

ELIAS MOTSOLEDI LOCAL MUNICIPALITY



TENDER DOCUMENT FOR THE BID: CONTRACT NO: EMLM 17/2023

CIDB REFERENCE NUMBER: 100078807

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

BID NUMBER: EMLM 17/2023

Supply Chain Management Unit

ISSUED BY:
THE MUNICIPAL MANAGER
ELIAS MOTSOLEDI LOCAL MUNICIPALITY
GROBLERSDAL
0470
TEL: (013) 262 3056
FAX: (013) 262 2547

PREPARED BY:
THE PROJECT MANAGER
DOLMEN ENGINEERS CC
22A PPRES PAUL KRUGER STREET
POLOKWANE
TEL: +27 (0) 15 295 4885
FAX: +27 (0) 15 294 8384

Closing Date: 30 SEPTEMBER 2022

Closing Time: 11H00

Name of Bidder:

.....

Bid Amount VAT Included: R_____



EXPANDED PUBLIC WORKS PROGRAMME
Creating opportunities towards human fulfillment

ELIAS MOTSOLEDI LOCAL MUNICIPALITY



UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

BID NUMBER: EMLM 17/2023

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RESPONSIVENESS AND EVALUATION CRITERIA

ELIAS MOTSOLEDI LOCAL MUNICIPALITY WILL NOT CONSIDER ANY BID UNLESS IT MEETS THE FOLLOWING RESPONSIVENESS CRITERIA:

MINIMUM REQUIREMENTS:

1. Attach CSD registration report (summary or detailed)
2. Valid copy Entity / Company registration certificate
3. Annexure Forms **(A, B, C, D, E, H and I)** fully completed and signed
4. Compulsory Briefing Session
5. Proof of CIDB registration minimum of **6 CE or Higher**
6. Sign any alteration on the tender document **(NB: Do Not Initialize)**
7. Sign every page on the tender document **(NB: Do Not Initialize)**
8. Sign any alterations on the BOQ
9. Forms must be completed in a **Black ink**.
10. CIPC Abridged Certificate Annual returns **(NB applicable to entities that are in business for more than 12 months)**
11. Annual financial statement **(if the bidder is required by law to prepare annual financial statements for auditing, their audited annual financial statements - for the past three years; or since their establishment if established during the past three years).**
12. Letter of good standing **(Compensation for Occupational Injuries and Disease Act (COIDA))** from Department of Labour OR any company accredited by the Department of Labour
13. Proof of Municipal rates and taxes or services charges:
 - Of the company and all of its directors not in arrears for more than 90 days or
 - Confirmation from the municipality if municipal rates and taxes are not levied (for the company and all its director(s)) as per CK/Company form of address on the registration certificate or
 - if leasing, a signed lease agreement by the lessor and the lessee and a declaration/letter indicating that the bidder and/or the director does not have municipal account and that the municipal services; rates and taxes are paid by the property owner, should be signed by the lessor and such declaration/letter must be attached / Municipal rates in the name of the lessor for both company and director(s).
14. Original certified copy of B-BBEE Certificate issued by a SANAS verification agency; original Sworn Affidavit from commissioner of oaths or Original / Certified copy of CIPC Sworn Affidavit. **(If not submitted will not be disqualified but no points will be allocated for BBEE)**
15. Original Certified copies of IDs of the Director(s) **(Certification not older than 3 months before the closing date)**
16. **In case of a Joint Venture**, Association or Consortium a formal contract agreement must be signed by both parties and be attached and the following must be adhered to:
 - All of the above requirements must be for the both entities.
 - Consolidated Valid B-BBEE Certificate issued by a SANAS Verification agency; **NB: No sworn affidavits will be considered.**
 - Consolidated Valid CIDB grading

CHECKLIST:

No.	Requirements Checklist	Tick	Comment if not Attached
COMPULSORY			
1	Attach CSD registration report (summary or detailed)		
2	Valid copy Entity / Company registration certificate		
3	Annexure Forms (A, B, C, D, E, H and I) fully completed and signed		
4	Compulsory Briefing Session		
5	Proof of CIDB registration (Minimum of 6 CE or Higher)		
6	Sign any alteration on the tender document (NB: Do Not Initialize)		
7	Sign every page on the tender document (NB: Do Not Initialize)		
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9	Forms must be completed in a Black ink .		
10	CIPC Abridged Certificate Annual returns (NB applicable to entities that are in business for more than 12 months)		
11	Annual financial statement (if the bidder is required by law to prepare annual financial statements for auditing, their audited annual financial statements - for the past three years; or since their establishment if established during the past three years).		
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14	Original certified copy of B-BBEE Certificate issued by a SANAS verification agency; original Sworn Affidavit from commissioner of oaths or Original / Certified copy of CIPC Sworn Affidavit.		
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17	Tender must be Completed and Signed in Black Ink		
ZERO SCORE IF NOT SUBMITTED			
18	Schedule of company experience (appointment letters and completion certificates)		
19	Curriculum Vitae of key personnel with original certified copies of qualifications, years of relevant experience on similar projects and projects names.		
20	Proof of bank rating not older than three (3) months. Bank rating and bank statements should be of the Lead Partner in case of Joint Venture.		

21	Schedule of plant: • Proof of ownership with certification not older than 3 months. • In case of hiring, a letter of intent must be submitted with proof of ownership by a rental company with certification not older than 3 months.		
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Note: This is just a guide to assist you and is not necessarily all the information required. The EMLM indemnifies itself and retain the rights to evaluate the full documentation.

Service provider / representative

Signature

PART T1: TENDERING PROCEDURES

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T1.2:	TENDER DATA	T.6	Pink
T1.3:	STANDARD CONDITIONS OF TENDER	T.12	Pink

T1.1: BID NOTICE AND INVITATION TO BID

ELIAS MOTSOLEDI LOCAL MUNICIPALITY

CLOSING DATE: 30 SEPTEMBER 2022 at 11H00

BID NUMBER: EMLM17/2023

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

T1.1: TENDER NOTICE

Bids are hereby invited from capable and experienced construction companies for the **UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD. The project scope entails upgrading of 1.85km section of a gravel road to a paving surfaced road and various storm water structures along the road.**

It is estimated that tenderers should have a CIDB contractor grading designation of **6CE** or higher.

Duly completed bid documents and supporting documents which are, CERTIFIED ID COPIES OF BUSINESS OWNERS, CERTIFIED COPY OF B-BBEE CERTIFICATE AS WELL AS RATES AND TAXES CLEARANCES FROM RELEVANT LOCAL AUTHORITY, CENTRAL SUPPLIERS DATABASE (CSD) REGISTRATION SUMMARY REPORT and a copy of the COMPANY REGISTRATION CERTIFICATE, together with the bid document must be sealed in an envelope clearly marked: **"Bid No. EMLM17/2023, UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD " CLOSING DATE: 30 September 2022"** with the name of the bidder shall be placed in the bid box **No:1** at **ELIAS MOTSOLEDI LOCAL MUNICIPALITY 2nd GROBLER AVENUE GROBLERSDAL** on or before **30 September 2022 at 11:00am** on the closing date. Tenders will be opened in public. **All certified copies must not be older than three months.**

Tender documents can be obtainable as from **26 August 2022** for free at www.etenders.gov.za or at the offices of Elias Motsoaledi Local Municipality (not on site), in Groblersdal, upon payment of a non-refundable amount of **R1500.00**. Only proof of deposit made to Elias Motsoaledi Local Municipality or cash will be acceptable.

A compulsory site briefing meeting with the Project Manager will take place at the Municipal Fleet Centre/ Workshop (5 Eind Street – Groblersdal) on the 13 September 2022 starting at 11:00 EXACTLY. Bids received by telegram, fax or e-mail will not be considered. Late bids shall not be accepted.

A preferential point system shall apply where by this contract will be allocated to a bidder in accordance with the Preferential Procurement Policy Framework Act, No. 5 of 2000 as defined in the conditions of bid in the bid document, read in conjunction with Preferential Procurement Regulations of 2017, where 80 points will be allocated in respect of price and 20 points in respect of B-BBEE status level of contribution. CIDB grading is **6CE or higher**.

Procurement Enquiries: Mr. V.E Masilela
Tel: 013 262 3056

Technical Enquiries: Mr. F.M. Debeila.
Tel: 013 262 3056

Employer: Municipal Manager: Mr. MM Kgwale.
Elias Motsoaledi Local Municipality
02 Grobler Avenue,
Groblersdal
0470

T1.1: BID NOTICE AND INVITATION TO BID

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

BID NUMBER: EMLM 17/2023

RESPONSIVENESS AND EVALUATION CRITERIA:

1. RESPONSIVENESS CRITERIA

The Elias Motsoaledi Local Municipality will consider no Bid unless it meets the following responsiveness criteria:

- The bid must be properly received in a sealed envelope clearly indicating the description of the service and the bid number for which the bid is submitted.
- The bid must be deposited in the relevant bid box as indicated on the notice of the bid on or before the closing date and time of the bid.
- An original Valid Tax Clearance Certificate must be submitted with the bid on or before the closing time and date of the bid. Or
- The electronic verification tax clearance must be accompanied by the verification code

- The proof of CSD registration report must be attached
- Bid forms must be completed in full and each page of the bid initialed.
- Certified copy of the company registration certificate must be submitted with the bid on or before the closing time and date of the bid.
- Submission of a Joint Venture Agreement, where applicable, which has been properly signed by all parties.
- Proof of payment of municipal rates and taxes.
- Complies with the requirements of the bid and technical specifications.
- Registered in the relevant contractor category in the Construction Industry Development Board Register of Contractors (CIDB).
- Adheres to Pricing Instructions.
- Financial ability to execute the contract.
- Comply in full and observe the requirements of the Notice to Bidders.

NB: It is the responsibility of tenderer to select competent subcontractor who is registered on the treasury central supplier database (CSD) that meet all minimum the requirement of the tender. Tenderers are responsible for all due diligence on their subcontractors.

2. EVALUATION OF BIDS

- a) All bids received shall be evaluated in terms of the Supply Chain Management Regulations, Elias Motsoaledi Local Municipality Supply Chain Management Policy, the preferential procurement regulation 2017, and other applicable legislations.
- b) The Council reserves the right to accept all, some, or none of the bids submitted – either wholly or in part – and it is not obliged to accept the lowest bid.
- c) Only locally manufactured products/items with specified minimum thresholds will be considered for local content **(Not applicable)**

By submitting this bid, bidder authorizes the Council or its delegate(s) to carry out any investigation deemed necessary to verify the correctness of the statements and documents submitted and that such documents reasonably reflect the ability of the Bidder to provide the goods and services required by the Council.

PLEASE NOTE

1. The Municipal Manager may cancel a contract awarded to a person if:

- a) The person committed a corrupt or fraudulent act during the procurement process or in the execution of the contract, or
- b) An official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited that person.

2. The Municipal Manager may reject the bid or quote of any person if that person or any of its directors have:

- a) Failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months;
- b) Failed, during the last five years, to perform satisfactorily on a previous contract with the Elias Motsoaledi Local Municipality or any other organ of State after written notice was given to that bidder that performance was unsatisfactory;
- c) Abused the supply chain management system of the Municipality or have committed any improper conduct in relation to this system;
- d) Been convicted of fraud or corruption during the past five years;
- e) Willfully neglected, reneged on or failed to comply with any government, municipal or other public-sector contract during the past five years; or
- f) Been listed in the Register for Bid Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No. 12 of 2004) or has been listed on National Treasury's database as a person prohibited from doing business with public sector

ANNEXURE A

SUPPLY CHAIN MANAGEMENT

EVALUATION PROCESS AND CRITERIA

The following evaluation process and criteria will be used to evaluate all bids submitted:

1. COMPLIANCE WITH TENDER CONDITIONS

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T1.2: TENDER DATA

The conditions of tender are those contained in the latest edition of SANS 10845-3, *Construction Procurement – Part 3: Standard Conditions of Tender*.

SANS 10845-3 makes several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the provisions of SANS 10845-3.

Each item of data given below is cross-referenced to the clause in SANS 10845-3 to which it mainly applies.

Clause Number	Data												
2.1	Wherever reference is made in the documentation to Bill of Quantities, it shall also mean Pricing Schedule.												
2.7	Wherever reference is made in the documentation to contractor it shall also mean service provider												
3.1	The Employer is ELIAS MOTSOLEDI LOCAL MUNICIPALITY The Employer’s domicile citandi et executandi (permanent physical business address) is: 2 Grobler Avenue, Groblersdal, 0470 The Employer’s address for communication relating to this project is: <table><tr><td>POSTAL</td><td>OR</td><td>DELIVERY</td></tr><tr><td>P. O. Box 48</td><td></td><td>2 Grobler Avenue</td></tr><tr><td>Groblersdal</td><td></td><td>Groblersdal</td></tr><tr><td>0470</td><td></td><td>0470</td></tr></table>	POSTAL	OR	DELIVERY	P. O. Box 48		2 Grobler Avenue	Groblersdal		Groblersdal	0470		0470
POSTAL	OR	DELIVERY											
P. O. Box 48		2 Grobler Avenue											
Groblersdal		Groblersdal											
0470		0470											
3.2	The tender documents issued by the employer comprise: T1: Tendering Procedures T1.1 Tender notice and invitation to tender T1.2 Tender data T2: Returnable Schedules T2.1 List of returnable documents T2.2 Returnable schedules C1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Form of guarantee C1.4 Disclosure Statement C1.5 Adjudication Member Agreement C1.6 Agreement in terms of the Occupational Health and Safety Act C2: Pricing data C2.1 Pricing instructions C2.2 Activity schedules or bill of quantities C3: Scope of work C4: Site information C4.1 Locality Plan C4.2 Tender drawing												
3.4	The language for communications is English.												
3.4	The Employer’s agent is: Name : Dolmen Engineers CC Address : 22A Pres Paul Kruger Street Polokwane 0699 Telephone : (015) 295 4885 Fax: (015) 295 8384 E-Mail : <u>polokwane@dolmenengineers.co.za/dolmeneng@gmail.com</u>												
3.5	The tender process may be cancelled if:												

	(a) Due to changed circumstances, there is no longer a need for the goods or services specified in the invitation; (b) Funds are no longer available to cover the total envisaged expenditure; (c) No acceptable tender is received; or (d) There is a material irregularity in the tender process				
3.6	The competitive selection procedure shall be applied in awarding the tender.				
3.7	Jurisdiction Unless stated otherwise in the Tender Data, each tenderer and the Employer undertake to accept the jurisdiction of the courts of law of the Republic of South Africa.				
4.1	Only those tenderers who satisfy the following eligibility criteria are eligible to submit tenders: (a) The Contractor submitting the tender is under restrictions or has principals who are under restriction to participate in the Employer's procurement due to corrupt or fraudulent practices; (b) The tenderer does not have the legal capacity to enter into the contract; (c) The Contractor submitting the tender is insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of the foregoing; (d) The tenderer does not comply with the legal requirements stated in the Employer's procurement policy; (e) The tenderer cannot demonstrate that he possesses the necessary professional and technical qualifications and competent, financial resources, equipment and other physical facilities, managerial capability, personnel, experience and reputation to perform the contract; (f) The Tenderer cannot provide proof that he is in good standing with respect to duties, taxes, levies and contributions required in terms of legislation applicable to the work in the contract. Only those tenderers who are registered with the Construction Industry Development Board (CIDB) in a contractor-grading equal to or higher than a contractor grading designation 6 CE or higher or a combined grading (in the case of a joint venture) equal or higher than 6 CE as defined in the Regulations (09 August 2004 and 22 July 2005), in terms of the CIDB Act No 38 of 2000, are eligible to submit tenders for this contract. <table border="1"> <tr> <td>1</td><td>Only those Tenderers who have in their employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for Supervisory and management staff are eligible to submit tenders.</td></tr> <tr> <td>2</td><td>The Tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labor-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.</td></tr> </table>	1	Only those Tenderers who have in their employ management and supervisory staff satisfying the requirements of the scope of work for labour intensive competencies for Supervisory and management staff are eligible to submit tenders.	2	The Tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labor-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.
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2	The Tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labor-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.				
4.6	Failure to apply instructions contained in addenda may render a tenderer's offer non-responsive in terms of Condition of Tender, Clause 5.8.				
4.7	A compulsory site briefing meeting with the Project Manager will take place at the Municipal Fleet Centre/ Workshop (5 Eind Street – Groblersdal) Enquiries and confirmation of attendance at least one full working day in advance regarding the meeting and site inspection may be directed to: Dolmen Engineers cc CC Name: Mr. M.P. Sematla Telephone No: (015) 295 4885 . Fax: (015) 295 8384 E-Mail address: polokwane@dolmenengineers.co.za/dolmeneng@gmail.com				

4.10	Tenderers are required to state the rates and currencies in Rand.
4.12	Alternative offers are generally not acceptable due to possible manipulation of the tender process and resulting complexity of the evaluation. Therefore, the submission of alternative tenders is strongly discouraged. The submission of alternative work will be considered as a non-responsive offer. However, a tenderer wishing to submit an alternative offer shall first apply to the Employer with full details of the principles of the alternative for confirmation that the Employer's standards and requirements are not compromised or reduced. Such confirmation must have been provided by the Employer in writing at least 5 (five) working days before the date and time of tender closing, or as extended by an addendum sent to all tenderers. The application shall not be submitted later than 7 (seven) working days before the date and time of tender closing given in Tender Data Clause 4.15.
4.13	Parts of each tender offer communicated on paper shall be submitted as an original, plus zero (0) copies.
4.13.4	The tenderer is required to submit with his tender the following Mandatory documents: • Electronic Valid Tax Clearance Certificate supplied with verification code; • Compensation Fund registration certificate • Certificate of Contractor Registration issued by the Construction Industry Development Board or a copy of the application Form for registration in terms of the Construction Industry Development Board Act (Form F006). A minimum grading of 6 CE is required In the event of a Joint Venture submitting a tender, every member of the joint venture must submit proof of registration with the CIDB within 10 days from the closing date for tenders; and the lead partner must have a minimum contract grading designation Important Note: Failure to provide the required particulars as per the above-listed certificates implies a non-responsive tender and warrants rejection of the tender on account of non-compliance with the requirements of the Tender Data
4.13.5	Wherever reference is made in the tender documentation for non-financial proposal it shall also mean technical proposal.
4.13.5	The Employer's address for delivery of tender offers and identification details to be shown on each tender package are: Location of tender box: No:1 at ELIAS MOTSOLEDI LOCAL MUNICIPALITY 2nd GROBLER AVENUE GROBLERSDAL Physical address: 2 Grobler Avenue, Groblersdal, 0470 Postal Address: P. O. Box 48 Groblersdal 0470
4.13.5	A two-envelope procedure is NOT required
4.13.6	Telephonic, telegraphic, telex, facsimile or e-mailed tender offers shall NOT be accepted
4.15	The closing time for submission of tender offers is 11H00 hours on Friday, 30 September 2022
4.16.1	The tender validity period is 90 Days
4.16.2	Where a tenderer, at any time after the opening of his tender offer but prior to entering into a contract based on his tender offer: (a) withdraws his tender; (b) gives notice of his inability to execute the contract in terms of his tender; or (c) fails to comply with a request made in terms of 4.17, 4.18 or 5.9; such tenderer shall be barred from tendering on any of the Employer's tenders for a period to be determined by the Employer, but not less than 6 (six) months from a date determined by the Employer. This sanction also applies to tenders under evaluation and not yet awarded. The Employer may fully or partly exempt a tenderer from the provisions of this conditions if he is of the opinion that the circumstances justify the exemption.
4.18	Any additional information requested under the clause must be provided within 5 (five) working days of date of request.
4.19	Access shall be provided for inspections and testing by personnel acting on behalf of the Employer
5.1	The Employer shall respond to clarifications received up to 7 (seven) working days before tender closing time.

5.2	The Employer shall issue addenda until 5 (five) working days before tender closing time.
5.4	The time and location for opening of the tender offers are: Date : 11H00 on 30 September 2022 Location : Elias Motsoaledi Local Municipality, 2 Grobler Avenue, Groblersdal, 0470
5.5	The minimum percentage of evaluation points for quality is 70%.
5.7	Prior to disqualification, the Employer shall inform the tenderer and give the tenderer an opportunity to make representations within 14 days as to why the tender submitted should not be disqualified and as to why the tenderer should not be restricted by the National Treasury from conducting any business with any organ of state for a period not exceeding 10 years. In the event of disqualification, the Employer may, at its sole discretion, claim damages from the tenderer and impose a specified period during which tender offers will not be accepted from the offending tenderer and, the Employer shall inform the National Treasury in writing.
5.8	Arithmetical errors, omissions, discrepancies and imbalanced unit rates Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount appearing in the summary to the Pricing Schedule shall govern. Check responsive tender offers for: - the gross misplacement of the decimal point in any unit rate; - omissions made in completing the Pricing Schedule or Bills of Quantities; or - arithmetic errors in: - line-item totals resulting from the product of a unit rate and a quantity in Bills of Quantities or Schedules of Prices; or - the summation of the prices; - Imbalanced unit rates. Notify shortlisted tenderers of all errors, omissions or imbalanced rates that are identified in their tender offers. Where the tenderer elects to confirm the errors, omissions or re-balancing of imbalanced rates the tender offer shall be corrected as follows: - If Bills of Quantities or Pricing Schedules apply and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the unit rate shall govern, and the line-item total shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted, and the unit rate shall be corrected. - Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall be corrected. - Where the unit rates are imbalanced, adjust such rates by increasing or decreasing them and selected others while retaining the total of the prices derived after any other corrections made under (a) and (b) above. Where there is an omission of a line item, no correction is possible, and the offer may be declared non-responsive. Declare as non-responsive and reject any offer from a tenderer who elects not to accept the corrections proposed and subject the tenderer to the sanction under 4.16.2. The tenderer is required to submit balanced unit rates for Rate Only items in the Pricing Schedule. The rates submitted for these items will be taken into account in the evaluation of tenders.
5.11	The procedure for the evaluation of responsive tenders is Method 4 .

5.11.5	Method 4: Financial offer, quality and preferences In this case of a financial offer, quality and preferences; - score each tender in respect of the financial offer made, the preference claimed, if any, and the quality offered in accordance with the provisions of 5.11.7 to 5.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any, - calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula; $T_{EV} = N_{FO} + N_P + N_Q$ Where; N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with 5.11.7 N_P is the number of tender evaluation points awarded for preferences claimed in accordance with 5.11.8; N_Q is the number of tender evaluation points awarded for quality offered in accordance with 5.11.9, - rank tender offers from the highest number of tender evaluation points to the lowest, and - recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so. Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so, in which case the process set out in this sub clause shall be repeated. If two or more tenderers score an equal total number of points, the contract must be awarded to the tenderer that scored the highest points for preference. If functionality / quality is, part of the evaluation process and two or more tenderers score equal total points and equal preference points, the contract must be awarded to the tenderer that scored the highest points for functionality/ quality. If two or more tenderers score equal total points in all respects, the award must be decided by the drawing of lots.
5.11.6	Scores of financial offers, preferences and quality, as relevant, to be given to two (2) decimal places

5.11.7	Scoring Financial Offers Score the financial offers using the following formula: $N_{FO} = W_1 \times A$ where N_{FO} is the number of tender evaluation points awarded for the financial offer; W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated below A is the number calculated using the relevant formula described below The value of W_1 is: 80 where the financial value, inclusive of VAT, of the lowest responsive tender offer has a value that equals or is less than R50 000 000.00. The following formula shall be used to calculate the points for price (A): $A = \left(1 - \frac{P - P_m}{P_m}\right) W_1$ Where: P is the comparative offer of the tender offer under consideration and P_m is the comparative offer of the most favourable comparative offer W_1 is the maximum number of points for price (in this case 80) In the event that the calculated value is negative, the allocated score shall be 0 (zero).
5.11.8	Scoring Preferences N_P shall be calculated as described below; Up to 100 minus W_1 tender evaluation points will be awarded to tenderers who submit responsive tenders and who are found to be eligible for the preference claimed. Points are based on a tenderer's scorecard measured in terms of the Broad-Based Black Economic Empowerment Act (B-BBEE, Act 53 of 2003) and the Regulations (2017) to the Preferential Procurement Policy Framework Act (PPPFA, Act 5 of 2000). Points awarded will be according to a tenderer's B-BBEE status level of contributor and summarized in the table below: Eligibility for preference points is subject to the following conditions: - A tenderers' scorecard shall be a B-BBEE Verification Certificate issued in accordance with the revised Notice of Clarification published in the Notice 444 of 2015 published in Government Gazette 38799 on 15 May 2015 by the Department of Trade and Industry; and - The scorecard shall be submitted as a certificate attached to Returnable Schedule Annexure P; and - The certificate shall: - Be an original or an original certified copy of the original; and - Have been issued by a verification agency accredited by the South African National Accreditation System (SANAS); or - Have been issued prior to 30 September 2016 by a registered auditor who was approved by the Independent Regulatory Board of Auditors (IRBA); or - Be in the form of a sworn affidavit in the case of an Exempted Micro Enterprise (EME) or Qualifying Small Enterprise (QSE); and - Be valid at the tender closing date; and - Have a date of issue less than 12 (twelve) months prior to the tender closing date (see Tender Data 4.15); and - Compliance with any other information requested to be attached to Returnable Schedule Annexure P and - If a tenderer claims a preference score without submitting an acceptable verification certificate (s)

	and/or all of the information in compliance with Returnable Schedule Annexure P, a period of 1 working day will be granted to submit this information; and f) Failure to submit a valid verification certificate(s) and/or all the information in compliance with Returnable Schedule Annexure P, will result in the award of 0 (zero) points for preference; and g) In the event of a Joint Venture (JV), a consolidated B-BBEE Verification Certificate in the name of the JV shall be submitted, as well as a valid B-BBEE verification certificate for each member of the JV; and, h) If the tender documents indicate that the tenderer intends subcontracting more than 25% of the value of the contract to any other person not qualifying for at least the points that the tenderer qualifies for, 0(zero) points for preference will be awarded, unless the intended subcontractor is an EME that has the capability to execute the subcontract. <table border="1"> <thead> <tr> <th>B-BBEE Status Level of Contributor</th><th>Number of points (80/20 system)</th></tr> </thead> <tbody> <tr><td>1</td><td>20</td></tr> <tr><td>2</td><td>18</td></tr> <tr><td>3</td><td>16</td></tr> <tr><td>4</td><td>12</td></tr> <tr><td>5</td><td>8</td></tr> <tr><td>6</td><td>6</td></tr> <tr><td>7</td><td>4</td></tr> <tr><td>8</td><td>2</td></tr> <tr><td>Non-compliant contributor</td><td>0</td></tr> </tbody> </table>	B-BBEE Status Level of Contributor	Number of points (80/20 system)	1	20	2	18	3	16	4	12	5	8	6	6	7	4	8	2	Non-compliant contributor	0
B-BBEE Status Level of Contributor	Number of points (80/20 system)																				
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7	4																				
8	2																				
Non-compliant contributor	0																				
5.11.9	Scoring Quality Score each of the criteria and sub criteria for quality in accordance with the provisions of the tender data. Calculate the total number of tender evaluation points for quality (N_Q) using the following formula: $N_Q = W_2 \times So / M_s$ where W_2 is the maximum possible number of tender evaluation points awarded for the quality So is the score for quality allocated to the submission under consideration; M_s is the maximum possible score for quality in respect of a submission (using the table given below)																				
5.11.9.1	The functionality criteria (as part of quality) and maximum score in respect of each of the sub criteria are as follows: <table border="1"> <thead> <tr> <th>Functionality Criteria</th><th>Maximum Number of Points</th></tr> </thead> <tbody> <tr><td>Relevant Past Experience</td><td>50</td></tr> <tr><td>Bank Rating</td><td>10</td></tr> <tr><td>Key Personnel</td><td>20</td></tr> <tr><td>Plant and Equipment</td><td>20</td></tr> <tr><td>Maximum possible score for functionality</td><td>100</td></tr> </tbody> </table>	Functionality Criteria	Maximum Number of Points	Relevant Past Experience	50	Bank Rating	10	Key Personnel	20	Plant and Equipment	20	Maximum possible score for functionality	100								
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Tenderers must meet the minimum points of 70 on functionality to be considered for further evaluation.

Functionality Scorecard				
Criteria	Scoring guide			Maximum Weights
Company Experience: NB: The Tender must submit similar and successfully completed projects to qualify for maximum points. No points will be allocated for repair and maintenance projects Note 1: Tenderers to submit names of the completed projects with valid contact details, appointment letters and completion certificates. Non-submission will result in loss of points.	No	Scoring Criteria	Weight	Score
	1	Road construction projects Above R 20 million	25	
	2	Road construction projects above R10mil to R20mil (per Appointment Letter& Completion Certificates)	10	
	3	Road construction projects R5mil to R10mil (per Appointment Letter& Completion Certificates)	5	
		MAXIMUM	50	
				50
Financial Capacity- Tenderer to submit proof of bank rating not older than three (3) months. Bank rating and bank statements should be of the Lead Partner in case of Joint Venture. Note: Points will not be allocated if proof not attached.	Bank Rating		Weighting	Score
	Bank Rating = A,B, C		10	
	Bank Rating = D		5	
	Bank Rating = E		3	
	MAXIMUM		10	
				10
Specific Personnel Knowledge – Well detailed curriculum vitae and original certified copies of academic qualification certificates need to be attached for functionality points scoring otherwise no points will be allocated (Certified copies should not be older than 3 months)	Designation	Designation	Points	Total
	Project Manager	<u>Project Manager: Experience in Road Construction Points: 10</u>		
		• B-Tech: Civil Engineering certificate or higher with more than 9 years' exp.	6	
		• N. Dip: Civil Engineering certificate or higher with 7 - 8 years' exp.	8	
		• N. Dip: Civil Engineering certificate or higher with 5 - 6 years' exp.	6	
	Contraction Manager (Site Agent)	• N. Dip: Civil Engineering certificate or higher with 3 to 5 years' exp.	3	
		<u>Construction Manager (Previously known as Site Agent): Experience in Road Construction - Points: 7</u>		
		• N. Dip: Civil Engineering or higher with more than 9 years' exp.	7	
		• N. Dip: Civil Engineering or higher with 5 - 8 years' exp.		
				20

			N. Dip: Civil Engineering or higher with 3 - 5 years' exp. N. Dip: Civil Engineering or higher with 1 to 3 years' exp	5 3 1																																	
		Safety Officer	Safety Officer - Points: 3 - National Diploma Safety Management or Environmental Health with more than 4 Years exp - National Diploma Safety Management or Environmental Health 0 – 3 Years exp	3 2																																	
	List of plant- 1. Tenderer to submit proof of ownership with original certified copies not older than three months. 2. And in case of hiring, a letter of intent must be submitted with proof of ownership with original certified copies not older than three months. Bidders will score 50% points where the total minimum plant required has a letter of intent and also proof of ownership by a rental company	<table><tr><th>Required plant</th><th>Points</th><th>Owned</th><th>Hired</th></tr><tr><td>1 x Excavator</td><td>5</td><td></td><td></td></tr><tr><td>1 x Grader</td><td>5</td><td></td><td></td></tr><tr><td>1 x Roller</td><td>2</td><td></td><td></td></tr><tr><td>1 x water Tanker</td><td>2</td><td></td><td></td></tr><tr><td>1 x TLB</td><td>1</td><td></td><td></td></tr><tr><td>5 x Tipper Truck (10cm³)</td><td>1 point each (Maxi 5)</td><td></td><td></td></tr><tr><td>Maximum points</td><td>20</td><td></td><td></td></tr></table>			Required plant	Points	Owned	Hired	1 x Excavator	5			1 x Grader	5			1 x Roller	2			1 x water Tanker	2			1 x TLB	1			5 x Tipper Truck (10cm³)	1 point each (Maxi 5)			Maximum points	20			20
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Functionality Threshold (Minimum score)					70																																
Total Points for Functionality					100																																

5.13	Tender offers will only be accepted if: a) the tenderer is registered on the Central Supplier Database (CSD) for the South African government (see https://secure.csd.gov.za/) unless it is a foreign supplier with no local registered entity b) the tenderer is in good standing with SARS according to the Central Supplier Database; c) the tenderer submits a letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Part C1.3 of this procurement document d) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation; e) the tenderer or any of its directors/shareholders is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; f) the tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect; g) the tenderer has completed the Compulsory Declaration and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process; h) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;
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	i) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
5.13.1	Acceptance of a tender offer (Additional Conditions) The Employer shall accept a tender offer should it be considered not to present any unacceptable commercial risk, only if the tenderer a) is not under restrictions, or has principals who are under restrictions, preventing participation in the employer's procurement, b) can, as necessary and in relation to the proposed contract, demonstrate the possession of the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and personnel, to perform the contract, c) has the legal capacity to enter into the contract, d) is not insolvent, in receivership, bankrupt or being liquidated, does not have affairs administered by a court or a judicial officer, does not have suspended business activities, or is subject to legal proceedings with respect to any of the foregoing, e) complies with the legal requirements, if any, stated in the tender data, and f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.
5.17	The number of paper copies of the signed contract to be provided by the employer is ONE (1)
5.18	Preparing Tender Documents If necessary, the documents that shall form part of the contract and that were issued by the employer as part of the tender documents, shall be revised to take account of; a) addenda issued during the tender period, b) inclusion of some of the returnable documents, and c) other revisions agreed between the employer and the successful tenderer during the process of offer and acceptance. The schedule of deviations attached to the form of offer and acceptance, if any, shall be completed.
5.19	All communication shall be done in writing

T1.3: STANDARD CONDITIONS OF BID

(As contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement)

F.1 General

F.1.1 Actions

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

F.1.2 Bid Documents

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

F.1.3 Interpretation

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

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

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

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

F.1.4 Communication and employer's agent

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

F.1.5 The employer's right to accept or reject any bid offer

F.1.5.1 The employer may accept or reject any variation, deviation, bid offer, or alternative bid offer, and may cancel the bid process and reject all bid offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a bidder for such cancellation and rejection, but will give written reasons for such action upon written request to do so.

F.1.5.2 The employer may not subsequent to the cancellation or abandonment of a bid process or the rejection of all responsive bid offers re-issue a bid covering substantially the same scope of work within a period of six months unless only one bid was received and such bid was returned unopened to the bidder.

F.2 Bidder's obligations

F.2.1 Eligibility

Submit a bid offer only if the bidder complies with the criteria stated in the bid data and the bidder, or any of his principals, is not under any restriction to do business with employer.

F.2.2 Cost of bidding

Accept that the employer will not compensate the bidder for any costs incurred in the preparation and submission of a bid offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.

F.2.3 Check documents

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

F.2.4 Confidentiality and copyright of documents

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

F.2.5 Reference documents

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

F.2.6 Acknowledge addenda

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

F.2.7 Clarification meeting

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

F.2.8 Seek clarification

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

F.2.9 Insurance

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

F.2.10 Pricing the bid offer

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

F2.10.2 Show VAT payable by the employer separately as an addition to the bidder's total of the prices.

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

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

F.2.11 Alterations to documents

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

F.2.12 Alternative bid offers

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

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

F.2.13 Submitting a bid offer

F.2.13.1 Submit a bid offer to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the bid data.

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

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

F.2.13.4 Sign the original and all copies of the bid offer where required in terms of the bid data. The Employer will hold all authorized signatories liable on behalf of the bidder. Signatories for bidders Proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the bid offer.

F.2.13.5 Seal the original and each copy of the bid offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the bid data, as well as the bidder's name and contact address.

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

F.2.13.7 Seal the original bid offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the bid data.

F.2.13.8 Accept that the employer shall not assume any responsibility for the misplacement or premature opening of the bid offer if the outer package is not sealed and marked as stated.

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

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

F.2.15 Closing time

F.2.15.1 Ensure that the employer receives the bid offer at the address specified in the bid data not later than the closing time stated in the bid data. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept bid offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the bid data.

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

F.2.16 Bid offer validity

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

F.2.16.2 If requested by the employer, consider extending the validity period stated in the bid data for an agreed additional period.

F.2.17 Clarification of bid offer after submission

Provide clarification of a bid offer in response to a request to do so from the employer during the evaluation of bid offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the total of the prices or substance of the bid offer is sought, offered, or permitted. The total of the prices stated by the bidder shall be binding upon the bidder.

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

F.2.18 Provide other material

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

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

F.2.19 Inspections, tests and analysis

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

F.2.20 Submit securities, bonds, policies, etc.

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

F.2.21 Check final draft

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

F.2.22 Return of other bid documents

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

F.2.23 Certificates

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

F.3 The employer's undertakings

F.3.1 Respond to clarification

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

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the bid documents to each bidder during the period from the date of the Bid Notice until seven days before the bid closing time stated in the Bid Data. If, as a result a bidder applies for an extension to the closing time stated in the Bid Data, the Employer may grant such extension and, will then notify it to all bidders who drew documents.

F.3.3 Return late bid offers

Return bid offers received after the closing time stated in the Bid Data, unopened, (unless it is necessary to open a bid submission to obtain a forwarding address), to the bidder concerned.

F.3.4 Opening of bid submissions

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

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

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

F.3.5 Two-envelope system

F.3.5.1 Where stated in the bid data that a two-envelope system is to be followed, open only the technical proposal of valid bids in the presence of bidders' agents who choose to attend at the time and place stated in the bid data and announce the name of each bidder whose technical proposal is opened.

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

F.3.6 Non-disclosure

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

F.3.7 Grounds for rejection and disqualification

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

F.3.8 Test for responsiveness

Determine, on opening and before detailed evaluation, whether each bid offer properly received:

- a) Meets the requirements of these Conditions of Bid,
- b) Has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the bid documents.

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

- Detrimentially affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- change the Employer's or the bidder's risks and responsibilities under the contract, or
- affect the competitive position of other bidders presenting responsive bids, if it were to be rectified.

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

F.3.9 Arithmetical errors

Check responsive bid offers for arithmetical errors, correcting them in the following manner:

- Where there is a discrepancy between the amounts in figures and in words, the amount in words shall govern.
- If a bill of quantities (or schedule of rates) apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate will be corrected.
- Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the bidder's addition of prices, the total of the prices shall govern and the bidder will be asked to revise selected item prices (and their rates if a bills of quantities applies) to achieve the bided total of the prices.

Consider the rejection of a bid offer if the bidder does not correct or accept the correction of his arithmetical errors in the manner described above.

F.3.10 Clarification of a bid offer

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

F.3.11 Evaluation of bid offers

F3.11.1 General

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

Method 1: Financial offer	1) Rank bid offers from the most favorable to the least favorable comparative offer. 2) Recommend highest ranked bidder for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 2: Financial offer and preferences	1) Score bid evaluation points for financial offer. 2) Confirm that bidders are eligible for the preferences claimed and if so, score bid evaluation points for preferencing. 3) Calculate total bid evaluation points. 4) Rank bid offers from the highest number of bid evaluation points to the lowest. 5) Recommend bidder with the highest number of bid evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 3: Financial offer and quality	1) Score quality, rejecting all bid offers that fail to score the minimum number of points for quality stated in the Bid data. 2) Score bid evaluation points for financial offer. 3) Calculate total bid evaluation points. 4) Rank bid offers from the highest number of bid evaluation points to the lowest. 5) Recommend bidder with the highest number of bid evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 4: Financial offer, quality and preferences	1) Score quality, rejecting all bid offers that fail to score the minimum number of points for quality stated in the Bid data. 2) Score bid evaluation points for financial offer. 3) Confirm that bidders are eligible for the preferences claimed, and if so, score bid evaluation points for Preferencing. 4) Calculate total bid evaluation points. 5) Rank bid offers from the highest number of bid evaluation points to the lowest. 6) Recommend bidder with the highest number of bid evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

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

F.3.11.2 Scoring Financial Offers

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

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

N_{FO} = the number of bid evaluation points awarded for the financial offer.

W_1 = the maximum possible number of bid evaluation points awarded for the financial offer as stated in the Bid Data.

A = a number calculated using either formulas 1 or 2 below as stated in the Bid Data.

Formula	Basis for comparison	Option 1	Option 2
1	Highest price or discount	$(1 + \frac{(P - P_m)}{P_m})$	P/P_m
2	Lowest price or percentage commission/fee	$(1 - \frac{(P - P_m)}{P_m})$	P_m/P

where:

P_m = the comparative offer of the most favorable bid offer.

P = the comparative offer of bid offer under consideration.

F.3.11.3 Scoring quality (functionality)

Score quality in each of the categories stated in the Bid Data and calculate total score for quality.

F.3.12 Insurance provided by the employer

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

F.3.13 Acceptance of bid offer

F.3.13.1 Accept bid offer only if the bidder satisfies the legal requirements stated in the Bid Data.

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

F.3.14 Notice to unsuccessful bidders

After the successful bidder has acknowledged the employer's notice of acceptance, notify other bidders that their bid offers have not been accepted.

F.3.15. Prepare contract documents

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

- a) Addenda issued during the bid period,
- b) Inclusion of some of the returnable documents,
- c) Other revisions agreed between the employer and the successful bidder, and
- d) The schedule of deviations attached to the form of offer and acceptance, if any.

F.3.16 Issue final contract

Prepare and issue the final draft of contract documents to the successful bidder for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of bid require the bidder to submit, after acceptance by the employer, shall be included.

F.3.17 Complete adjudicator's contract

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

F.3.18 Provide copies of the contracts

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

PART T2: RETURNABLE SCHEDULES

TABLE OF CONTENTS	Page	Colour
T2.1: LIST OF RETURNABLE DOCUMENTS.....	T.25	White
T2.2: RETURNABLE SCHEDULES TO BE COMPLETED BY TENDERER	T.26	Yellow

T2.1: LIST OF RETURNABLE DOCUMENTS

The tenderer must complete the following returnable documents:

1 Returnable Schedules required only for tender evaluation purposes

- A. Record of Addenda to Tender Documents
- B. Proposed amendments and qualifications
- C. Preferencing Schedule: Broad Based Black Economic Empowerment Status
- D. Compulsory Declaration
- E. Municipal declaration and returnable documents
- F. Certificate of Attendance at a Tender Site Meeting
- G. Certificate of Authority of Joint Ventures/ Close corporations/ Partnership/ Company/ Sole proprietor (Certified Copies of the Identity Documents in the Case of sole proprietor)
- H. Registration Certificates of Entities – Joint Ventures/ Close corporations/ partnership/ Company/ Sole Proprietor
- I. Schedule of Tenderer's Experience
- J. Schedule of Key Personnel
- K. Format of Curriculum Vitae (CV) L. Schedule of Sub-Contractors
- L. Schedule of Proposed Subcontractors
- M. Schedule of plant and equipment
- N. Copy of Workmen's Compensation Registration Certificate (or proof of payment of contributions in terms of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993)

2. Other documents required only for tender evaluation purposes

- O. Competence Achievement Schedule
- P. BBBEE Certificate / Sworn affidavit
- Q. Form of Intent to offer a Performance Guarantee
- R. An Original Tax Clearance Certificate issued by the South African Revenue Services

3. Other documents that will be incorporated into the contract

- S. Execution Programme
- T. Contractor's Health and Safety Declaration
- U. Contractor's Safety Plan
- V. Proforma Notification form in terms of the Occupational Health and Safety Act 1993, Construction Regulations, 2014

NB: Mandatory documents will also be used for the evaluation

4 The offer portion

Part C1 Agreements and Contract Data

Part C2 Pricing Data

RETURNABLE DOCUMENTS

T2.2 LIST OF RETURNABLE DOCUMENTS

The tenderer must complete the following returnable documents:

1. Returnable Schedules required only for tender evaluation purposes

- A. Record of Addenda to Tender Documents
- B. Proposed amendments and qualifications
- C. Preferencing Schedule: Broad Based Black Economic Empowerment Status
- D. Compulsory Declaration
- E. Municipal declaration and returnable documents
- F. Certificate of Attendance at a Tender Site Meeting
- G. Certificate of Authority of Joint Ventures/ Close corporations/ Partnership/ Company/ Sole proprietor (Certified Copies of the Identity Documents in the Case of sole proprietor)
- H. Registration Certificates of Entities – Joint Ventures/ Close corporations/ partnership/ Company/ Sole Proprietor
- I. Schedule of Tenderer's Experience
- J. Schedule of Key Personnel
- K. Format of Curriculum Vitae (CV) L. Schedule of Sub-Contractors
- L. Schedule of Proposed Subcontractors
- M. Schedule of plant and equipment
- N. Copy of Workmen's Compensation Registration Certificate (or proof of payment of contributions in terms of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993)

2. Other documents required only for tender evaluation purposes

- O. Competence Achievement Schedule
- P. BBBEE Certificate / Sworn affidavit
- Q. Form of Intent to offer a Performance Guarantee
- R. An Original Tax Clearance Certificate issued by the South African Revenue Services

3. Other documents that will be incorporated into the contract

- S. Execution Programme
- T. Contractor's Health and Safety Declaration
- U. Contractor's Safety Plan
- V. Proforma Notification form in terms of the Occupational Health and Safety Act 1993, Construction Regulations, 2014.

ANNEXURE A. : 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 or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed Date

Name Position

Tenderer:

ANNEXURE B. : PROPOSED AMENDMENTS AND QUALIFICATIONS

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

The Tenderer's attention is drawn to clause 5.8 of SANS 10845-3 regarding the employer's handling of material deviations and qualifications.

Page	Clause or item	Proposal

Signed

Date

Name

Position

Tenderer:

ANNEXURE C. ANNEXURE C: PREFERENCING SCHEDULE: BROAD BASED BLACK ECONOMIC EMPOWERMENT STATUS

Preamble

Section 10(b) of the Broad-Based Black Economic Empowerment Act of 2003 (Act No. 53 of 2003) states that “Every organ of state and public entity must take into account and, as far as is reasonably possible, apply any **relevant code of good practice** issued in terms of this Act in developing and implementing a preferential procurement policy:”

A number of codes of good practice have been issued in terms of Section 9(1) of the B-BBEE Act of 2003 including a generic code of good practice and various sector codes. The sector codes vary the metrics, weightings and targets used in the generic code of good practice to establish the overall performance of an entity and its B-BBEE status. The B-BBEE status needs to be assessed in accordance with the applicable code.

1 Conditions associated with the granting of preferences

Tenderers who claim a preference shall provide sufficient evidence of their B-BBEE Status in accordance with the requirements of section 2 in respect of the applicable code as at the closing time for submissions, failing which their claims for preferences will be rejected.

2 Sufficient evidence of qualification

2.1 Exempted micro enterprises

Sufficient evidence of qualification as an Exempted Micro-Enterprise is a:

- a) a registered auditor's certificate or similar certificate issued by an accounting officer as contemplated in the Close Corporation Act of 1984 in respect of the entity's last financial year or a 12-month period which overlaps with its current financial year; or a certificate issued by a verification agency and which is valid as at the closing date for submissions; or,
- b) a sworn affidavit - B-BBEE Exempted Micro Enterprise (see www.thedti.gov.za/gazettes/Affidavit_EME.pdf)

2.2 Enterprises other than micro exempted enterprises

Sufficient evidence of B-BBEE Status is:

- a) an original or certified copy of the certificate issued by a verification agency accredited by the South African National Accreditation System (SANAS) or registered auditors approved by Independent Regulatory Board for Auditors (IRBA) and which is valid as at the closing date for submissions; or,
- b) a sworn affidavit – B-BBEE Qualifying Small Enterprise (see www.thedti.gov.za/gazettes/BBEE_QUALIFYING_SMALL_ENTERPRISE.pdf)

3 Tender preferences claimed

The scoring shall be as follows:

B-BBEE status determined in accordance with the preferencing schedule for Broad-Based Black Economic Empowerment	% max points for preference
Form not completed or no-complaint contributor	0
Level 8 contributor	2
Level 7 contributor	4
Level 6 contributor	6
Level 5 contributor	8
Level 4 contributor	12
Level 3 contributor	14
Level 2 contributor	18
Level 1 contributor	20

4 Declaration

The tenderer declares that

- a) the tendering entity is a level contributor as stated in the submitted evidence of qualification as at the closing date for submissions
- b) the tendering entity has been measured in terms of the following code *(tick applicable box)*
 - ☐ Generic code of good practice
 - ☐ Other – specify
- c) the contents of the declarations made in terms of a) and b) above are within my personal knowledge and are to the best of my belief both true and correct

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the tenderer confirms that he / she understands the conditions under which such preferences are granted and confirms that the tenderer satisfies the conditions pertaining to the granting of tender preferences.

Signature:

Name:

Duly authorised to sign on behalf of:

Telephone:

Fax: Date:

Name of witness Signature of witness

- Note:**
- 1) Failure to complete the declaration will lead to the rejection of a claim for a preference
 - 2) Supporting documentation of the abovementioned claim for a preference must be submitted with the tender submission to be eligible for a preference

ANNEXURE D. : COMPULSORY DECLARATION

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

Section 1: Enterprise Details

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no	
Fax:	
Physical address	
Postal address	

Section 2: Particulars of companies and close corporations

Company / Close Corporation registration number	
---	--

Section 3: SARS Information

Tax reference number	
VAT registration number:	State Not Registered If not registered for VAT

Section 4: CIDB registration number

CIDB Registration number (if applicable)	
--	--

Section 5: National Treasury Central Supplier Database

Supplier number	
Unique registration reference number	

Section 6: Particulars of principals

principal: means a natural person who is a partner in a partnership, a sole proprietor, a director of a company established in terms of the Companies Act of 2008 (Act No. 71 of 2008) or a member of a close corporation registered in terms of the Close Corporation Act, 1984, (Act No. 69 of 1984).

Full name of principal	Identity number	Personal tax reference number
Attach separate page if necessary		

Section 7: Record in the service of the state

Indicate by marking the relevant boxes with a cross, if any principal is currently or has been within the last 12 months in the service of any of the following:

- | | |
|---|---|
| a member of any municipal council | an employee of any department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act of 1999 (Act No. 1 of 1999) |
| a member of any provincial legislature | |
| a member of the National Assembly or the National Council of Province | |
| a member of the board of directors of any municipal entity | a member of an accounting authority of any national or provincial public entity |
| an official of any municipality or municipal entity | an employee of Parliament or a provincial legislature |

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

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

*insert separate page if necessary

Section 8: Record of family member in the service of the state

family member: a person's spouse, whether in a marriage or in a customary union according to indigenous law, domestic partner in a civil union, or child, parent, brother, sister, whether such a relationship results from birth, marriage or adoption

Indicate by marking the relevant boxes with a cross, if any family member of a principal as defined in section 5 is currently or has been within the last 12 months been in the service of any of the following:

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

Name of family member	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

Section 9: Record of termination of previous contracts with an organ of state

Was any contract between the tendering entity including any of its joint venture partners terminated during the past 5 years for reasons other than the employer no longer requiring such works or the employer failing to make payment in terms of the contract.

Yes No (Tick appropriate box)

If yes, provide particulars (insert separate page if necessary)

Section 10: Declaration

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the tendering entity confirms that the contents of this Declaration are within my personal knowledge, and save where stated otherwise in an attachment hereto, are to the best of my belief both true and correct, and:

- i) neither the name of the tendering entity or any of its principals appears on:
 - a) the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 (Act No. 12 of 2004)
 - b) National Treasury's Database of Restricted Suppliers (see www.treasury.gov.za)
- ii) neither the tendering entity or any of its principals has within the last five years been convicted of fraud or corruption by a court of law (including a court outside of the Republic of South Africa);
- iii) any principal who is presently employed by the state has the necessary permission to undertake remunerative work outside such employment (attach permission to this declaration);
- iv) the tendering entity is not associated, linked or involved with any other tendering entities submitting tender offers
- v) has not engaged in any prohibited restrictive horizontal practices including consultation, communication, agreement, or arrangement with any competing or potential tendering entity regarding prices, geographical areas in which goods and services will be rendered, approaches to determining prices or pricing parameters, intentions to submit a tender or not, the content of the submission (specification, timing, conditions of contract etc.) or intention to not win a tender;
- vi) has no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- vii) neither the tenderer or any of its principals owes municipal rates and taxes or municipal service charges to any municipality or a municipal entity and are not in arrears for more than 3 months;
- viii) SARS may, on an on-going basis during the term of the contract, disclose the tenderer's tax compliance status to the Employer and when called upon to do so, obtain the written consent of any subcontractors who are subcontracted to execute a portion of the contract that is entered into in excess of the threshold prescribed by the National Treasury, for SARS to do likewise.

Signed

Date

Name

Position

Enterprise name

NOTE 1 The Standard Conditions of Tender contained in SANS 10845-3 prohibits anticompetitive practices (clause 3.1) and requires that tenderers avoid conflicts of interest, only submit a tender offer if the tenderer or any of his principals is not under any restriction to do business with employer (4.1.1) and submit only one tender either as a single tendering entity or as a member in a joint venture (clause 4.13.1). Clause 5.7 also empowers the Employer to disqualify any tenderer who engages in fraudulent and corrupt practice. Clause 3.1 also requires tenderers to comply with all legal obligations.

NOTE 2: Section 30(1) of the Public Service Act, 1994, prohibits an employee (person who is employed in posts on the establishment of departments) from performing or engaging remunerative work outside his or her employment in the relevant department, except with the written permission of the executive authority of the department. When in operation, Section 8(2) of the Public Administration Management Act, 2014, will prohibit an employee of the public administration (i.e. organs of state and all national departments, national government components listed in Part A of Schedule 3 to the Public Service Act, provincial departments including the office of the premier listed in Schedule 1 of the Public Service Act and provincial departments listed

in schedule 2 of the Public Service Act, and provincial government components listed in Part B of schedule 3 of the Public Service Act) or persons contracted to executive authorities in accordance with the provisions of section 12A of the Public

Service Act of 1994 or persons performing similar functions in organs of state from conducting business with the State or to be a director of a public or private company conducting business with the State. The offence for doing so is a fine or imprisonment for a period not exceeding 5 years or both. It is also a serious misconduct which may result in the termination of employment by the employer.

NOTE 3: Regulation 44 of Supply Chain Management regulations issued in terms of the Municipal Finance Management Act of 2003 requires that organs of state and municipal entities not award a contract to a person who is the service of the state, a director, manager or principal shareholder in the service of the state or who has been in the service of the state in the previous twelve months.

NOTE: 4: Regulation 45 of Supply Chain Management regulations requires a municipality or municipal entity to disclose in the notes to the annual statements particulars of any award made to a close family member in the service of the state.

NOTE: 5 Corrupt activities which give rise to an offence in terms of the Prevention and Combating of Corrupt Activities Act of 2004) include improperly influencing in any way the procurement of any contract, the fixing of the price, consideration or other moneys stipulated or otherwise provided for in any contract and the manipulating by any means of the award of a tender.

NOTE: 6 Section 4 of the Competition Act of 1998 prohibits restrictive horizontal practice including agreements between parties in a horizontal relationship which have the effect of substantially preventing or lessening competition, directly or indirectly fixing prices or dividing markets or constitute collusive tendering. Section 5 also prohibits restrictive vertical practices. Any restrictive practices that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties.

ANNEXURE E. : MUNICIPAL DECLARATION AND RETURNABLE DOCUMENTS

The following particulars must be furnished in relation to tenders for municipalities and municipal entities where:

- a) consultancy services are required; and
- b) goods, services or a combination thereof where the estimated total of the prices exceeds R 10 million including VAT.

In the case of a joint venture, separate municipal declarations and returnable documents shall be submitted in respect of each partner.

Section 1: Enterprise Details

Name of enterprise:	
Contact person:	
Email:	
Telephone:	
Cell no	
Fax:	
Physical address	
Postal address	

Section 2: Declaration for consultancy services:

The enterprise has been awarded the following consultancy services by an organ of state during the last five years.

Name of organ of state	Estimated number of contracts	Nature of service, e.g, quantity surveying	Service similar to required service (yes / no)?

Attach separate page as necessary

Section 3 Goods, services or a combination thereof where the estimated total of the prices exceeds R 10 million including VAT

I / we certify that

1) (tick one of the boxes):

- ☐ the enterprise **is not** required by law to prepare annual financial statements for auditing
- ☐ the enterprise **is** required by law to have audited annual financial statements and attached the audited financial statements for the past three financial years, or since the establishment as the enterprise was established within the past three years.

2) the enterprise and its directors has / have no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days (i.e.: all municipal accounts are paid up to date);

3) source of goods and / or services:

(tick one of the boxes and insert percentages if applicable):

- ☐ goods and / or services are sourced only from within the Republic of South Africa
- ☐ % of the total cost of goods and / or services will be sourced from outside the Republic of South Africa and the percentage of payment from the municipality or municipal entity which is expected to be transferred out of the Republic is . %

I furthermore confirm that the following contracts were awarded to the enterprise by an organ of state during the last five years and attached particulars of any material non-compliance or dispute concerning the execution of such contracts:

Name of organ of state	Estimated number of contracts	Nature of contracts

Attach separate page as necessary

I, the undersigned who warrants that I am duly authorised on behalf of the tendering entity, hereby declare that the contents of this Declaration are within my personal knowledge, and save where stated otherwise are to the best of my belief both true and correct

Signed

Date

Name
.....

Position

Enterprise name

ANNEXURE F. : CERTIFICATE OF ATTENDANCE AT A TENDER SITE 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
Municipal Fleet Centre / Workshop (5 Eind Street Groblersdal 0470).

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

Particulars of person(s) attending the meeting:

1.Name:

Signature:

Capacity:

2. Name:

Signature:

Capacity:

ANNEXURE G. CERTIFICATE OF AUTHORITY OF JOINT VENTURES/ CLOSE CORPORATIONS/ PARTNERSHIP/ COMPANY/ SOLE PROPRIETOR (CERTIFIED COPIES OF THE IDENTITY DOCUMENTS IN THE CASE OF SOLE PROPRIETOR)

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

(I) COMPANY	(II) CLOSE CORPORATION	(III) PARTNERSHIP	(IV) JOINT VENTURE	(V) SOLE PROPRIETOR

(I) Certificate for Company

I,, chairperson of the Board of Directors of hereby confirm that by resolution of the Board (copy attached) taken on 20....., Mr./Ms., acting in the capacity of was authorized to sign all documents in connection with the tender for Bid No. 95/2017 and any contract resulting from it on behalf of the company.

Chairman:

As Witnesses: 1.....

2.....

Date:

(II) Certificate for Close Corporation

We, the undersigned, being the key members in the business trading as
..... hereby authorize Mr./Ms., acting in the capacity of
....., to sign all documents in connection with
the tender for Bid No. 95/2017 and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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

(II) Certificate for Partnership

We, the undersigned, being the key partners in the business trading as,
....., hereby authorize Mr./Ms.,
acting in the capacity of, to sign all documents in connection with the
tender for Bid No. 95/2017 and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

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

(IV) Certificate for Joint Venture

This Returnable Schedule is to be completed by joint ventures.

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

NAME OF FIRM	ADDRESS	DULY AUTHORIZED SIGNATORY
Lead partner		Signature. Name Designation
		Signature. Name Designation
		Signature. Name Designation
		Signature. Name Designation

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

(V) Certificate for Sole Proprietor

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

Signature of Sole owner:

As Witnesses:

Date:

1.....

2.

ANNEXURE H. : REGISTRATION CERTIFICATE OF AN ENTITY

[Important note to Tenderer: Registration Certificates for Companies, Close Corporations and Partnerships, and ID documents for Sole Proprietors, must be attached here. In the case of a Joint Venture, a copy of a duly signed Joint Venture Agreement must be included]

ANNEXURE I. : SCHEDULE OF THE TENDERER'S EXPERIENCE

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

Signed

Date

Name

Position

Tenderer:
.....

ANNEXURE J. : SCHEDULE KEY PERSONNEL

In terms of the Project Specification and the Conditions of Tender, unskilled workers may only be brought in from outside the local community if such personnel are not available locally.

The Tenderer shall list below the personnel which he intends to utilize on the Works, including key personnel which may have to be brought in from outside if not available locally.

CATEGORY OF EMPLOYEE	NUMBER OF PERSONS					
	KEY PERSONNEL, PART OF THE CONTRACTOR'S ORGANISATION		KEY PERSONNEL TO BE IMPORTED IF NOT AVAILABLE LOCALLY		UNSKILLED PERSONNEL TO BE RECRUITED FROM LOCAL COMMUNITY	
	HDI	NON-HDI	HDI	NON-HDI	HDI	NON-HDI
Site Agent, Project Managers						
Foremen, Quality Control and Safety Personnel						
Technicians, Surveyors, etc.						
Artisans and other Skilled workers						
Plant Operators						
Unskilled Workers						
Others:						
.....						
.....						
.....						

Signed

Date

Name

Position

Tenderer:

[illegible]

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 the schedule

.....
Date

ANNEXURE K. : FORMAT OF CURRICULUM VITAE OF KEY PERSONNEL

Provide separate forms for each position listed in the Form: Key Personnel

Site Foreman

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional Registration Number:	
Name of Employer (firm):	
Current position:	Years with firm:
<u>Employment Record:</u>	
<u>Experience Record Pertinent to Required service:</u>	

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 the schedule

.....
Date

ANNEXURE K: FORMAT OF CURRICULUM VITAE OF KEY PERSONNEL

Provide separate forms for each position listed in the Form: Key Personnel

Safety Officer

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional Registration Number:	
Name of Employer (firm):	
Current position:	Years with firm:
<u>Employment Record:</u>	
<u>Experience Record Pertinent to Required service:</u>	

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 the schedule

.....
Date

ANNEXURE L. : 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 names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

We confirm that all Subcontractors who are contracted to construct a house are registered as home builders with the National Home Builders Registration Council.

	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience with Subcontractor.

Signed Date

Name Position

Tenderer

ANNEXURE M. : 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.

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

Quantity	Description, size, capacity, etc.

Attach additional pages if more space is required.

Signed _____

Date _____

Name _____

Position _____

Tenderer

**ANNEXURE N. : PROOF OF WORKMEN'S COMPENSATION REGISTRATION
CERTIFICATE**

The Tenderer must attach hereto proof of compliance with the relevant requirements of the compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993) OR proof of payment of contributions in terms of the Compensation for Occupational injuries and Diseases Act No.130 of 1993.

ANNEXURE O. : COMPETENCE ACHIEVEMENT SCHEDULES

Functionality Points will be spread as follows (100 points maximum):

TABLE A1: COMPANY EXPERIENCE

Evaluation shall be based on the largest projects executed in the past five years. Only experience from the tendering entity, and not by staff members, shall be considered.

Company Experience in Bridge and road construction– 50 points

- i) Evaluation shall be based on the five largest projects executed in the past five years. Only experience from the tendering entity, and not by staff members, shall be taken into account.

Relevant Overall Experience of Company – 50 points

Company Experience	Returnable schedule Ref	Points
A) Provide the names of two (2) current/recent contactable references for each category that the bidder has tendered for. The information provided include: Customer company name contact person address phone number contract value duration of contract brief description of the services provided Attach five (5) appointment letters and completion certificates	Annexure O: Competence Achievement Schedules	50

TABLE A2: FINANCIAL REFERENCES

This will be assessed against Bank ratings as follows (If a bank letter is submitted, it should be specific to this project and not older than 30 days):

Mandatory audited financial statements

FINANCIAL REFERENCE	Returnable schedule Ref	Bank Rating	Score
Very Good – indisputable for enquiries	TABLE A2: FINANCIAL REFERENCES		
Good – Good for the amount of work			
Adequate – Good for the amount strictly in accordance with business		C	10
Poor – Reasonable business risk (additional motivation will be required prior appointment)		D	8
Inadequate and risky			
Contractor's letter of intent from a registered financial institution of guarantor in the amount of 10% for surety			5

Ability of the contractor to finance working capital requirements before the first claim is paid by the client (The bank letter submitted should not be older than 3 months).

TABLE A3: CONSTRUCTION TEAM KEY PERSONNEL

Construction Team Key Personnel – 20 points

i) Project Manager

Project Manager is required to have a N.D Civil Engineering or higher qualification and have 5-10 years construction experience with a minimum of 4 years in road and bridge construction experience in a project managers role, as indicated below:

YEARS EXPERIENCE	0-4	5-6	7-8	9-10
POINTS	0	4	6	8

ii) Contracts Manager/Site Agent

Site Agent is required to have a N.D Civil Engineering or higher qualification and have 3-10 years construction experience with a minimum of 2 years in road and bridge construction experience in a contract's managers role, as indicated below

YEARS EXPERIENCE	0	3-4	5-6	7-10
POINTS	0	4	5	6

iii) Safety Officer

Safety officer on permanent/contract basis, with a Safety Management or Environmental Health Certificate or Equivalent qualification or related qualification with experience in road projects of not less than two (2) years. Points will be allocated on a pro-rata basis for experience between 2 to 6 years, as indicated below:

YEARS EXPERIENCE	0-3	3-5	6-10
POINTS	0	4	6

TABLE A4: PLANT AND EQUIPMENT

	TARGETED GOALS	TENDERED GOAL	POINTS CLAIMED BY	ALLOCATED POINTS
1	2 x TLB (1.5 points per TLB)	3		
2	2 x Grader (2points per grader)	4		
3	3 x Roller (1 point per roller)	3		
4	4 x (10m ³) Tipper Trucks) (1point per tipper truck)	4		
5	2 x Water tankers (1point per water tanker)	2		
6	2 Excavators (2 points per excavator)	4		
	SUB-TOTAL: Plant and Equipment	20		

SUMMARY OF THE COMPETENCE ACHIEVEMENT SCHEDULE (FUNCTIONALITY)

Number	DESCRIPTION	MAXIMUM POINTS TO BE ALLOCATED	POINTS CLAIMED BY TENDERER	ALLOCATED POINTS
1	Company Experience	50		
2	Financial References	10		
3	Construction Team Key Personnel	20		
4	Plant and Equipment	20		
	SUB-TOTAL:	100		

ANNEXURE P. : BBBEE CERTIFICATE / SWORN AFFIDAVIT

[BBBEE Certificate / Sworn Affidavit to be attached here]

ANNEXURE Q. : FORM OF INTENT TO PROVIDE A PERFORMANCE GUARANTEE

The Tenderer must attach hereto a letter from the bank with whom he has made the necessary arrangements, to the effect that the said bank or institution will be prepared to provide the required performance guarantee when asked to do so.

PRO-FORMA FOR A PERFORMANCE GUARANTEE

PERFORMANCE GUARANTEE

Employer: (Name and Address)

.....

Bid No:

(Contract title)

WHEREAS

.....

(hereinafter referred to as "the Employer") entered into, a Contract with

.....

(hereinafter called "the Contactor") on theday of
20...
for the construction of (Contract Title)

.....

at

.....

AND WHEREAS it is provided by such Contract that the Contractor shall provide the Employer with security by way of a guarantee for the due and faithful fulfilment of such Contract by the Contractor;

AND WHEREAS (hereinafter referred to as "the Guarantor") Has/have at the request of the Contractor, agreed to give such guarantee;

NOW THEREFORE WE,

.....

Do hereby guarantee and bind ourselves jointly and severally as Guarantor and Co-Principal Debtors to the Employer under renunciation of the benefits of division and exclusion for the due and faithful performance by the Contractor of all the terms and conditions of the said Contract, subject to the following conditions:

1. The Employer shall, without reference and/or notice to us, have complete liberty of action to act in any manner authorized and/or contemplated by the terms of the said Contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the Completion Data of the Works under the said Contract, and that its rights under this guarantee shall in no way be prejudiced nor our liability hereunder be affected by reason

of any steps which the Employer may take under such Contract, or of any modification, variation, alterations of the Completion Date which the Employer may make, give, concede or agree to under the said Contract.

2. This guarantee shall be limited to the payment of a sum of money
3. The Employer shall be entitled, without reference to us, to release any guarantee held by it, and to give time to or compound or make any other arrangement with the Contractor. However, upon receipt by us of an authenticated copy of the Certificate of Completion in terms of the Contract, the amount of liability shall be reduced by 50%, which shall be in force until the issue of the Final Approval Certificate at expiry of the Defects Liability Period
4. This guarantee shall remain in full force and effect until the issue of the Certificate of Completion in terms of the Contract, unless we are advised in writing by the Employer before the issue of the said Certificate of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated.
5. Our total liability hereunder shall not exceed the sum of

.....
..... (in words)
R (in figures)

(10 % of the tender sum) which amount I/we agree to hold at your disposal.

6. The Guarantor reserves the right to withdraw from this guarantee by depositing the Guaranteed Sum with the beneficiary, whereupon the Guarantor's liability hereunder shall cease.

I/We declare that I/we, on behalf of the Guarantor, waive the legal exceptions available to a guarantor and undertake to pay the said amount or such portion thereof as may be demanded, immediately on receipt of a written demand from you.

A certificate under your hand shall be sufficient and satisfactory evidence as to the amount of the Guarantor's liability for the purpose of enabling provisional sentence or any similar relief to be obtained against the Guarantor.

This guarantee is neither negotiable nor transferable, and must be surrendered to the Guarantor in the event of the full amount of the Guarantee being paid to the Employer.

7. I/We hereby choose our address for the serving of all notices for all purposes arising here from as

.....
.....

IN WITNESS WHEREOF this guarantee has been executed by us at

on this day of 20.....

As witnesses:

1. Signature

2. Signature

Duly authorized to sign on behalf of (*Guarantor*)

Address

.....

.....

.....

ANNEXURE R. : TAX CLEARANCE CERTIFICATE

Tax Clearance Certificate obtained from SARS to be inserted here.

IMPORTANT NOTES:

1. The following is an abstract from the Preferential Procurement Regulations 2001 promulgated with the Preferential Policy Framework Act No 5 of 2000:

Tax clearance certificate

16. No contract may be awarded to a person who has failed to submit an original Tax Clearance Certificate from the South African Revenue Service ("SARS") certifying the taxes of that person to be in order or that suitable arrangement have been made with SARS."
2. Before entering into a contract with a successful Tenderer, the Employer will confirm with the CIDB that the Tenderer's registration is active and the expiry date of the tax certificate
3. The ST 5.1 form, Application for Tax Clearance Certificate (in respect of tenders), must be **completed by the tenderer in every detail and submitted to the Receiver of Revenue** where the tenderer is registered for income tax purposes. The Receiver of Revenue will then furnish the tenderer with a Tax Clearance Certificate that will be valid for 12 months from date of issue. **This Tax Clearance Certificate must be submitted in the original with the tender before the closing time and date of the tender.**

Each party to a Consortium / Joint Venture / Subcontractors must complete a separate Tax Clearance Certificate.

Failure to submit an original and valid Tax Clearance Certificate ISSUED BY SARS WITH YOUR BID DOCUMENT AT THE TIME OF CLOSING will invalidate the tender.

APPLICATION FORM FOR TAX CLEARANCE CERTIFICATE]
(IN RESPECT OF TENDER)

1. NAME OF TAXPAYER/TENDERER:																
2. TRADE NAME:																
3. IDENTIFICATION No. (if applicable):	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td> </tr> </table>															
4. COMPANY/CLOSE CORPORATION REG No.:	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td> </tr> </table>															
5. INCOME TAX REFERENCE No. :	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td> </tr> </table>															
6. VAT REGISTRATION No. :	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td> </tr> </table>															
7. PAYE EMPLOYERS REG No. (if applicable) :	<table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td><td style="width: 5%;"></td> </tr> </table>															

NB: Copy of the tender request must be attached to this application.

CONTACT PERSON REQUIRING TAX CLEARANCE CERTIFICATE:

SIGNATURE:

NAME:

TELEPHONE NUMBER : CODE: NUMBER:

ADDRESS :

.....

DATE : 200. / /

Please note that the Commissioner for the South African Revenue Service (SARS) will not exercise his discretionary powers in favour of any person with regard to any interest, penalties and/or additional tax leviable due to the late or underpayment of taxes, duties or levies or the rendition of returns by any person.

NAME OF PERSON RESPONSIBLE FOR CONTRACT:

(ST 5.1) March 1999

NB: *This is a pro forma application form that has to be submitted to SARS to enable them to issue the required Tax Clearance Certificate. The original and valid Tax Clearance Certificate furnished by the Receiver of Revenue must be submitted with the tender (to be attached to the next page).*

TAX CLEARANCE CERTIFICATE

[Tax Clearance Certificate obtained from SARS to be attached here]

ANNEXURE S. : EXECUTION PROGRAMME

The Tenderer shall detail below or attach a preliminary programme reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this Contract. The programme shall be in accordance with the information supplied in the Contract, requirements of the Project Specifications and with all other aspects of the Tender.

[illegible]

[Note: The programme must be based on the completion time as specified in the Contract Data. No other completion time that may be indicated on this programme will be regarded as an alternative offer, unless it is listed in Table (b) of the Form hereafter and supported by a detailed statement to that effect, all as specified in the Tender Data]

SIGNATURE: DATE:
(of person authorized to sign on behalf of the Tenderer)

ANNEXURE T. : CONTRACTOR'S HEALTH AND SAFETY DECLARATION

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

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

Declaration by Tenderer

1. I, the undersigned hereby declare and confirm that I am fully conversant with the Occupational Health and Safety Act No 85 of 1993 (as amended by the Occupational Health and Safety Amendment Act No 181 of 1993), and the OHS 1993 Construction Regulations 2003.
2. I hereby declare that my company has the competence and the necessary resources to safely carry out the construction work under this contract in compliance with the Construction Regulations and the Employer's Health and Safety Specifications.
3. I hereby confirm that adequate provision has been made in my tendered rates and prices in the Bill of Quantities to cover the cost of all resources, actions, training and all health and safety measures envisaged in the OHS 1993 Construction Regulations 2003, including the cost of the specific items listed in the tables hereafter.

(Tables to be completed by Tenderer)

TABLE 1: COST OF SAFETY PERSONNEL

PERSONNEL	COSTS AS ALLOWED IN TENDER	NOMINATED PERSON/S
Construction Supervisor		
Construction Safety Officer		
Health and Safety Representatives		
Health and Safety Committee		

TABLE 2: COST OF SAFETY EQUIPMENT

EQUIPMENT	STATE YES or NO	COST ALLOWED FOR IN TENDER
Hard hats		
Safety boots		
Harnesses		
Gas detectors		
Add items as per risk assessment:		

4. I hereby undertake, if my tender is accepted, to provide, before commencement of the works under the contract, a suitable and sufficiently documented Health and Safety Plan in accordance with Regulation 5(1) of the Construction Regulations, which plan shall be subject to approval by the Employer.
5. I confirm that copies of my company's approved Health and Safety Plan, the Employer's Safety Specifications as well as the OHSA 1993 Construction Regulations 2003 will be provided on site and will always be available for inspection by the Contractor's personnel, the Employer's personnel, the Engineer and his Agents, visitors, and officials and inspectors of the Department of Labour.
6. I hereby confirm that I will be liable for any penalties that may be applied by the Employer in terms of the said Regulations (Regulation 30) for failure on the Contractor's part to comply with the provisions of the Act and the Regulations.
7. I agree that my failure to complete and execute this declaration to the satisfaction of the Employer will mean that I am unable to comply with the requirements of the OHSA 1993 Construction Regulations 2003, and accept that my tender will be prejudiced and may be rejected at the discretion of the Employer.

SIGNATURE: DATE:
(of person authorized to sign on behalf of the Tenderer)

ANNEXURE U. : CONTRACTOR'S SAFETY PLAN

[The Tenderer shall submit separately before commencement of the works his Health and Safety Plan as required in terms of Regulation 5 of the Occupational Health and Safety Act 1993 Construction Regulations 2003, and referred to in T2.1]

ANNEXURE V. : Proforma Notification form in terms of the Occupational Health and Safety Act 1993, Construction Regulations, 2014

[This form must be completed and forwarded, prior to commencement of work on site, by all Contractors that qualify in terms of Regulation 3 of the Construction Regulations 2003, to the office of the Department of Labour]

1.
(a) Name and postal address of Contractor:

(b) Name of Contractor's contact person:

Telephone number:

2. Contractor's workman's compensation registration number:

3. (a) Name and postal address of client:

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

(b) Name of client's contact person or agent:

Telephone number:

4. (a) Name and postal address of designer(s) for the project:

(b) Name of designer's contact person:

Telephone number:

5. Name of Contractor's construction supervisor on site appointed in terms of:

Regulation 6(1): Telephone

number:

6. Name/s of Contractor's sub-ordinate supervisors on site appointed in terms of regulation 6(2):

7. Exact physical address of the construction site or site office:

8. Nature of the construction work:

9. Expected commencement date:

10. Expected completion date:

11. Estimated maximum number of persons on the construction site:
12. Planned number of subcontractors on the construction site accountable to Contractor:
13. Name(s) of subcontractors already chosen:

SIGNED BY:

CONTRACTOR:

DATE:

CLIENT:

DATE:

THE CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

PART C2: PRICING DATA

PART C3: SCOPE OF WORK

PART C4: SITE INFORMATION

ELIAS MOTSOALEDI LOCAL MUNICIPALITY

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PART C1: AGREEMENTS AND CONTRACT DATA (YELLOW COLOUR)

C1.1: FORM OF OFFER AND ACCEPTANCE – PHASE 2

C1.1-1: FORM OF OFFER AND ACCEPTANCE – PHASE 2

C1.2: CONTRACT DATA

C1.2.1: CONDITIONS OF CONTRACT

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

PART B: CONTRACT DATA PROVIDED BY THE CONTRACTOR

C1.3: FORM OF GUARANTEE

C1.4: AGREEMENT WITH ADJUDICATOR

C1.5: AGREEMENT IN TERMS OF SECTION 37(2) OF THE
OCCUPATIONAL HEALTH AND SAFETY ACT No 85 OF 1993

PART C2: PRICING DATA (YELLOW COLOUR)

C2.1: PRICING INSTRUCTIONS

C2.2: BILL OF QUANTITIES

PART C3: SCOPE OF WORK (BLUE COLOUR)

C3.1: STANDARD SPECIFICATIONS

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PART C4: SITE INFORMATION (GREEN COLOUR)

C4.1: LOCALITY PLAN

C4.2: BID DRAWINGS

ELIAS MOTSOALEDI LOCAL MUNICIPALITY
UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

C1.1-1 Form of Offer and Acceptance

Offer

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

CONTRACT NO: EMLM 17/2023: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

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

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

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

.....

..... Rand (in words);

R (in figures)

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

Signature Block: Bidder	
Signature	Date
Name	
Capacity	
Name of organization.	
Address of organization	
.....	
Signature of witness	Date
Name of witness	

Acceptance

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

The terms of the contract, are contained in:

Part C1: Agreements and contract data, (which includes this agreement)
Part C2: Pricing data
Part C3: Scope of work.
Part C4: Site information
and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

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

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

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

Signature Block: Employer	
Signature	Date
Name	
Capacity	
For the Employer:	Municipal Manager Elias Motsoaledi Local Municipality
Signature of witness	Date
Name of witness	

Schedule of Deviations

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

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

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

For the Bidder:

Signature(s)	_____	_____
Name(s)	_____	_____
Capacity	_____	_____

(Name and address of organization)		

Name & Signature of Witness	_____	_____
-----------------------------------	-------	-------

For the Employer:

Signature(s)	_____	_____
Name(s)	_____	_____
Capacity	_____	_____

(Name and address of organization)		

Name & Signature of Witness	_____	_____
-----------------------------------	-------	-------

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

Situated in

ELIAS MOTSOALEDI LOCAL MUNICIPALITY

C1.2 Contract Data

The General Conditions of Contract for Construction Works (3rd edition 2015) published by the South African Institution of Civil Engineers, is applicable to this contract. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineers (Tel: 011-805 5947).

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

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

If for some reason that “The General Conditions of Contract for Construction Works (2015)” does not address, “The COLTO General Conditions of Contract 1998 for Road and Bridge Works” will be referred to.

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

Situated in

ELIAS MOTSOLEDI LOCAL MUNICIPALITY

C1.2.1: CONDITIONS OF CONTRACT

GENERAL CONDITIONS OF CONTRACT

SPECIAL CONDITIONS OF CONTRACT

- 1. GENERAL**
- 2. AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT**
- 3. TRANSFER OF RIGHTS**

C1.2.1 CONDITIONS OF CONTRACT

GENERAL CONDITIONS OF CONTRACT

This Contract will be based on the "General Conditions of Contract for Construction Works - (3rd edition 2015)", issued by the South African Institution of Civil Engineers (Short title: "**General Conditions of Contract 2015**") and can be obtained from:

SAICE

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

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

SPECIAL CONDITIONS OF CONTRACT

1. GENERAL

These Special Conditions of Contract (SCC) form an integral part of the Contract. The Special Conditions shall amplify, modify or supersede, as the case may be, the General Conditions of Contract 2010 to the extent specified below, and shall take precedence and shall govern.

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

2. ADDITIONAL SPECIAL CONDITIONS OR AMENDMENTS TO THE GENERAL CONDITIONS OF CONTRACT

2.1 General

The following clauses add to, vary or otherwise amend the General Conditions of Contract:

2.1.1 Cession (CL 2.5.1)

Delete the words "without the written consent of the other".

2.1.2 Contractor's Superintendence (CL 4.12)

Add the following sub-clause 4.12.4 to Clause 4.12:

"Where a form is included in the Appendix to the Contract Data for this purpose, the Bidder shall fill in the name of the person he proposes to entrust with the post of Contractor's Site Agent on this Contract in the space provided therefor. Previous experience of this person on work of a similar nature during the past five (5) years is to be entered in the list.

The Contractor's Site Agent shall be on Site at all times when work is being performed.

The person as approved of by the Employers Agent in writing shall not be replaced or removed from Site without the written approval of the Employers Agent.”

2.1.3 Programme (CL 5.6)

Add the following sub-clause 5.6.6 to Clause 5.6:

“Failure on the part of the Contractor to deliver to the Employers Agent, the

- programme of the Works in terms of Clause 5.6.1 and
- supporting documents in terms of Clause 5.6.2

Within the period stated in the Contract Data, shall be sufficient cause for the Employers Agent to retain 25 per centum of the value of the Fixed Charge and Value-related items in assessment of amounts due to the Contractor, until the Contractor has submitted aforementioned first Programme of the Works and Supporting Documents”.

2.1.4 Contractor's Designs and Drawings (CL 5.9.7)

“All designs, calculations, drawings and operation and maintenance manuals shall be fully endorsed by a third party registered Employers Agent, accomplished in such specific field of practice and the cost thereof shall be borne solely by the Contractor.

Once the alternative design has been approved, the Contractor shall indemnify and hold harmless the Employers Agent, the Employer, their agents and assigns, against all claims howsoever arising out of the said design, whether in contract or delict”

2.1.5 Suspension of the Works (CL 5.11)

Add the following sub-clause 5.11.6 to Clause 5.11:

“If the Contractor does not receive from the Employer the amount due under an Interim Payment Certificate within 28 days after expiry of the time stated in sub-clause 6.10.4 within which payment is to be made (except for deductions in accordance with sub-clauses 6.10.1.6 and 6.10.1.7), the Contractor may, after giving 14 days’ notice to the Employer, suspend the progress of the Works.

The Contractor’s action shall not prejudice his entitlements to a claim in terms of Clause 10.1 and to cancellation of the Contract in terms of Clause 9.3.

If the Contractor subsequently receives full payment of the amount due under such Interim Payment Certificate before giving a notice of cancellation of the Contract, the Contractor shall resume normal working as soon as is reasonably practicable.”

2.1.6 Extension of Time Arising from Abnormal Rainfall (CL 5.12)

Add the following to sub-clause 5.12.2.2:

“The extension of time to be allowed due to abnormal rainfall shall be calculated separately for each calendar month or part thereof in accordance with the following formula:

$$V = (Nw - Nn) + \frac{Rw - Rn}{x}$$

V = Extension of time in calendar days for the calendar month under consideration

Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded

Nn = Average number of days for the calendar month on which a rainfall of 10 mm or more has been recorded, as derived from existing rainfall records
 Rw = Actual recorded rainfall for the calendar month
 Rn = Average rainfall for the calendar month, as derived from existing rainfall records
 x = 20

The rainfall records which shall provisionally be accepted for calculation purposes are:

**Based on records taken at: Rainfall Station: MARBLE HALL Lat: 24.9670 Lon: 29.3000
Height 914 m**

Average No of Days with Rainfall exceeding 10mm: 69.2 days/year

Average Rainfall: 521.5 mm/year

Years of record: 1941-2015

Month	Average rainfall for calendar month Rn	Average number of days for calendar month on which a rainfall of 10 mm or more were recorded Nn
	(mm)	(days)
January	84.7	8.4
February	71.4	6.7
March	60.9	5.8
April	32.9	3.87
May	10.2	1.5
June	4.2	0.7
July	1.7	0.4
August	4.1	0.7
September	15.4	1.9
October	49.3	5.5
November	86.3	8.6
December	100.5	8.3

The factor (Nw - Nn) shall be considered to represent a fair allowance for days during which rainfall exceeds 10 mm and the factor (Rw - Rn)/x shall be considered to represent a fair allowance for those days when rainfall does not exceed 10 mm but wet conditions prevent or disrupt work.

The total extension of time shall be the algebraic sum of all monthly totals for the contract period, but if the algebraic sum is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for a part of a month shall be calculated using pro rata values of Nn and Rn."

2.1.7 Guarantee (Security) (CL 6.2)

Delete the contents of the first paragraph of Clause 6.2.1 and insert:

"The Contractor shall deliver to the Employer within such time as may be stated in the Contract Data a Demand Guarantee, of Insurance Company registered in terms of the Short-term Insurance Act (Act 53 of 1998) or registered Commercial Bank, in a sum equal to the amount stated in the Contract Data. The Demand Guarantee shall be issued by an entity approved by the Employer, and shall conform in all respects to the format contained in the Appendix to the Contract Data.

Wherever a joint venture constitutes the contracting party, the Demand Guarantee shall be issued on behalf of the joint venture.

Failure to produce an acceptable Demand Guarantee within the period stated in Clause 2.2.8 of the Contract Data is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 with specific reference to sub-clause 9.2.2.5 as amended in the Special Conditions of Contract.”

2.1.8 Variations (CL 6.3)

Omit the words “Provided that” under Clause 6.3.2 and omit Clause 6.3.2.1.

2.1.9 Interim Payments (CL 6.10.1)

Add to the end of Clause 6.10.1 the following paragraph:

“The Contractor shall complete the ‘Contractor’s Monthly Report Schedule’, which pro forma documentation is obtainable from the Employers Agent. Pursuant to Sub-Clause (1), these, duly signed by all concerned, together with the Contractor’s statement and a VAT invoice in original format are to be submitted to the Employers Agent. Issue by the Employers Agent to the Employer and Contractor of any signed payment certificate is conditional to this information being fully endorsed, accurately and timeously submitted to the Employers Agent”.

Add to the end of Clause 6.10.1.5 the following paragraph:

“All documentary evidence of such materials shall be unambiguous with respect to ownership having fully passed to the Contractor on or before the date of submittal of the Contractor’s monthly statement.

Should the Contractor fail to supply unambiguous documentary evidence, he shall, prior to submittal of his monthly statement, deliver to the Employer a Guarantor Guarantee in the form contained in the Appendices to the Contract Data.”

2.1.10 Variations Exceeding 15 Per Cent (CL 6.11)

In sub-clause 6.11.1.3 omit the words “15 per cent” and replace with “20 per cent”.

2.1.11 Insurances (CL 8.6)

2.1.11.1 Contractor to produce proof of payment

Delete sub-clause 8.6.6 and substitute with:

“The Contractor shall before commencement of the Works produce to the Employers Agent:

8.6.6.1 The policies by which the insurances are effected,

8.6.6.2 Proof that due payment of all premiums there under, covering the full required period has been made, and

8.6.6.3 Proof of continuity of the policies for the required period.

Should, during the currency of the Contract, the required period of insurance be extended for any reason, the Contractor shall timeously extend (so as to maintain) the said insurances for the full extended duration.

The Employers Agent shall be empowered to withhold all payment certificates until the Contractor has complied with his obligations in terms of this Clause 8.6.”

2.1.11.2 Remedy of Contractor’s failure to insure

Delete sub-clause 8.6.7 and substitute with:

“Failure on the part of the Contractor to effect and keep in force any of the insurances referred to in Clause 8.6.1 and its sub-clauses, is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 and with specific reference to sub-clause 9.2.2.5, as amended, in the Special Conditions of Contract.”

2.1.12 Termination of the Contract (CL 9.1)

Alter the numbering of:

Clause 9.1.5 to 9.1.6,
Clause 9.1.6 to 9.1.7 and

insert the following new clause 9.1.5:

“The Employer shall be entitled to cancel the Contract, at any time for the Employer’s convenience, by giving written notice of such cancellation to the Contractor. The termination shall take effect 28 days after the later of the dates which the Contractor receives this written notice or the Employer returns the Demand Guarantee. The Employer shall not cancel the Contract under this sub-clause in order to execute the Works himself or to arrange for the Works to be executed by another contractor.

This restriction on the Employer shall lapse 18 months after the date of receipt by the Contractor of cancellation in terms of this sub-clause”.

2.1.13 Termination by Employer (CL 9.2)

Delete the contents of Clause 9.2 and substitute with:

“9.2.1 The Employer may terminate the Contract by written notice to the Contractor if:

9.2.1.1 Sequestration of the Contractor’s estate is ordered by a Court with due jurisdiction, or

9.2.1.2 The Contractor publishes a notice of surrender or presents a petition for the surrender of his estate as insolvent, or makes a compromise with his creditors, or assigns in favour of his creditors, or agrees to carry out the Contract under the supervision of a committee representing his creditors, or (being a company) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purpose of amalgamation or reconstruction), or if the Contractor assigns the Contract without having first obtained the Employer’s consent in writing, or if execution is levied on his goods, or

9.2.1.3 The Contractor, or anyone on his behalf, or in his employ, offers to any person in the employ of the Employer or the Employers Agent, a gratuity or reward or commission, or

9.2.1.4 The Contractor furnished materially inaccurate information in his Bid, which had a bearing on the award of the Contract, or

9.2.1.5 The Contractor has abandoned the Contract

9.2.2 If the Contractor:

- 9.2.2.1 Has failed to commence the Works in terms of Clause 5.3 hereof, or has suspended the progress of the Works for fourteen (14) days after receiving from the Employers Agent written notice to proceed, or
 - 9.2.2.2 Has failed to provide the Guarantee in terms of Clause 6.2 within the time stipulated in the Contract Data, or
 - 9.2.2.3 Has failed to proceed with the Works with due diligence, or
 - 9.2.2.4 Has failed to remove materials from the Site or to pull down and replace work within fourteen (14) days after receiving from the Employers Agent written notice that the said materials or work have been condemned and rejected by the Employers Agent in terms of these conditions, or
 - 9.2.2.5 Is not executing the Works in accordance with the Contract, or is neglecting to carry out his obligations under the Contract, or
 - 9.2.2.6 Has, to the detriment of good workmanship or in defiance of the Employers Agent's instructions to the contrary, sublet any part of the Contract, or
 - 9.2.2.7 Has assigned the Contract or any part thereof without the Employer's consent in writing, then the Employer may give the Contractor 14 days' notice to rectify the default, and if the Contractor fails to rectify the default in said 14 days, then, without further notice, notify the Contractor in writing of the termination of the Contract and expel the Contractor and order the Contractor to vacate the site within 24 hours of issue of the Notice of Termination and to hand the Site over to the Employer, and the Employer may then enter upon the Site and the Works without affecting the rights and powers conferred on the Employer or the Employers Agent by the Contract and the Employer may himself complete the Works or may employ another contractor to complete the Works, and the Employer or such other contractor may use for such completion so much of the Construction Equipment, Temporary Works and materials brought onto the Site by the Contractor as the Employer may think proper, and the Employer may at any time sell any of the said Construction Equipment, Temporary Works and unused materials and apply the proceeds of sale towards payment of any sums that may be due or become due to the Employer by the Contractor under the Contract. In such circumstances the Contractor shall forthwith vacate the Site and shall not be entitled to remain on the Site on the grounds that he is entitled to do so on a right of retention until amounts due to him have been paid, neither will the Contractor be entitled to any further payments in terms of this Contract.
- 9.2.3 If the Contractor, having been given notice to rectify a default in terms of 55.2 above, rectifies said default, but later repeats the same or substantially the same default, then the Employer may notify the Contractor of the immediate termination of the Contract, and proceed as stated in the paragraph following the word "writing" in Clause 55.2.7 above.
- 9.2.4 Should the amounts the Employer must pay to complete the Works exceed the sum that would have been payable to the Contractor on due completion by him, then the Contractor shall upon demand pay to the Employer the difference, and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly. Provided that should the Contractor on demand not pay the amount of such excess to the Employer, such sum may be determined and deducted by the Employer from any sum due to or that may become due to the Contractor under this or any previous or subsequent contract between the Contractor and the Employer."

2.1.14 Termination by the Contractor (CL 9.3)

Add the following paragraph as Clause 9.3.5:

“In addition to, or as an alternative to the rights to termination contained in this Clause 9.3, the Contractor may notify the default to the Employer, with a copy to the Employers Agent, and if the default is not rectified within 10 days the Contractor may suspend progress of the works until a date 7 days after the default is rectified. The Contractor shall be entitled to extension of time to the extent of delay caused by or resulting from such suspension, and to payment of additional costs caused by or resulting from the suspension. Such extension of time and additional costs shall be promptly ascertained by the Employers Agent, who shall then grant the extension of time and include the additional costs in all future payment certificates. Such suspension, extension of time and/or payment of additional costs, shall not prejudice the Contractor's rights to cancel the contract.”

3. PRIORITY OF DOCUMENTS

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purpose of interpretation, the priority of the documents shall be in accordance with the following sequence:

- a) the Form of Offer and Acceptance.
- b) amplifications of the General Conditions of Contract within the Contract Data.
- c) additional special conditions or amendments to the General Conditions of Contract within the Contract Data.
- d) the General Conditions of Contract.
- e) the Specifications, Drawings, Schedules and other documents forming part of the Contract (in that order) contained in the Scope of Work and the Site Information.

If any ambiguity or discrepancy is found in the documents, the Employers Agent shall issue any necessary clarification or instruction.

4. TRANSFER OF RIGHTS

TRANSFER OF RIGHTS AND INDEMNITY (To be completed during construction by successful Bidder only)

Claim for materials on site, Payment Certificate No. Date:

Contract No: for (contract title)

I, the undersigned (name of signatory) in my capacity, as

..... of (name of Contractor)

duly authorized hereto on behalf of the Contractor hereby transfer, cede and assign all the Contractor's rights, title and interest in and to the materials and goods, for which evidence of bona fide ownership is attached hereto, unto and in favor of (name of Employer) insofar as the Contractor retains actual control of the materials and goods, the right of ownership thereof passes to the Employer by *constitutum possessorium*.

I herewith indemnify the Employer against any claim to and in respect of said materials by reason of the Contractor's sequestration or liquidation or of any defect in the Contractor's title to the materials and agree that no payment for materials on site will be made by the Employer until such time as I have submitted documentary proof of bona fide ownership of the said materials and goods.

This transfer shall become effective upon conclusion of the Contractor receiving payment from the Employer or from any other person on behalf of the Employer for the materials and goods as Materials on Site, payment of retention money thereon excluded.

I further confirm that I am fully responsible for all materials and goods listed under this Transfer of Rights and that they have been insured adequately against all risks and will remain insured until they are built into or used in the permanent works and taken over by the Employer.

This certificate of Transfer of Rights applies only to the materials and goods as listed in the following table:

Description of Item	Unit	Quantity	Rate	Amount	Supplier
Total Value of Materials and goods					

Signed by: **Date:**
for and on behalf of the Contractor.

Witnessed by: **Date:**

NOTE: This form, together with the documentary proof of ownership or proof of payment by the Contractor to the supplier, shall accompany the Contractor's claim for payment for materials on site in terms of **Clause 6.10.1.5 of the General Conditions of Contract 2015**.

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

The following contract specific data are applicable to this contract.

REFERENCE CONTRACT SPECIFIC DATA BY THE EMPLOYER

- Clause 1.1.13: The defects liability period is 12 months measured from the date of the completion certificate.
- Clause 1.1.14: The time for achieving Practical Completion is when each phase of the defined project scope is completed, and the duration is **Two financial years with 18 calendar months being the effective working time** from the Commencement Date, including special non-working days
Financial year 1: July 2019 to June 2020: Implementation of Work for Phase 1D-1 Time to achieve practical completion is 4 months
Financial Year 2: July 2020 to June 2021: Implementation of Work for Phase 1D-2 Time to achieve practical completion is 6 months
- Clause 1.1.15: **Name of Employer: ELIAS MOTSOLEDI LOCAL MUNICIPALITY represented by Head of Department: Department of Technical Services**
- Clause 1.2.1: **Address of Employer:**

The Employer's address for receipt of communications is
Postal: P. O Box 48;
Groblersdal 0470
Fax: 013 262 3056/7/8/9
Tel: 013 262 2547/2886
- Clause 1.1.16: **Name of Employers Agent**
'Employers Agent' means any Director, Associate or Professional Employers Agent appointed by a Director of Dolmen Engineers cc to fulfil the functions of the Employers Agent in terms of the Contract Data.
- Clause 1.2.1: **Address of Employers Agent:**

Physical: Postal:

The Employers Agent's address for receipt of communications is:

22A Pres Paul Kruger Street P.O. Box 468
Polokwane Fauna Park, 0713
1820

E-Mail: polokwane@dolmenengineers.co.za

Telephone No: (015) 295 4885 Fax No: (015) 295 8384
- Clause 3.2: The Employers Agent is required to obtain the specific approval of the Employer for the following:
- a) Nominating the Employers Agent's Representative in terms of CI 3.3.1.
 - b) Delegation of Employers Agent's authority in terms of CI 3.2.4.
 - c) The issuing of instructions for dealing with fossils and the like in terms of CI 4.7.1
 - d) The issuing of an instruction to accelerate progress in terms of CI 5.7.3.

- e) Granting permission to work during non-working times in terms of CI 5.8.1.
- f) The issuing of further drawings or instructions in terms of CI 5.9.1.
- g) Suspend the progress of the works in terms of CI 5.11.1.
- h) The reduction of a penalty for delay in terms of CI 5.13.2.
- i) The issuing of a variation order in terms of CI 6.3.2.
- j) Issuing of instructions to carry out work on a day work basis in terms of CI 6.4.1.4.
- k) The determination of additional or reduced costs arising from changes in legislation in terms of CI 6.8.4.
- l) The agreeing of the adjustment of the sums for general items in terms of CI 6.11.
- m) Authorizing the Contractor to repair and make good excepted risks in terms of CI 8.2.2.
- n) The giving of a ruling on a contractor's claim in terms of CI 10.1.5.
- o) The agreeing of an extension to the 28 period in terms of CI 10.1.5.1.
- p) The inclusion of credits in the next payment certificate in terms of CI 10.1.5.2.

Clause 6.2: The Guarantee shall be delivered within 14 days after receipt of the acceptance document from the Employer.

Clause 6.2: The Liability of the Guarantee shall be for 10% of the Accepted Bid Sum.

Clause 5.3: The contractor shall commence executing the work within 14 days of the commencement date.

Clause 5.6.1 & 5.6.2: The Contractor shall deliver to the Employers Agent, within 14 days calculated from the Commencement Date, a realistic programme in terms of Clause 5.6.1 and supporting documents in terms of Clause 5.6.2.

Clause 8.6.1.1.3: The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is NIL

Clause 8.6.1.2: Special risk insurance issued by SASRIA is required.

Clause 8.6.1.3: The limit of indemnity for liability insurance required should not be less than the contract amount.

Clause 5.13.1: The penalty for failing to complete the works is 0.05 % of the total bid sum per calendar day

Clause 6.8.2: The value of the certificates for phase 2 issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values:

Contract Price Adjustment Factor = $(1 - x) \left[\frac{aL_t}{L_o} + \frac{bP_t}{P_o} + \frac{cM_t}{M_o} + \frac{dF_t}{F_o} - 1 \right]$ rounded off to the fourth decimal place.

Coefficients for calculating Contract Price Adjustment Factor shall be:
Value of x is 0.10

a = 0.15 b = 0.20 c = 0.55 d = 0.10

L is the "Labour Index" and shall be the "Consumer Price Index – for Polokwane Area" In Release P 0141.1 Table 21

The base month is: "the month prior to the closing of the Bid"
No Contract Price Adjustment will be done if contract period is less than 7 months.

Clause 6.8.3: Price adjustments for variations in the costs of special materials are not allowed.

- Clause 6.10.1.5: The percentage advance on materials not yet built into the Permanent Works is: 80%
- Clause 6.10.3: The percentage retention on the amounts due to the Contractor is 10 %, excluding contract price adjustment, contingencies and VAT, and limited to 10% of the contract amount, excluding contract price adjustment, contingencies and VAT.
- Clause 6.10.5: A Retention money guarantee will be not permitted.
- Clause 7.8.1: The Defects Liability Period is 12 months measured from the date of the Certificate of Completion.
- Clause 10.7.1 Dispute resolution shall be by Adjudication.

SPECIAL

- i) The minimum local labor target is 10% of the tender sum
 - ii) The minimum local SMMEs target is 20% of the tender sum
- Clause 10.7.1: Dispute Resolution shall be by Adjudication.

Payment for labour-intensive component of the works

Payment for works identified in the Scope of Works 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 payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict

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

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

Applicable Labour Laws

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

C1.2.2: PART B: CONTRACT DATA PROVIDED BY THE CONTRACTOR

The following contract specific data are applicable to this contract:

REFERENCE CONTRACT SPECIFIC DATA BY THE CONTRACTOR

Clause 1.1.9: **Name of Contractor:**

Clause 1.2.1: **Address of the Contractor:**

The Contractor's address for receipt of communication is:

Physical:

Postal:

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

E-Mail:

Telephone No: Fax No:

Clause 5.5 The works shall be completed within **Six (6) months** (including special non-working days and the year-end break).

Clause 6.8.3: The variation in cost of all special materials is to be provided in the table SM 1 for special materials.
The rates and prices for the special materials shall be furnished by the Bidder, which rates and prices shall not include VAT but shall include all other obligatory taxes and levies. The quoted price is the ruling price on the Month prior to close of bid.

TABLE: SM1

Special Materials*	Unit	Rate or Price for the base month
Bitumen (specify type)		
.....		
.....		
.....		
.....		
.....		

*Contractor to indicate the type, unit and rate of special material to be listed. The Contractor shall substantiate the above rates or prices with acceptable documentary evidence. Contractor to provide any other Special Materials if deemed necessary.

N.B. Diesel, reinforcing steel, and cement will not be accepted as special material.

C1.3 Form of Guarantee - Pro Forma

The Municipal Manager
Elias Motsoaledi Local Municipality
Number 02 Grobler Ave
Groblersdal
0470

CONTRACT: EMLM 17/2023
FOR
UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:.....

Physical address:.....

"Employer" means: **ELIAS MOTSOALEDI LOCAL MUNICIPALITY**

"Contractor" means:.....

"Engineer" means: **MTP INFRASTRUCTURE RESOURCES CC**

"Works" means: **UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD**

"Site" means: **NYAKURANE VILLAGE**

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

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

Amount in words:.....

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

Amount in words:.....

"Expiry Date" means:.....

CONTRACT DETAILS

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

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the mount of the Guaranteed Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Engineer and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be constructed as any intention whatsoever to create an accessory obligation or and intention whatsoever to create a suretyship;
 - 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - a. A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Engineer in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;
 - b. A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
 - c. A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
- 5.1 Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
 - 5.2 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
 - 5.3 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
 - 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
- 6 It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
- 7 Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
- 8 Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
- 9 Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
- 10 The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.

- 11 The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
- 12 This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
- 13 The Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
- 14 Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No.32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Signed at.....

Date.....

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

Capacity

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

Capacity.....

Witness signatory (1).....

Witness signatory (2).....

C1.4: Agreement with Adjudicator

This agreement is made on the.....day of 20.....between: the Employer
(name of company / organisation).....
of (address).....
.....and the Contractor
(name of company / organisation)
of (address).....
..... (hereinafter called **the Parties**)

and
(name).....
of (address)
..... (hereinafter called **the Adjudicator**)

Disputes or differences may arise/have arisen* between the Parties under a Contract dated.....
and known as Contract No.....
(Contract title).....

and these disputes or differences shall be/have been* referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "**the Procedure**") and the Adjudicator may be or has been requested to act.

(* Delete as necessary)

IT IS NOW AGREED as follows:

1. The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
2. The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
3. The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
4. The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavor to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
5. The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

SIGNED by:

(Signature): (Signature): (Signature):

Name: Name: Name:

who warrants that he/ she is
duly authorised to sign for and
on behalf of the **First Party** in
the presence of

who warrants that he/ she is
duly authorised to sign for
and on behalf of the **Second
Party** in the presence of

the **Adjudicator** in the
presence of

Witness: (Signature).....	Witness: (Signature).....	Witness: (Signature).....
Name:	Name:	Name:
Address:	Address:	Address:
.....		
.....		
Date:	Date:	Date:

C1.5: 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 is made aton this theday of.....in the year.....between The **ELIAS MOTSOLEDI LOCAL 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;

AND:

(hereinafter called the CONTRACTOR) of the other part, herein represented by

.....
in his capacity as: and duly authorised to sign on behalf of the Contractor.

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 the parties agree as follows:

1. The contractor 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.
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):

******For official use only**

SIGNED ON BEHALF OF THE CONTRACTOR

AS WITNESS:

1.....

2.....

NAME(Print):

NAME(Print):

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

Situated in

ELIAS MOTSOALEDI LOCAL MUNICIPALITY

C2.1: PRICING INSTRUCTIONS

1. GENERAL

The pricing instructions describe the criteria and assumptions which will be assumed in the Contract that the Bidder has taken into account when developing his prices. The Bills of Quantities record the Contractor's rates for providing supplies, services, engineering and construction works in accordance with the Scope of Work.

The terms of payment and the provisions for price adjustment, if applicable, are established in the Contract Data. These items are not described in the Pricing Data.

The Bidder's obligations in pricing the Bid offer and the Employer's undertakings in the checking and correction of arithmetical errors are dealt with in the Standard Conditions of Bid contained in Annexure c of SANS 10845-3:2015, as amended in and read in conjunction with the Bid Data.

2. DOCUMENTS MUTUALLY EXPLANATORY

The documents forming the Contract are to be taken as mutually explanatory of one another. The Bill of Quantities forms an integral part of the Contract Documents and shall be read in conjunction with the Bid Data, Contract Data, Scope of Work, Site Information General and Special Conditions of Contract, the Specifications and the Drawings.

3. DEFINITIONS

For the purpose 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 COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition).
Quantity	:	The number of units of work for each item
Rate	:	The payment per unit of measurement at which the Bidder Bids to do the work.
Amount	:	The product of the quantity and the rate Bided for an item
Sum	:	An amount Bided for an item, the extent of which is described in the Schedule of Quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.
Prime Cost (or PC item)	:	A sum fixed by the Engineer and entered in the Schedule of Quantities as the net sum provided to cover the cost of specific goods or materials to be supplied under the contract, or the net sum to be paid by the Contractor to merchants or others for such articles or materials. ¹
Provisional Sum	:	A sum of money fixed by the Engineer and entered in the Schedule of Quantities to provide for work not defined at the Bid stage and includes any allowance specifically made for unforeseen contingencies. ¹
Extra Over (or EO)	:	Qualifies an operation (or combination of operations) which is common in a varying degree to a number of other operations and which is scheduled once as "extra over" those other operations in order to avoid a multiplicity of items each reflecting the degree to which the common operations apply. The term "extra over" invariably denoted double measurement, no deduction being made from one on account of the other. ¹

4. **DESCRIPTIONS**

Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.

5. **REFERENCES**

The general conditions of contract, the special conditions of contract (if any), the specifications (including the project specification) and the drawings are to be read in conjunction with the schedule of quantities.

Descriptions in the schedule of quantities are abbreviated and the schedule has been drawn up generally in accordance with the COLTO Standard Specification for Road and Bridge Works for State Authorities (1998 edition) as amended in the Scope of Works. Should any requirement of the measurement and payment clause of the applicable standardised specification², or the project specification², or the particular specification(s)² conflict with the terms of the schedule or, when relevant, COLTO¹, the requirement of the standardised, project or particular specification, as applicable, shall prevail.

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance has been made for waste.

The prices and rates to be inserted in the schedule of quantities are to be the full inclusive prices to the Employer for the work described under the several items, value added tax excluded. Such prices shall cover all costs and expenses that may be required in and for the construction of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the quotation is based.

A price or rate is to be entered against each item in the schedule of quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the schedule

6. **UNITS OF MEASUREMENT**

The units of measurement indicated in the Bill of Quantities are metric units.

The following abbreviations are used in the Bill of Quantities:

%	=	per cent
h	=	hour
ha	=	hectare
kg	=	kilogram
kl	=	kilolitre
km	=	kilometre
km-pass	=	kilometre-pass
kW	=	kilowatt
l	=	litre
m	=	metre
mm	=	millimetre
MN	=	mega newton
MN-m	=	mega newton-metre
MPa	=	mega Pascal

kPa	=	kilopascal
m ²	=	square metre
m ³	=	cubic metre
m ³ -km	=	cubic metre-kilometre
m ² -pass	=	square metre-pass
no	=	number
PC sum	=	Prime Cost sum
Prov Sum	=	Provisional Sum
sum	=	lump sum
t	=	ton (1 000 kg)
R/only	=	Rate only
W/day	=	Work day

7. **NET MEASUREMENTS**

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for off-cuts and waste.

8. **QUANTITIES**

The quantities set out in these Bills of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.

The Contract Amount to be determined in accordance with the conditions of contract identified in the Contract Data shall be computed from the actual quantities of authorized work done, value at rates determined in terms of the Contract Data, against the respective items in the Bill of Quantities.

The item numbers appearing in the Bills of Quantities refer to the corresponding item numbers in the COLTO Standard Specification for Road and Bridge Works for State Road Authorities (1998 edition).

9. **CURRENCY**

All rates and sums of money quoted in the Bill of Quantities shall be in Rand and whole cents. Fractions of a cent shall be discounted.

10. **VALUE ADDED TAX**

Value Added Tax shall be excluded from the rates and sums contracted for the various items of work included in the Bill of Quantities. VAT will be added as a single entry to the summary.

11. **RATES AND PRICES**

11.1 **General**

- a) The Contractor must price each item in the Bill of Quantities in BLACK INK. Reproduced computer printouts of the Bills of Quantities will not be acceptable.
- b) The rates and prices to be inserted in the Bill of Quantities shall cover all the services and incidentals for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Bid is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these

will be used as a basis for assessment of payment for additional work that may have to be carried out.

- c) Where the Contractor is required to furnish detailed drawings and designs or other information in terms of the Contract Data, all costs thereof shall be deemed to have been provided for and included in the unit rates and sum amounts contracted for the items scheduled in the Bill of Quantities. Separate additional payments will not be made.
- d) A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill. The Contractor will not be paid for items against which no rate or lump sum has been entered in the Bill of Quantities.
- e) Should the Contractor group a number of items and contract one lump sum for such group of items, this single lump sum shall apply to that group of items and not to each individual item.
- f) Should the Contractor indicate against any item that compensation for such item is included in another item; the rate for the item included in another item shall be deemed nil.
- g) A submission may be regarded as non-responsive if any rates or lump sums in the Bill of Quantities are, in the opinion of the Employer, unreasonable or out of proportion.

11.2 "Rate only" items

The Contractor shall fill in a rate (in the rate column) against all items where the words "rate only" appear in the Amount column, which rate will constitute payment for work which may be done in terms of this item. Such "rate-only" items are used where it is estimated that little or no work will be required under the item or where the item is to be considered as an alternative to another item for which a quantity is given.

11.3 Arithmetic

Excepting where Sum Amounts are required or where Provisional Sums have been indicated, the Contractor shall enter an applicable rate in the Rate Column of the Bill of Quantities for each scheduled item. He shall also enter an appropriate sum in the Amount column for each scheduled item, by determining in the applicable line item the product of the Quantity and the Unit Rate.

If there is an error in the line item resulting from the product of the unit rate and the quantity, the rate shall be binding and the error of extension as entered in the Bid offer will be corrected by the Employer in determining the Contract Price.

Where there is an error in addition, either as a result of other corrections required by this checking process or in the Bidder's addition of prices, such error will be corrected by the Employer in determining the Contract Price.

12. VARIATION IN TEXT

No alteration, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognized; the original wording of the Bill of Quantities will be adhered to.

- 13 Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column or as a prefix or suffix against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of works, is a

deviation from the contract. The items marked with the letters 'LI' are not necessarily an exhaustive list of all the activities, which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour-intensive specification in the Scope of Works.

- 14 Where minimum labour intensity is specified by the design the contractor is expected to use their initiative to identify additional activities that can be done labour-intensively in order to comply with the set minimum labour intensity target.
- 15 Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the scope of works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work, which was to be done labour-intensively will not be condoned, and any works so constructed will not be certified for payment.

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

Situated in
ELIAS MOTSOLEDI LOCAL MUNICIPALITY
of the Limpopo Province

BID No. EMLM 17/2023



UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
1200		GENERAL REQUIREMENTS AND PROVISIONS				
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)	LI	soft material	m³	10.00		
(ii)	LI	hard material	m³	2.00		
(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)	LI	soft material	m³	2.00		
(ii)		hard material	m³	1.00		
B12.02		Backfilling				
(a)	LI	Using the excavated material	m³	5.00		
(b)	LI	Using imported selected material	m³	6.00		
B12.03(a)		Allow a provisional sum for existing services a to be relocated and/or protected as ordered by the engineer	Prov sum	1.00	300 000.00	R 300 000.00
(b)		Handling costs and profit in respect of sub-item B12.03(a) above	%	300 000.00		
B12.04		Provision for a Community Liaison Officer				
(a)		Provisional sum for the payment of the Community Liaison Officer	Prov sum	1.00	60 000.00	R 60 000.00
(b)		Provisional sum for the payment PSC Members (5 off)	Prov sum	1.00	25 000.00	R 25 000.00
(c)		Handling costs and profit in respect of sub-item B12.04 (a-b)	%	85 000.00		
SECTION 1200 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
1300		CONTRACTORS ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
B13.01		The contractors general obligations				
(a)		Fixed obligations	L.Sum	1.00		
(b)		Value related obligations	L.Sum	1.00		
(c)		Time related obligations	Month	8.00		
B.13.02		Occupational Health & Safety				
(a)		Preparation of Health & Safety Plan complying with Covid 19 Regulation	L.Sum	1.00		
(b)		Compilation of a Risk Assessment prior to commencement of Construction.	L.Sum	1.00		
(c)		Health & safety induction training of employees	L.Sum	1.00		
(d)		Compilation and keeping up with date the Health & Safety file which shall include all documentation required in terms of the Act. Implementation of the health and Safety plan over the entire construction period	Month	8.00		
B.13.03	LI	Supply and erect one contract nameboard	L. Sum	1.00		
		PROVISSIONAL SUM STATED BY THE ENGINEERS				
		a) Survey equipments ,Traffic Lights and safety Jackets	Prov sum	1.00	10 000.00	R 10 000.00
		b) Provisional sum for the payment of the Sudent in training 2 off @R3500/month	Prov sum	1.00	70 000.00	R 70 000.00
		d) Handling costs and profit in respect of sub-item (a-c) above	%	80 000.00		
		Provision for accredited training				
		i) Generic skills	P Sum	1.00	100 000.00	R 100 000.00
		ii) Entrepreneurial skills	P Sum	1.00	100 000.00	R 100 000.00
		iii) Handling costs and profit in respect of sub-item E12.05(a) and (b) above	%	200 000.00		
		iv) Training venue (only if required)	L. Sum	1.00		
		NOTE: The combined total tendered for items B13.01(a), (b) and (c) shall not exceed 15% of the Tender sum excluding VAT.				
SECTION 1300 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
1400		HOUSING, OFFICES AND LABORATORIES FOR ENGINEER'S SITE PERSONNEL				
14.01		Office and accommodation:				
(a)		Offices (interior floor space only and as per drawing)	m ²	30.00		Rate only
(b)		Ablution units	m ²	10.00		Rate only
14.02		Office furniture:				
(a)		Chairs	No.	10.00		Rate only
(c)		Desks, complete with drawers and locks	No.	1.00		Rate only
(e)		Conference tables (place for 10 chairs)	No.	1.00		Rate only
B14.02 (g)		Survey Equipment	L. Sum	1.00		Rate only
B14.02 (h)		Pinboard (size 1.0 x 1.5 m)	No.	1.00		Rate only
14.03		Office and laboratory fittings, installations and equipment:				
(a)		Items measured by number:				
	(i)	220/250 volt power points	No.	1.00		Rate only
	(iii)	Double 80 watt fluorescent light fittings complete with ballast and tubes	No.	1.00		Rate only
	(iii)	Wash-hand basins complete with taps and drains	No.	1.00		Rate only
	(vi)	Fire extinguishers, 9,0 kg, all purpose dry powder type, complete, mounted on wall with brackets	No.	1.00		Rate only
	(vii)	General purpose steel cupboards with shelves	No.	1.00		Rate only
	(viii)	Steel filing cabinets with drawers	No.	1.00		Rate only
	(x)	Refrigerators (200 l min)	No.	1.00		Rate only
	(xii)	Bookcases	No.	0.00		Rate only
	(xiii)	Voltage stabilizers	No.	1.00		Rate only
	(xviii)	Air Conditioning units with 2,2 kW minimum capacity, mounted and with own power connection	No.	1.00		Rate only
(b)		Prime cost items and items paid for in a lump sum				
	(i)	The provision of a direct independent telephone line for the engineer, including the cost of calls in connection with contract administration and telephone rental	Prov sum	1.00	20 000.00	R 20 000.00
	(ii)	Handling costs and profit in respect of subsubitem 14.03(b)(iii)(1)above	%	20 000.00		
	(iii)	The provision of a fax apparatus as specified	Prov sum	1.00	50 000.00	R 50 000.00
	(vi)	Handling costs and profit in respect of subsubitem 14.03(b)(iii)above	%	50 000.00		
	(vii)	1) Provision of cellular telephones, Computers, Printing	Prov sum	1.00	30 000.00	R 30 000.00
		2) Provisional sum for the costs of cellular calls and other charges	Prov sum	1.00	5 000.00	R 5 000.00
		3) Handling cost and profit in respect of sub-item B14.03(ix) 1 & 2	%	35 000.00		
TOTAL CARRIED TO NEXT PAGE						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
				Brought Forward		
(c)		Items measured by area				
	(i)	Vertical blinds	m ²	0.00		Rate Only
	(ii)	Notice boards as specified	m ²	0.00		Rate Only
14.04		Car ports				
(a)		Car port as specified at offices and laboratory buildings	No.	1.00		Rate Only
14.07		Rented Hotel and other Accomodation				
(a)		Proviisional sum for providing rented housing,hotel or other accomodation as described in sub clause 1403(c)(ii)	PC Sum	1.00	45 000.00	R 45 000.00
(b)		Handling cost and profit in respect of sub-item B14.07(a)	%	45 000.00		
14.10		Provision of photostat facilities	Month	8.00	2 000.00	Rate Only
B14.11		Provision and erection of security fencing (including gate)	m	100.00	200.00	Rate Only
14/B15.03(n)		Provision of high visibility safety jackets, safety hats and rotating lights for mobile use	No.	4.00	120.00	Rate Only
SECTION 1400 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
1500			ACCOMMODATION OF TRAFFIC			
B15.01	LI		Accommodating traffic and maintaining temporary deviations	km	1.91	
B15.03 (a)	LI		Temporary traffic-control facilities	man-day	336.00	
(b)			Flagmen	No.	2.00	
(e)			Portable STOP and GO-RV signs	No.	6.00	
(f)			Road signs, R- and TR-series, 1 200mm in diameter	No.	6.00	
(g)			Road signs, TW-series, 1 500mm sides	m²	6.00	
(h)	LI	(i)	Road signs, STW-, DTG-, TGS- and TG-series (excluding delineators and barricades)	No.	10.00	
		(ii)	Delineators (800mm x 200mm): Single	No.	6.00	
(i)	LI		Mounted back to back	No.	6.00	
(j)	LI		Movable barricades/road sign combination	No.	20.00	
B15.15 (a)			Traffic cones (750mm high)	P Sum	1.00	100 000.00
(b)			Prime cost sum for: Compensation to landowners for land taken up by Road	%	Rate Only	Rate Only
			Handling cost and profit in respect of sub-item B15.15(a) above			
SECTION 1500 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
1700			CLEARING AND GRUBBING			
B17.01			Clearing and grubbing of:			
(a)			Normal areas:			
		(i)	Within the road reserve	ha	2.00	
		(ii)	In borrow pits	ha	2.00	
17.02			Removal and grubbing of large trees and tree stumps:			
(a)			Girth exceeding 1m up to and including 3m	No.	6.00	
(b)			Girth exceeding 3m	No.	4.00	
SECTION 1700 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
B1800		DAY WORK SCHEDULE				
B18.01	(i)	Labourers: Unskilled	hr	20.00		Rate Only
	(ii)	Semi-skilled	hr	20.00		Rate Only
	(iii)	Skilled	hr	20.00		Rate Only
B18.02		Foreman	hr	20.00		Rate Only
B18.03	(i)	Tipper Trucks: 3 - 5 ton	hr	10.00		Rate Only
	(ii)	5,1 - 10 ton	hr	10.00		Rate Only
B18.04		Loader (0.5m³)	hr	10.00		Rate Only
B18.05		Loader (1-2.5m³)	hr	10.00		Rate Only
B18.05		Grader (CAT 140G or similar)	hr	10.00		Rate Only
B18.06		LDV	hr	10.00		Rate Only
B18.07	(i)	Compaction Rollers: Vibrator roller	hr	10.00		Rate Only
	(ii)	Tamping roller	hr	10.00		Rate Only
	(iii)	Grid roller	hr	10.00		Rate Only
B18.08	(i)	Hand Controlled Compactors Pedestrian roller (Bomag BW90)	hr	10.00		Rate Only
	(ii)	Vibratory plate	hr	10.00		Rate Only
	(iii)	Rammers	hr	10.00		Rate Only
B18.09		Water truck (min 10000 l)	hr	10.00		Rate Only
B18.10		Dozer (D7 or similar)	hr	10.00		Rate Only
SECTION B1800 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
2100		DRAINS				
21.01		Excavation for open drains:				
(a)		Excavating soft material situated within the following depth ranges below the surface level:				
	LI	(i) 0 m up to 1,5 m	m³	1 110.89		
		(ii) Exceeding 1,5 m and up to 3,0 m	m³	244.00		Rate Only
		(iii) Exceeding 3,0 m	m³	0.00		Rate Only
(b)		Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m³	67.74		
21.03		Excavation for subsoil drainage systems:				
(a)		Excavating soft material situated within the following depth ranges below the surface level				
		(i) 0 m up to 1,5 m	m³	172.50		
		(ii) Exceeding 1,5 m and up to 3,0m	m³	0.00		Rate Only
(b)		Extra over subitem 21.03(a) for excavation in hard material, irrespective of depth	m³	26.00		
21.04		Impermeable backfilling to subsoil drainage systems	m³	34.50		
21.05		Banks and dykes	m³	0.00		Rate Only
21.06		Natural permeable material in subsoil drainage systems (crushed stone)				
(b)		Crushed stone obtained from commercial sources				
		(i) Fine-grade stone	m³	69.00		
		(ii) Coarse-grade stone	m³	69.00		Rate Only
21.07		Natural permeable material in subsoil drainage systems (sand) obtained from commercial sources				
(a)		Sand obtained from approved sources on the site	m³	69.00		Rate Only
(b)		Sand from commercial sources	m³	69.00		
21.11		Composite in-plane drainage systems				
		(a) Supply and install complete subsurface drain Type 2, Drawing T13 (Stone,Sand, Synthetic filter fibre and 100mm perforated uPVC pipe included).	m	345.00		
21.12		Concrete outlet structures for subsoil drainage	No.	2.00		
21.13		Concrete caps for subsoil drain pipes	No.	2.00		
21.15		Overhaul for material hauled in excess of 1,0km free-haul (normal overhaul)	m³-km	0.00		Rate Only
21.16		Backfilling existing eroded side drains	m³	0.00		Rate Only
21.17		Test flushing of pipe subsoil drains	no	2.00		
B21.20		Galvanised wire mesh 250 x 250mm, at the outlets of subsoil drainage systems. Mesh 10mm x 2,5mm	no	0.00		Rate Only
B21.21		Subsoil drainage markers	no	7.00		
SECTION 2100 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
2200		PREFABRICATED CULVERTS				
22.01		Excavation Storm water culverts : Excavating soft material situated within the following depth ranges below the surface level				
(a)	(i)	0 m up to 1,5 m	m ³	56.00		
	(ii)	1,5 m up to 3,0 m	m ³	5.60		
(b)		Extra over subitem 22.01 (a) for excavation in hard material, irrespective of depth	m ³	12.32		
B22.02		Backfilling of culverts				
(a)		Using the excavated material	m ³	20.00		
(b)		Using imported selected material	m ³	30.00		
(c)		Extra over subitems 22.02 (a) and (b) for soil-cement backfilling (100 kg cement per m ³)	m ³	3.00		
22.05		Portal and rectangular culverts				
(b)	(i)	Without prefabricated floor slabs 1200mm x 800mm Type RP	m	11.00		
22.07		Cast in-situ concrete and formworks				
(a)		In class A bedding, screeds and the encasing for pipes, including formwork (Class 20/38)	m ³	12.69		
(c)		In inlet and outlet structures, catch pits, manholes thrust and anchor blocks, excluding formwork but including class U2 surface finish (Class 25/19)	m ³	2.10		
(d)		Formwork of concrete under subitem 22.07(c) above				
(i)		Vertical formwork for Class F1 surface finish	m ²	12.00		
(ii)		Vertical formwork for Class F2 surface finish	m ²	12.00		
(iii)		Horizontal formwork for F2 surface finish	m ²	2.00		Rate only
22.10		Steel reinforcement				
(a)		Mild steel bars	ton	0.02		
(b)		High- tensile steel bars	ton	0.45		
(c)		Welded steel fabric ref. 395 mesh	kg	58.50		
22.12		Removing existing concrete				
		(a) Plain concrete	m ³	2.00		
		(b) Reinforced concrete	m ³	5.00		
22.13		Remove and re-laying existing pipes				
		(b) Class B bedding				
		(1) 600mm dia.	m	18.00		Rate Only
22.25		Overhaul on excavated material carted to spoil, backfill material (but excluding Portland Cement in the case of soil cement), existing structures removed to spoil, and removing and relaying, and removing and stacking existing pipes, for haul in excess of 1 kilometre	m ³ -km	56.00		
22.29		Tie bars for joining in situ concrete invert slabs to inlet and outlet structures, as indicated on the drawings (Type, diameter and length indicated)	no	10.00		
B22.30	(a)	Preparation and compaction of in-situ bedding material to 90% of Mod. AASHTO density	m ³	25.00		
	(b)	Extra over sub-item B22.30(a) for compaction to 93% of Mod. AASHTO density	m ³	25.00		
B22.31		Dewatering and keeping dry of culvert excavations	no	5.00		
B22.32		Cutting of concrete pipes				
	(i)	450 diameter class 75D	no	0.00		Rate Only
	(ii)	600 diameter class 75D	no	0.00		Rate Only
	(iii)	600 diameter class 100D	no	2.00		Rate Only
	(iv)	1200 diameter class 100D	no	2.00		Rate Only
	(iv)	1800 diameter class 100D	no	6.00		Rate Only
SECTION 2100 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
2300			CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWN PIPES, AND CONCRETE LININGS FOR OPEN DRAINS			
23.01 (a)	LI	(i)	Concrete kerbing Precast kerbing to SABS 927 Figure 8c kerb	m	1 220.00	
23.05			Inlet, outlet, transition and similar structures :			
(a)	LI		In situ inlet structures for chutes as shown on drawing T30/A class 20/19 concrete	No	7.00	
(b)	LI		In situ outlet structures for chutes as shown on drawing T30/A class 20/19 concrete	No	7.00	
(c)	LI		In situ transition sections as shown on drawing T30/A class 20/19 concrete	No	3.00	
23.07			Trimming of excavations for concrete-lined open drains:			
(a)	LI		In soft material	m ²	4 023.77	
(b)	LI		In hard material	m ²	603.57	
23.08 (a) (i)	LI	(i)	Concrete lining for open drains: Cast in situ concrete lining Class 25/19: Standard side drain Cast in situ concrete lining class 25/19 for all types of open drains including drifts	m ³	576.12	
(b)	LI	(i)	Class U2 surface finish to cast in situ concrete: All types	m ²	3 840.77	
23.09			Formwork to cast in situ concrete lining for open drains (class F2 surface finish): To sides with formwork on the external face only	m ²	169.02	
(a)	LI		To sides with formwork on both internal and external faces (each face measured)	m ²	0.00	Rate Only
(b)	LI		To ends of slabs	m ²	84.51	
23.10 (a)	LI		Sealed joints in concrete linings of open drains Polysulphide sealants	m	0.00	Rate Only
(b)	LI		Polyurethane-based sealant	m	0.00	Rate Only
(c)	LI		Silicone-based sealant	m	0.00	Rate Only
(d)	LI		Soft Board expansion	m	77.61	
(e)	LI		Polystyrene expansion	m	116.42	
23.12 (c)	LI		Steel reinforcement: Welded steel fabric (High-tensile steel ref. 395)	kg	2 276.00	
23.13			Polythylene sheeting (0.15 mm thick) for concrete-lined open drains	m ²	3 840.77	
23.14	LI		Cutting bituminous/Paving surfacing and pavement layers for concrete kerbing, channelling and concrete lined drains	m	1 352.14	
23/22.12 (a)	LI		Removing existing concrete: Plain concrete	m ³	10.00	
23/16.02			Overhaul on material hauled in excess of 1,0km (ordinary overhaul on spoil material)	m ³ -km	150.00	
SECTION 2300 TOTAL CARRIED TO SUMMARY						R -

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
3100			BORROW MATERIALS			
B31.01			Excess overburden			
(a)			Depths up to and including 0,5m	m³	1 250.00	
(b)			Depths exceeding 0,5m and up to 1,0m	m³	250.00	
31.03			Finishing-off borrow areas in:			
(a)			Hard material	ha	0.50	
(b)			Intermediate material	ha	0.10	
(c)			Soft material	ha	0.13	
B31.04			Compensation to landowners:			
(a)			Prime cost sum for compensation to landowners	P.C.	1.00	150 000.00
(b)			Handling costs and profit in respect of sub-item B31.04(a) above	%	150 000.00	
31/55.06			Providing temporary fences and gates:			
(a)	LI	(i)	Stock-proof fence (1200mm high with 4 strain)	km	1.60	
(d)	LI	(i)	Temporary gates:			
			Single leaf, 1 200mm high Government pattern farm gate, 4,2m wide	No.	2.00	
C33.03			Penalty for failing to rehabilitate the borrow pit that the Contractor is responsible for:	no	0.00	Rate only
31/32.06			Stockpiling of material	m³	3 746.58	
SECTION 3100 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
3300		MASS EARTHWORKS				
33.01		Cut and borrow to fill, including free-haul up to 0.5 km				
(a)		Material in compacted layer thicknesses of 200 mm and less:				
	(i)	Compacted to 90% of modified AASHTO density	m ³	318.61		
	(ii)	Compacted to 93% of modified AASHTO density	m ³	318.61		Rate only
	(iii)	Eight-roller-pass compaction	m ³	0.00		Rate only
33.03		Extra over item 33.01 for excavating and breaking down material in - Intermediate excavation				
(a)			m ³	64.00		
(b)		Hard excavation	m ³	12.80		
(c)		Boulder excavation class A	m ³	20.00		
(d)		Boulder excavation class B	m ³	20.00		
33.04		Cut to spoil, including free-haul up to 0,5 km				
(a)		Material obtained from - Soft excavation	m ³	21 927.70		
(b)		Intermediate excavation	m ³	1 096.00		
(c)		Hard excavation	m ³	1 096.00		
(d)		Boulder excavation class A	m ³	110.00		
(e)		Boulder excavation class B	m ³	110.00		Rate only
33.05		Overbreak in hard and boulder class A excavation	m ²	65.00		
33.06		Variations in the number of roller passes (applicable to items 33.01(a)(ii), 33.01(b)(iii) and 33.11				
(a)		Vibratory rollers	m ² -pass	55.00		
(c)		Heavy grid rollers	m ² -pass	55.00		
(d)		Tamping rollers	m ² -pass	55.00		
(e)		Impact rollers	m ² -pass	55.00		
33.07		Removal of unsuitable material (including free-haul of 0,5 km)				
(a)		In layer thicknesses of 200 mm and less:				
	(i)	Stable material	m ³	2 192.77		
	(ii)	Unstable material	m ³	3 289.15		
33.09		Material bladed down to windrow	m ³	543.00		
33.10		Roadbed preparation and the compaction of material				
(a)		Compaction to 90% of modified AASHTO density	m ³	3 618.30		
(b)		Compaction to 93% of modified AASHTO density	m ³	3 618.30		Rate only
TOTAL CARRIED TO NEXT PAGE						R -

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
Brought Forward						R -
33.11		Three-pass-roller compaction				
(a)		Vibratory rollers	m ²	0.00		Rate only
(c)		Heavy grid rollers	m ²	15 315.00		
(f)		Pneumatic-tyre roller	m ²	0.00		Rate only
33.12		In situ treatment of roadbed				
(a)		In-situ treatment by ripping	m ³	3 618.30		
(b)		In-situ treatment by blasting	m ³	3 618.30		Rate only
33.13		Finishing-off cut and fill slopes, medians and interchange areas				
(a)		Cut slopes	m ²	791.12		
(b)		Fill slopes	m ²	347.97		
33/1600		OVERHAUL				
33/16.01		Overhaul on material hauled in excess of a free-haul distance of 0,5 km, for haul up to or through 1,0 km (restricted overhaul)	m ³	21 927.70		Rate Only
33/16.02		Overhaul on material hauled in excess of 1,0 km (ordinary overhaul)	m ³ -km	267 079.05		
33/32.06		Stockpiling of material	m ³	4 328.10		Rate Only
SECTION 3300 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
3400		PAVEMENT LAYERS OF GRAVEL MATERIAL				
34.01		Pavement layers constructed from gravel taken from cut or borrow, including free-haul up to 1,0km:				
(a)	(i)	Gravel selected layer (un-stabilized gravel) compacted to: 93% of modified AASHTO density (150mm thick)	m³	4 221.12		
(c)	(i)	Gravel Subbase (un-stabilized material) compacted to: 95% of modified AASHTO density (150mm thick)	m³	1 855.00		Rate only
	(ii)	97% of modified AASHTO density (150mm thick)	m³	0.00		Rate only
(d)	(i)	Gravel Subbase (chemically stabilized material) compacted to: 96% of modified AASHTO density (150mm thick)	m³	1 855.00		
(f)	(i)	Gravel base (chemically stabilized material) compacted to: 98% of modified AASHTO density (150mm thick)	m³	76.00		Rate Only
(g)	(i)	Gravel shoulders compacted to: 93% of modified AASHTO density (150mm thick)	m³	0.00		
(h)	(i)	Gravel wearing course compacted to: 95% of modified AASHTO density (150mm thick)	m³	0.00		Rate only
34.02		Extra over item 34.01 for excavation of material in: Intermediate excavation	m³	801.00		
(a)		Hard excavation	m³	560.00		
34.07		Extra over item 34.01 for temporarily blading the material to windrow	m³	300.00		
34/16.01		Overhaul on material hauled in excess of a free-haul distance of 0,5 km, for haul up to or through 1,0 km (restricted overhaul)	m³	6 152.12		
34/16.02		Overhaul on material hauled in excess of 1,0km (ordinary overhaul)	m³-km	71 364.59		
34/32.04		Removal of oversize pavement material	m³	15.00		
34/32.05		Additional normal grid rolling	m³	70.00		
34/32.06		Stockpiling of material	m³	3 691.27		
SECTION 3400 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
3500			STABILIZATION			
35.01			Chemical stabilization extra over un-stabilized compacted layers:			
		(i)	Base layer, 150mm thick	m³	76.00	Rate Only
		(ii)	Subbase layer, 150mm thick	m³	1 855.00	
35.02			Chemical stabilizing agent:			
(a)			Ordinary Portland cement	t	149.00	
(b)			Portland blast-furnace cement	t	0.00	Rate only
(c)			Slaked road lime	t	0.00	Rate only
SECTION 3500 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
5100			PITCHING, STONEWORK AND PROTECTION AGAINST EROSION			
51.01			Stone pitching			
(b)			Grouted stone pitching	m ²	42.95	
51.04 (a)			Concrete pitching and block paving			
	(i)		Cast in situ concrete pitching, Class 30/19: 150mm thick (Mesh Ref 311 included)	m ²	45.00	Rate Only
51.05			Concrete edge beams (0.2mm x 0.20mm) (class 25/19MPa)	m ³	116.55	
SECTION 5100 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
5200			GABIONS			
52.01 (b)	LI LI		Foundation trench excavation and backfilling: In all other classes of material	m ³	100.00	Rate Only
52.02	LI		Surface preparation for bedding the gabions	m ²	350.00	Rate Only
52.03 (a)	LI LI	(i)	Gabions Galvanized gabion boxes, wire diameter 2,7mm, Mesh size 80mm x 100mm, diaphragm spacing: 1,0m			
		(i)	4m x 1m x 1m	m ³	400.00	Rate Only
		(c)	Galvanized gabion mattresses (wire diameter 2,5 mm, mesh size 80mm x 100mm, diaphragm spacing 1,0m			
		(i)	2m x 1m x 0,23m deep	m ³	50.00	Rate Only
		(ii)	2m x 1m x 0,30m deep	m ³	75.00	Rate Only
52.04 (a)	LI LI		Filter fabric Grade U24 or approved equivalent	m ²	320.00	Rate Only
SECTION 5100 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
5500			FENCING			
55.04			Moving existing fences and gates:			
(a)	LI	(i)	Fences:			
			Stock-proof fences	km	0.50	Rate only
	LI	(ii)	Security fences	km	0.50	Rate only
(b)			Gates	No.	6.00	Rate only
SECTION 5500 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
5600			ROAD SIGNS			
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: Aluminium sheet (2.0 mm thick):			
(a)	LI	(i)	Area not exceeding 2 m ²	m ²	50.00	
	LI	(ii)	Area exceeding 2 m ² but not 10 m ²	m ²	60.00	Rate Only
	LI	(iii)	Area not exceeding 10 m ²	m ²	40.00	Rate Only
56.02			Extra over item 56.01 for using: Background of retro-reflected material:			
(a)		(i)	Class I	m ²	0.00	Rate only
		(ii)	Class II	m ²	0.00	Rate only
		(iii)	Class III	m ²	60.00	Rate only
56.03			Road sign supports (overhead road sign structures excluded): Structural steel	t	1.00	Rate only
(a)						
(b)			Steel tubing	t	1.00	Rate only
(c)			Timber			
	LI	(i)	100 mm dia.	m	50.00	
	LI	(ii)	150 mm dia.	m	30.00	
56.04			Kilometre posts Concrete	No	2.00	Rate only
(a)						
56.05	LI		Excavation and backfilling for road sign supports (not applicable to kilometre posts)	m ³	11.00	
56.06	LI		Extra over item 56.05 for cement-treated soil backfill	m ³	15.00	
56.07			Extra over item 56.05 for rock excavation	m ³	12.00	
SECTION 5600 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
5700		ROAD MARKINGS				
57.02 (a)	(i)	Retro-reflective road-marking paint: White lines (broken or unbroken): 100mm wide	km	2.21		Rate only
	(ii)	200mm wide	km	0.00		Rate only
	(iii)	500mm wide	km	0.50		
(b)	(i)	Yellow lines (broken or unbroken): 100mm wide	km	0.50		Rate only
	(ii)	150mm wide	km	0.00		Rate only
(d)		White lettering and symbols	m ²	50.00		
(e)		Yellow lettering and symbols	m ²	35.00		Rate only
(f)		Transverse lines, painted island and arrestor bed markings (any colour)	m ²	125.00		Rate only
57.04 (a)		Variations in rate of application: White paint	l	20.00		
(b)		Yellow paint	l	20.00		
(c)		Retro-reflective beads	kg	15.00		
57.05 (a)	(i)	Roadstuds Uni-directional Stimsonite or similar	No	2.00		Rate only
	(ii)	Armourlite or similar	No	2.00		Rate only
(b)	(i)	Bi-directional Stimsonite or similar	No	2.00		Rate only
57.06		Setting out and pre-marking the lines (excluding traffic island markings, lettering and symbols)	km	2.21		
57.07 (a)		Re-establishing the painting unit: At intervals during the contract period	No.	1.00		Rate only
(b)		At the end of the maintenance period	L.SUM.	1.00		Rate only
57.08 (a)		Removal of existing, temporary or permanent road markings by: Sandblasting	m ²	5.00		Rate only
(b)		Over painting as temporary measure	m ²	5.00		Rate only
SECTION 5700 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC		DESCRIPTION	UNIT	QUANTITIES	AMOUNT (R)
5900			FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS			
59.01 (b)			Finishing the road and road reserve: Single carriageway road	km	1.91	
SECTION 5900 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
7300		CONCRETE BLOCK PAVING FOR ROADS				
73.01		Concrete block paving (SABS 1058)				
(a)		Grey 80mm interlocking paving	m ²	11 486.00		
73.02		Cast in situ concrete edge and intermediate beams 200mm x 300mm (Class 30/19)	m ³	111.00		
73.03		Provision of approved herbicide and ant poison				
(a)		Provision of materials	Psum	1.00	50 000.00	R 50 000.00
(b)		Contractor's charges and profit added to prime cost sum	%	50 000.00		
73/42.21	LI	Complete Speed hump according to drawing (Signs, Paving and road markings, As per Drawing)	No	6.00		
SECTION 8100 TOTAL CARRIED TO SUMMARY						

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD : CONTRACT NUMBER EMLM17/2023						
ITEM	LIC	DESCRIPTION	UNIT	QUANTITIES	RATE	AMOUNT (R)
8100		TESTING MATERIALS AND WORKMANSHIP				
81.02		Other special tests requested by the engineer	Prov Sum	1.00	200 000.00	R 200 000.00
(b)		Handling costs and profit in respect of sub-item 81.02 above	%	200 000.00		
SECTION 8100 TOTAL CARRIED TO SUMMARY						

ELIAS MOTSOLEDI LOCAL MUNICIPALITY	
CONTRACT NUMBER :EMLM17/2023	
FOR	
UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD	
SUMMARY OF SCHEDULE OF QUANTITIES	

SCHEDULE A: ROADWORK'S		AMOUNT
1200	General requirements and provisions	R
1300	Contractor's establishment on site and general obligations	R
1400	Housing, offices and laboratories for the engineer's site personnel	R
1500	Accommodation of traffic	R
1700	Clearing and grubbing	R
1800	Day works	R
2100	Drains	R
2200	Prefabricated Culverts	R
2300	Concrete kerbing, concrete channelling, chutes and downpipes, and concrete linings for open drains	R
3100	Borrow materials	R
3300	Mass earthworks	R
3400	Pavement layers of gravel material	R
3500	Stabilization	R
5100	Pitching, stonework and protection against erosion	R
5200	Gabions	R
5500	Fencing	R
5600	Road Signs	R
5700	Road markings	R
5900	Finishing the road and road reserve and treating old roads	R
7300	Concrete Block Paving For Roads	R
8100	Testing materials and workmanship	R
TOTAL SCHEDULE A: ROADWORK'S		R

ELIAS MOTSOLEDI LOCAL MUNICIPALITY		
CONTRACT NUMBER :EMLM17/2023		
FOR		
UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD		
CALCULATION OF CONTRACT SUM		AMOUNT
TOTAL SCHEDULE A: ROADWORK'S	A	
TENDER SUM (CARRIED FORWARD TO LETTER OF TENDER)	C = A+ B	
CONTINGENCIES (10%) The sum provided here is under the sole control of the Employer and may be deducted in whole or in part. The tenderer shall add 10% of the total of schedule of quantities for contingencies.	D=C*10%	
SUBTOTAL	F =C+ D + E	
VALUE ADDED TAX (VAT) 15% The tenderer shall add 15% of the subtotal for VAT	F=E*15%	
TOTAL	H =F+ G	

SIGNED BY BIDDER:

. DATE : .

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

Situated in

ELIAS MOTSOALEDI LOCAL MUNICIPALITY

C3: SCOPE OF WORK

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C3.9 PARTICULAR SPECIFICATIONS

SECTION EMP: ENVIRONMENTAL MANAGEMENT SPECIFICATION

SECTION DWK: DAYWORKS

SECTION OHS: PRE-CONSTRUCTION HEALTH AND SAFETY SPECIFICATION

All definitions, interpretations and general provisions for the General Conditions of Contract for Construction Work (2015) (3rd edition) are applicable.

C 3.1 DESCRIPTIONS OF WORKS

C3.1.1 Client's Objective

The project objective is to provide an effective, sustainable and a safe traffic and pedestrian travel facility, by upgrading the Upgrading of Nyakurane Internal Access Road. Upon completion of the project, it would provide an access to social and economic activities, user and communities will be able to conveniently travel to their specific destination e.g., schools, clinic, shops, etc. with ease.

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

C3.1.2 Overview of the Works

Labour-intensive works comprise the activities described in SANS 1921-5, Minor Concrete Work activities which are to be performed by hand, and its associated specification data. Such works shall be constructed using local workers who are temporarily employed in terms of this Scope of Work.

C3.1.3 Extend of the Works

- Site Establishment.
- Construction of road layer works (approx. 1.85 km long) for both 6.0m wide roads.
- Road Surfaced using 80mm Interlocking Paving Blocks class 25 with an average compressive strength 25Mpa (comply with SANS 1058-1985).
- Laying of precast concrete kerbs fig 8c (Comply with sans 927:2007 standards).
- Construction of Storm Water Control System i.e., V and Side Drains.
- Installation of traffic calming measures (road signs and speed humps)
- Material and layer testing.
- Finishing of road reserve on completion of the project (Section 5900)
- Clearing of Site on Completion

C3.1.4 Location of the Works

The site is situated within Elias Motsoaledi Local Municipality of Limpopo in latitudes 25°16'1.93"S and longitudes 29° 7'51.36"E. Access to the site can be gained off the provincial road R573 and R25.

C3.1.5 Construction program

It is specifically brought to the notice of the Contractor that time is critical on this project, and the construction period will be a major factor in the award of the tender.

Tenderers shall submit with their tender their **preliminary weekly programme for the construction** of the

Works under this contract to suit their proposed method of executing the Works. The programme shall be sufficiently detailed to differentiate between the various activities so that the contract may be properly evaluated.

C3.1.6 Change in works

The Engineer may, from time to time by order in writing without in any way vitiating the Contract or giving to the Contractor any claim for additional payment, require the Contractor to proceed with the execution of the works in such order as in his opinion may be necessary, and may alter the order of or suspend any part of the Works at such time and times as he may deem desirable and the Contractor shall not, after receiving such written order, proceed with work ordered to be suspended until he shall receive a written order to do so from the Engineer. Where the work must of necessity be carried out in conjunction with work of other Contractors, or with that of the Employer, it shall be co-ordinated and arranged in such a manner as to interfere as little as possible with the progress of such other work so as to offer every reasonable facility to other Contractors or to employees of the Employer.

C3.2 ENGINEERING

C3.2.1 Design services and activity matrix

Description	Responsibility
Design of Works	Engineer
Concept, feasibility and overall process	Client
Basic Engineering and detail layouts to tender stage	Engineer
Final Design of Works	Engineer
Final Design to approved for construction stage	Client
Preparation of tender documentation & adverts	Engineer
Appointment of soil test / topographical surveyors	Engineer
Appointment of sub-contractors	Contractor
Supervision	Engineer
Preparation of as-built drawings	Contractor / Engineer
Completion certificate	Engineer / Client / Contractor

C3.2.2 Drawings

The Engineer will provide the Contractor with one full set of drawings, which will be used exclusively for the recording of as built information by the Contractor.

Only dimensions, positions, levels, co-ordinates etc. that change from the original values, will be required to be entered on these drawings. These drawings, fully marked up, will be handed to the Engineer at the issue of the Certificate of completion, which will not be issued until the as-built information has been received.

C3.3 PROCUREMENT

The Tenderer's attention is drawn to the fact that the awarding of this tender will be in terms of the Supply Chain Management Policy of the Elias Motsoaledi Local Municipality and The Standard Conditions of Tender

as contained in Annexure F of the July 2015 edition of the CIDB Standard for Uniformity in Construction Procurement.

C3.4 SUB-CONTRACTING

No work may be sub-contracted to another party unless approval is given by the Engineer in liaison with the Client in writing. The Contractor is to submit to the Engineer in writing a request for appointment of a particular sub-contractor. Accompanying this request is to be the full detail of the sub-contractor, including:

- Previous experience
- Work which will be sub-contracted to him/her
- Approximate value of the work to be sub-contracted

Before the Engineer in terms of Clause 49 hereof issues any certificate that includes any payment in respect of work done or goods supplied by any sub-contractor appointed in accordance with the provisions of Clause 6.3 of the General Conditions of Contract for Construction works (2015 3rd Edition), he shall be entitled to call upon the Contractor to furnish reasonable proof that all payments (less retention moneys) included in previous certificates in respect of the work or goods of such sub-contractors have been made or discharged by the Contractor, in default of which, unless the Contractor:

- ✓ Informs the Engineer in writing that he has reasonable cause for withholding or refusing such payment; and
- ✓ Submits to the Engineer reasonable proof that he has so informed such sub-contractor in writing.

C3.5 CONSTRUCTION

C3.5.1 Work Specifications

The following applicable standardized and particular specifications as per COLTO are relevant to this contract:

Section 1200	General Requirements and Provisions
Section 1300	Contractor's Site Establishment on Site and General Obligations
Section 1400	Housing, Offices and Laboratories for the Engineer's Site Personnel
Section 1500	Accommodation of Traffic
Section 1600	Overhaul
Section 1700	Clearing and Grubbing
Section 2100	Drains
Section 2200	Prefabricated Culverts
Section 2300	Concrete Kerbing, Concrete Channelling, and Chutes and Down pipes and Concrete Linings for Open Drains
Section 3100	Borrow Materials
Section 3200	Selection, Stockpiling and Breaking-Down the Material from Borrow Pits, Cutting and Existing Pavement Layers and Placing and Compacting Gravel Layers
Section 3300	Mass Earthworks
Section 3400	Pavement Layers of Gravel Material

Section 3500	Stabilization
Section 3600	Crushed Stone Base
Section 4100	Prime Coat
Section 4200	Asphalt Base and Surfacing
Section 4500	Double Seals
Section 5200	Gabions
Section 5400	Guardrails
Section 5600	Road Signs
Section 5700	Road Markings
Section 5900	Finishing the Road and Road Reserve and Treating Old Roads
Section 8100	Testing Materials and Workmanship

C3.5.2 Plant and materials

All materials shall comply with the requirements of the South African Bureau of Standards, and shall bear the official standardization mark. Where SANS standard does not exist for a certain material, or a material does not bear the official standardization mark, the Engineers approval of such material must be gained before use thereof.

C3.5.3 Construction Equipment

All equipment on site shall be in a good working order, and is to be in such a condition that it can achieve production rates which are typical of the industry standards.

Should any equipment, in the opinion of the Engineer, be substandard or breaks down frequently to such an extent that it affects the progress on the project, the Engineer may instruct the Contractor to replace such equipment.

C 3.5.4 Existing Services

The Contractor shall so carry out all his operations as not to encroach on, or interfere with, trespass on, or damage adjoining lands, building properties, roads, structures, places and things in the vicinity of the Works, and he shall free and relieve the Employer of any liability that may be incurred in consequence of his failure to do so.

The services existing on the site will be either shown on the drawings or pointed out on site by the Engineer and / or the Municipality. No excavation work will commence unless a representative of the Municipality and/or the Engineer have been requested to point out existing services in the area under construction. Written confirmation of services that have been pointed out by the Municipality is to be obtained by the Contractor.

All existing services on the site may not be shown on the drawings or be visible on the site. The Engineer may order excavation by hand in order to search for and expose services. An item has been included in the Schedule of Quantities to cover the cost of such work if so ordered by the Engineer. Where a service is damaged because of the Contractors negligence he shall be liable for the cost involved in the repair of the services and any other consequent cost that may arise due to the interruption of the damaged services.

No excavation is to take place until a representative from the Municipality has been contacted and

he has pointed out the existing services to the Contractor and confirmed it in writing. The same shall apply to all Telkom services in the area.

C3.5.5 Site Establishment

- Source of Water Supply

Water is available from the existing water network in the municipal area and the Contractor is to arrange with the Local Authority for a connection point. The Contractor will be responsible for the costs of the connection as well as the use of water for construction purposes. The Contractor's attention is drawn to the fact that the potable water supply is erratic in this area. Under no circumstances may potable water be used for construction, unless written permission is granted by the Engineer.

- Sources of power supply

Electricity is available from the existing network in the municipal area, and the Contractor is to arrange with the Local Authority for a connection. The Contractor will be responsible for the costs of electricity consumed as well as the connection costs.

- Location of camp and depot

The Engineer shall point out the position of the Contractors camp to the Contractor during the site inspection. The Contractor may assume that the site camp will be within 2 km of the site.

- Sanitary facilities

The Contractor is to provide the necessary sanitary facilities at his camp, all of which will be governed by the requirements of the Local Authority. The contractor shall pay all sanitary fees and charges due.

- Temporary offices

The Contractor is not required to provide any specific office space for the Engineers, but the Contractors' offices shall have adequate space and facilities for the holding of site meetings, and for the Engineer to perform administrative functions on an ad hoc basis.

Neither housing nor shelters will be provided for the contractor's employees, and the Contractor shall make his own arrangements to house his employees and transport them to the Site.

- Laboratory facilities

The use of commercial laboratories will be allowed, but the laboratory to be used is subject to the approval of the Engineer.

- Sanitary facilities

It is not required that specific sanitary facilities be provided for the Engineer, and the facilities for the Contractor will be shared by both parties. The facilities are, however, to be kept in a clean and hygienic condition, to the satisfaction of the Engineer. All sanitary facilities are to conform to the by-laws of the

Local Authority.

- Name Boards

One name board shall be provided in positions as ordered by the Engineer. The Engineer will provide the lettering required once the tender is awarded.

- Survey assistant and equipment

The Contractor will be required to make any survey equipment available for the use of the Engineer. The Contractor will also make 2 survey assistants available to the Engineer as and when required, as well as the theodolite and/or level plus accessories.

C3.5.6 Site Usage

- Ground and access to the works

The Contractor shall where necessary on or adjacent to roads which carry traffic; provide all the necessary barricades and signs in accordance with the stipulations of the South African Road Traffic Signs Manual, and in strict accordance with the requirements of the Protective Services of the ELIAS MOTSOLEDI Local Municipality.

The Contractor shall further ensure that all public roads that are used for access to the site are kept free of debris at all times. The Contractor shall also take adequate measures to ensure that dust is kept to an acceptable level. The term acceptable is to be deemed as acceptable to the Engineer.

- Care, damage and protection

The Contractor shall at his own cost make full provision for all watching and lighting necessary for the protection of all persons, animals, vehicles, etc., from injury by reason of the Works. He shall provide ample warning signs, guard rails, etc., around open excavations, stacks of materials, excavated material, debris or the like, and he shall be held liable for all claims made upon himself or upon the Employer by reason of his neglect of all such precautions and provisions.

During the periods of construction of the Works and the repair of defects, the Contractor shall, at his own cost, to the satisfaction of the Engineer and the relevant Authority, take sufficient and adequate measures to avoid interrupting the use of all roads, footpaths, water courses, drains, pipes, telephones, electric wires and cables, premises, places and works, public or private, which may in any way be interfered with by the operations; and shall also afterwards permanently restore all structures and everything which may have been temporarily displaced or otherwise interfered with, all to the satisfaction of the Engineer and the relevant Authority, without extra charge beyond the Contract price.

- Survey beacons

The Contractor shall take care to safeguard any permanent survey beacons such as erf boundary pegs and reference beacons. Should the Contractor disturb any such pegs and beacons, he shall have them replaced at his own cost by a registered Land Surveyor. The Contractor is to provide the Engineer with written confirmation from the Land Surveyor that he has replaced the relevant beacons.

The Contractor's attention is drawn to article 35(i) of the Land Surveying Act No. 9 of 1927 (as amended) in this regard.

▪ Blasting

As the construction takes place within a built-up area, extreme care is to be taken during any blasting operations. No blasting shall be permitted without prior written consent from the Engineer. Written as well as verbal notice will be given to all house owners in the affected area 24 hours prior to the blast being set off, and the contractor is to do a survey of all the houses (internal and external) in the area prior to blasting.

A full daily report of all blasting operations (in duplicate) is to be completed by the Contractor.

This report shall inter alia contain the following information:

- Date and time of each blast
- Number of holes
- Charge per hole
- Use of relays, etc.

This report is to be submitted to the Engineer on a weekly basis, and is to be countersigned by the Engineer.

The contractor is to be noted that he is not to use or permit any person to use an explosive powered tool, unless—

- (a) it is provided with a protective guard around the muzzle end, which effectively confines any flying fragments or particles; and
- (b) the firing mechanism is so designed that the explosive powered tool will not function unless—
 - (i) it is held against the surface with a force of at least twice its weight; and
 - (ii) the angle of inclination of the barrel to the work surface is not more than 15 degrees from a right angle:

▪ Protection of existing vegetation

Before any tree is cut down and removed from the site, the Contractor shall confirm the necessity of such action with the Engineer or his Representative.

▪ Access to individual erven

Access to all public and private property must be maintained at all times. Where trenches cross the access point to any property, the Contractor is to arrange for adequate and safe vehicular and pedestrian crossings over the trenches.

The Engineer must approve the method of providing access before any excavation commences.

▪ Use of construction vehicles and equipment

The contractor shall ensure that all construction vehicles and mobile plants—

- a) are of an acceptable design and construction;
- b) are maintained in a good working order;
- c) are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- d) are operated by workers who-
 - i. have received appropriate training and been certified competent and been authorised to operate such machinery; and
 - ii. are physically and psychologically fit to operate such construction vehicles and mobile plant by being in possession of a medical certificate of fitness;
- e) arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- f) are prevented from falling into excavations, water or any other area lower than the working surface by installing adequate edge protection, which may include guardrails and crash barriers;
- g) where appropriate, are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- h) are equipped with an electrically operated acoustic signalling device and a reversing alarm; and
- i) are on a daily basis inspected prior to use, by a competent person who has been appointed in writing and the findings of such inspection is recorded in a register.
- j) no person rides or be required or permitted to ride on any construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- k) every construction site is organised in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- l) the traffic routes are suitable for the persons using them, sufficient in number, in suitable positions and of sufficient size;
- m) every traffic route is, where necessary indicated by suitable signs for reasons of health or safety;
- n) bulldozers, scrapers, loaders, and other similar mobile plant are, when being repaired or when not in use, fully lowered or blocked with controls in a neutral position, motors stopped and brakes set;
- o) whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- p) when workers are working on or adjacent to public roads, reflective indicators are provided and worn by the workers.

3.6 MANAGEMENT

C3.6.1 Management of the Works

▪ Planning and programme

The Contractor shall deliver to the Engineer within **14** days, calculated from the commencement date, a realistic programme showing the order of procedure, the duration of activities making up the programme and method which he proposes to use in carrying out the Works in order to meet the due completion date for this project.

The tenderer is to note that the penalty for failing to complete the works is R **3 500.00** per day.

- Setting out of the works

Generally, the positions of the works have been fixed on the plans according to the existing stand boundaries. The Engineer is to approve all setting out prior to commencement of excavation.

- Excavation of works & safety

The contractor shall ensure that all excavation work is carried out under the supervision of a competent person who is been appointed in writing. The Contractor will evaluate, as far as is reasonably practicable, the stability of the ground before excavation works begin and he/she shall not permit any person to work in an excavation which has not been adequately shored or braced.

The Contractor will cause convenient and safe means of access to every excavation area in which person are required to work and such access shall not be further than 6m from the point where any worker within the excavation is working.

The Contractor must ascertain as far as is reasonably practicable the location and nature of electricity, water, gas or other similar services which may in any way be affected by the work to be performed, and shall before the commencement of excavation work that may affect any such service, take the steps that may be necessary to render the circumstances safe for all persons involved;

The Principal Contractor shall cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be:

- (i) adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and
- (ii) provided with warning illuminants or any other clearly visible boundary indicators at night or when visibility is poor;

The Principal Contractor shall cause warning signs to be positioned next to an excavation within which persons are working or carrying out inspections or tests.

- Inspection by engineer

No stage of construction shall be proceeded with until the Engineer or his representative has examined and approved the previous stage. If any work is covered or hidden from view before the Engineer has inspected same, the Contractor shall at his own cost open the covered work for inspection. The Contractor shall also be responsible for making good any work damaged by such uncovering.

- Employment of local labour

It is a specific criterion of this project that should as far as possibly adheres to RDP principles, and to meet these principles the following procedures will be followed:

All labour is to be sourced from the ELIAS MOTSOLEDI Local Municipality and as informed by the

“EPWP Recruitment Guideline” published by The Department of Public Works; area of jurisdiction and the Contractor may only bring in key personnel from outside this area.

The rate for appointed labour shall be determined by either

- i. The fixed rate for the appointment of local labour per provision by the Department of Public Works’ EPWP rate at the time of works commencement., or
- ii. The fixed rate in line with the provision by the Department of Labour. This will be payable by the Contractor on **fortnightly** basis. The Contractor’s attention is drawn to the standard rates specification (“*Annexure A*” – *Civil Engineering Industry Minimum Wage rates per hour; September 2010 to August 2013*) found on the SAFSEC website at www.safcec.org.za, or
- iii. The fixed rate as determined and defined by ELIAS MOTSOLEDI Local Municipality.

These standard rates shall be implemented for payment of all sourced employees of the Contractor.

Key personnel would typically include the Contracts Manager, Site Agent, and Supervisor for each discipline and operators of plant where the operator must be seated.

A Monthly labour report on all local labour i.e. payments and labour days should be submitted to the Engineer at the end of each month in order for the Engineer to submit a report to the Employer.

None of the Works shall be executed except between sunrise and sunset on Monday to Saturday, inclusive, of any week, and none of the Works shall be executed on any special non-working days stated in the Contract Data, unless:

- ✓ The Engineer’s permission in writing is obtained, subject to such conditions as may be laid down by the Engineer; or
- ✓ Provision is specifically made for it in the Contract; or
- ✓ Work is unavoidable or necessary for the saving of life or property or for the safety of the Works.

▪ Site Meetings

Regular meetings will be held between all relevant parties to establish the progress and / or delays and problems that might occur on site. Any problems of delays will be addressed accordingly and the Contractor will receive proper instructions with reference to this matter.

▪ Communication

The Engineer’s representative on this project will be: **Mr M.P. Sematla**

Contact No: **015 295 4885**

The contact person for the Employer is: **Mr. Fetakgomo Debeila**

Contact No: **013 262 3056**

▪ Daily Records

Daily records of resources (equipment and people employed) must be kept and must be available on site at all times. These records will include i.e. site instruction book, site diary, site visit register, contractual documentation and minutes of all project meetings. Labour information should be kept updated at all times.

▪ Compliance with applicable laws

The Contractor shall, in performance of the Contract, comply with all applicable laws, regulations and statutory provisions and agreements, and shall in particular, on the request of the Engineer, provide proof that he has complied therewith with regard to amongst others:

- ✓ Wages and conditions of work; and
- ✓ Safety

▪ Payment Certificates

As consideration for the construction, completion and defects correction of the Works, the Employer shall pay the Contractor in terms of the provisions of the Contract.

▪ Clearance of site

On completion of the Works, the Contractor shall clear away and remove from the site all Construction Equipment, surplus materials, rubbish and temporary works of every kind and leave the whole of the site and the works clean and in a safe condition. All streams and watercourses (where applicable) shall be cleaned and restored to the condition as at the commencement of the Works. If the Contractor does not, within a reasonable time, comply with this requirement, the Employer may have the site cleared and recover the cost thereof from the Contractor.

▪ Termination of Contract

If 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 makes a compromise with his creditors, or assigns in favour of his creditors, or agrees to carry out the Contract under the supervision of a committee representing his creditors, or (being a company) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), or if the contractor assigns the contract without having first obtained the Employer's consent in writing, or if execution is levied on his goods or if the Engineer certifies reference to this Clause, that in his opinion the Contractor:

- ✓ Has abandoned the contract; or
- ✓ Without reasonable excuse has failed to commence the Works in terms of Clause 10 of the General Conditions of Contract for Construction Works (2015 3rd Edition), or has suspended the progress of the Works for fourteen (14) days after receiving from the Engineer written notice to proceed or
- ✓ Has failed to proceed with the Works with due diligence; or
- ✓ Has failed to remove materials from the site or to pull down and replace work within fourteen (14) days after receiving from the Engineer written notice that the said materials or work have been condemned and rejected by the Engineer in terms of these conditions; or
- ✓ Is not executing the Works in accordance with the Contract, or is neglecting to carry out his obligations under the Contract; or
 - ✓ Has, to the detriment of good workmanship or in defiance of the Engineer's instruction to the contrary, sublet any part of the Contract; or
 - ✓ Has assigned the Contract or any part thereof without the Employer's consent in writing; or

- ✓ The contractor or anyone on his behalf or in his employ would pay, offer or offer as payment to any person in the employ of the Employer a gratuity or reward or commission; or
- ✓ The contractor furnished inaccurate information in the Schedules forming part of this Contract.

Then the Employer may, after giving fourteen (14) days' notice in writing to the Contractor, terminate the Contract and order the Contractor to vacate the Site and to hand it over to the Employer, and the Employer may then enter upon the site and the Works and expel the Contractor there from without thereby affecting the rights and powers conferred on the Employer of the Engineer by the Contract, and the Employer may himself complete the Works or may employ another contractor to complete the Works, and the Employer or such other contractor may use for such completion so much of the construction equipment, temporary works and materials bought onto the site by the Contractor as the Employer may think proper, and the Employer may at any time sell any of the said construction equipment, temporary works and unused materials and apply the proceeds of sale toward payment of any sums that may be due or become due to the Employer by the Contractor under the Contract. In such circumstances the Contractor shall forthwith vacate the site and shall not be entitle to remain on the site on the grounds that he is entitled to do so on a right of retention until amounts due to him have been paid, neither will the contractor be entitled to any further payments of this Contract.

C3.7 HEALTH AND SAFETY

▪ Health & Safety Issues

All work is to be carried out in accordance with the Occupational Health and Safety Act and Regulations (Act 85 of 1993) (a copy of which must be kept on site), the Explosive Material Act of (Act 26 of 1956), the Minerals Act of 1991, and the Factories Machinery and Building Work Act (No 22 of 1941).

The Contractor's notice is drawn to the stipulations of the Construction Regulations 2003, a regulation of the Health and Safety Act 1993 (Gov Notice No R1010 of 18 July 2003). The construction regulation will be applied vigorously on the project.

The Contractor to be appointed must have made provision for the cost of health and safety measures during the construction process. The contractor must have the necessary skills, competencies and resources to carry out the work safely. A proper Safety Plan is to be submitted by the Contractor and a copy thereof is to be made available to all applicable appointed labourers and permanent workers on this project.

The Contractor is to ensure that the legal compliance for the Health and Safety issues are in place. Audits will be carried out to ensure that the Contractor is registered and in good standing with the Workmen's Compensation fund and that the Contractor has affected insurance indemnifying the Employer against penalties levied upon the Employer due to the acts of omissions of the Contractor in failing to comply with the provisions of the OHS regulations 2003. A compliance audit will also be carried out to ensure that the Contractor has appointed a full-time competent person in writing to deal with the issues of the OHS and that a risk assessment has been conducted and a copy of the Safety plan is on site before any work commences.

Operational audits will be carried out on the following important issues:

- ✓ That the Safety Plan is on site at all times

- ✓ That the Contractor's Safety file is on site at all times
- ✓ That the Safety Officer is on site at all times
- ✓ That Safety meetings are conducted as per the Safety Plan
- ✓ That employees are working under safe conditions
- ✓ That the public is not placed in danger
- ✓ That there is no harm to the environment

▪ Accommodation of traffic

It is expected of the Contractor to ensure that the free flow of traffic is possible throughout the construction period.

The Contractor is to provide all necessary barricades, signs and lighting in accordance with the stipulations of the South African Road Signs Traffic Manual, and the Protective Services of the ELIAS MOTSOLEDI Local Municipality. All work is to be to the satisfaction of the Engineer.

▪ Reporting of accidents

In addition to any statutory regulations, the Contractor shall, as soon as practicable, report to the Engineer every occurrence on the Works or the site causing damage to property or injury or death of persons. If required by the Engineer, the Contractor will submit a report in writing to the Engineer within 48 hours of such requirement setting out full details of the occurrence. The Engineer shall have the right to make any enquiries either on the site or elsewhere as to the cause and results of any such occurrence and the Contractor shall make available to the Engineer the necessary facilities for carrying out such enquiries.

C3.8 PROJECT SPECIFICATIONS

This project shall be as per COLTO Standard Specifications for Road and Bridge Works for State Authorities 1998 (Green Book)

PSA: 1200 – GENERAL REQUIREMENTS AND PROVISIONS

PSA 1:1205 WORKMANSHIP AND QUALITY CONTROL

Add:

All materials shall comply with the requirements of the South African Bureau of Standards, and shall bear the official standardization mark. Where SANS standard does not exist for a certain material, or a material does not bear the official standardization mark, the Engineers approval of such material must be gained before use thereof.

And

It is not required for the Contractor to supply a laboratory for testing materials on site, and he may submit the name and credentials of a local commercial laboratory, for approval by the Engineer if he so requires.

PSAB: 1400 HOUSING, OFFICES AND LABORATORY FOR THE ENGINEER'S SITE PERSONNEL

PSAB 1 CONTRACTOR'S OFFICE AND STORES

Neither housing nor shelters will be provided for the contractor's employees, and the Contractor shall make his own arrangements to house his employees and transport them to the Site.

PSAB 2 SURVEY ASSISTANT AND EQUIPMENT

The Contractor will not be required to make any survey equipment available specifically for the use of the Engineer.

The Contractor will however make 2 survey assistants available to the Engineer as and when required, as well as a theodolite and/or level plus accessories.

PSAB 3 FACILITIES FOR ENGINEER

No specific offices are required for the Engineer on this contract. The contractor is however expected to have enough space for the holding of site meetings.

PSC: 1700 CLEARING AND GRUBBING

PSC 1 DISPOSAL OF SURPLUS MATERIAL

The disposal site is at the discretion of the Contractor but with approval from the Engineer.

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

PSDB 1 PRECAUTIONS

Add the following to 3201:

The Contractor or his agent or representative appointed in writing shall be deemed to be and shall be both the “excavator” and “a person who is competent to pronounce on the safety” of all bracing and shoring as set out in regulation 13 (demolition and excavation) of the General Safety Act No 6 of 1983 as published in the Government Gazette no 10252 Volume 251 page 30 of May 1986 (as amended).

PSDB 2 PROGRAMMING OF TRENCH EXCAVATION

The Contractor shall program his works in such a way that excavation and backfilling for all types of trenches will be completed before the construction of the subbase layer.

PSDB 3 BACKFILLING

All trenches that cross the roadway will be provided with the material and compacted to the specification as per the original layer works of the road that has been crossed.

PSDB 4 BEDDING CLASS

Unless shown otherwise on the drawings all bedding shall be of a class B type for concrete pipes, and bedding for flexible pipes (if utilised) as per section 2200 Clause 2210 of COLTO 2000

PSDB 5 TRANSPORT FOR EARTHWORKS AND TRENCHES

Add the following to clause:

- c) Notwithstanding anything stated to the contrary, the free haul distance on this contract will be taken as 2,0km.

PSDB 6 EXCAVATION

Excavation through surfaced roads is to be carried out in such a way that the edge of the surfacing forms a straight and true line after excavation.

PSDB 7

BARRICADING AND LIGHTING

Delete the Subclause and substitute the following:

In terms of the Occupational Health and Safety Act and Regulations (as amended), every excavation that is accessible to the public or that is adjacent to a public road or thoroughfare, or by which the safety of persons may be endangered, shall be

a) For Excavations Other Than Trenches:

- i) Adequately protected by a barrier or fence at least one metre high erected as close to the excavation as is practicable; and
- ii) Provided with red warning lights or any other visible boundary indicators at night or when visibility conditions are poor; and
- iii) Inspected by watchmen employed by the Contractor to ensure that barricades and lights are effective at all times.

b) For Trench Excavations

- i) Adequately protected by means of at least two horizontal double sided 'red/white' Chevron Tapes approved by the Engineer. The tapes shall be stretched tightly between suitable supports along both sides and ends of the excavation at levels approximately 0,45 m and 1,25 m above the ground. The supports shall consist of poles or iron standards securely planted in solid ground at not more than 10 m centres so as to enclose the spoil and the excavations.
- ii) Provided with red warning light or any other visible boundary indicators at night or when visibility conditions are poor. The spacing between lamps along an open trench shall be not greater than 10 metres. All lamps shall be kept in good order and continuously lit from dusk to dawn and the Contractor shall employ a night watchman to ensure that the lamps remain lit.
- iii) Provided with a sufficient number of steel plates at least 2 m x 1,20 m x 8 mm thick which may be laid across open excavated trenches to provide bridges for vehicles along the route of the work as and where may be considered necessary by the Engineer. The Contractor shall make such plates available on Site at all times.
- iv) Provided with protection for a private vehicular or a pedestrian crossing over an open trench. Such crossings shall be protected on each side by a stout two rail timber fence, at least 1 m high, consisting of 150 mm x 75 mm timber verticals set 0,50 m into the ground, with 75 mm x 50 mm rails securely nailed to them. Where timber is used for bridges, it must be battened underneath to prevent tipping. At least 4 lamps must be provided at each crossing.
- v) Provided with warning barriers in addition to the barricading and light requirements set out above, where construction is in, or across, public roads. The barriers shall comprise 225 mm x 40 mm timbers firmly fixed to heavy supports. The barriers shall be located at least 20 m distance from the obstruction in the directions of all approaching traffic; and the requisite ROAD CLOSED, DEVIATION and other

signs shall be prominently displayed well in advance of the work. All such signs and positioning thereof shall comply with the requirements set out in the S.A. Road Traffic Signs Manual.

Where only a portion of the roadway is closed suitable empty drums or pipes painted white shall be placed along the traffic side at distances not more than 20 m apart.

Lamps in good order shall be provided one to each drum or pipe and at least five to each barricade, in addition all poles and warning notices shall be clearly marked by means of approved reflecting material.

- vi) Regularly inspected by watchmen employed by the Contractor to ensure that barricades, bridges, warning barriers and lights are effective at all times.

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

PSGA 1 CEMENT

Unless written consent to the contrary is received from the Engineer, all cement used on the contract will be Ordinary Portland cement (CEM I 42,5).

PSGA 2 FINISH

All exposed concrete surfaces shall be floated off to the necessary gradients and planes, and while still green, will be finished off to a smooth surface with a wooden trowel.

PSGA 3 STRENGTH CONCRETE

The strength concrete necessary for the different portions of the work is as follows:

GRADE	ITEM
20/20	Encasement of pipes
20/20	Reinstatement of driveways

Should concrete for the works be mixed on site, the Contractor is to provide the Engineer with a mix design carried out by an approved laboratory for approval. The Contractor is also to furnish the Engineer with the methodology and equipment to be used for the mixing of concrete for approval by the Engineer. Six tests cubes are to be taken prior to the first concrete pour, and the 7-day result will be utilized as a first indication of suitability of the mix design. Approval will however be based on the 28-day strength.

PSGA 4 SELECTED FILL MATERIAL

"PI shall not exceeding 10".

PSGA 5 BEDDING

All pipes under this Contract will be considered as being flexible pipes.

PSGA 6 STONE BEDDING

Where ordered by the Engineer, special drains consisting of a 40 mm thickness of 6mm to 20mm graded stone extending the full width of the trench shall be provided below the bedding to the pipes. The excavation for these drains will be measured in cubic metres at the contract rate applying to unsuitable excavation below the bottom of the trench. The stone filling will be paid for per cubic metre. All measurements in this connection will be to a width equal to the base widths and depths ordered.

PSGA 7 CONCRETE CASING TO PIPES

Where concrete encasing is ordered by the Engineer it is to be of grade 20/19 concrete with a minimum thickness of 150 mm above the top of the pipe.

PSGA 8 VOLUME OF BEDDING MATERIALS

Add:

- (c) The volume of bedding material shall be measured nett i.e. the volume of the pipe is to be deducted.

PSGA 9 FREEHAUL

The free haul that applies to selected granular and selected fill material shall be 2 km.

C3.9 PARTICULAR SPECIFICATIONS

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

SECTION EMP	ENVIRONMENTAL MANAGEMENT SPECIFICATION
SECTION DWK	DAY WORKS
SECTION OHS	OHS 1993 SAFETY SPECIFICATION

SECTION EMP: ENVIRONMENTAL MANAGEMENT SPECIFICATION

EMP.1 General

In order to ensure that the construction works is carried out in an environmentally sensitive matter, strict compliance to the Environmental Management Plan (EMP) guidelines is required. The EMP is bounded to this document under Part C4: **Site Information**. The purpose of the EMP is to:

- Encourage good management practices through planning and commitment to environmental issues,
- Provide rational and practical environmental guidelines to:
 - i. Minimize disturbance of the natural environment,
 - ii. Prevent pollution of land, air and water,
 - iii. Prevent soil erosion and facilitate re-vegetation.
- Adopt the best practicable means available to prevent or minimize adverse environmental impact,
- Develop waste management practices based on prevention, minimization, recycling, treatment or disposal of wastes,
- Train employees and contractors with regard to environmental obligations.

EMP.2 Training and Induction of Employees

- The Contractor has a responsibility to ensure that all those people involved in the project are aware of and familiar with the environmental requirements for the project (this includes sub-contractors, casual labour, etc.). The EMP shall be part of the terms of reference for all contractors, sub-contractors and suppliers.

EMP.3 Complaints Register and Environmental Incident Book

Any complaints received by the project team from the public will be recorded. The complaint should be brought to the attention of the site manager, who will respond.

The following information must be recorded:

- Time, date and nature of the complaint,
- Type of communication (telephone, letter etc),
- Name, contact address and telephone number of the complainant,
- Response and investigation undertaken and
- Actions taken and by whom.

All complaints received will be investigated and a response given to the complainant within 14 days.

All environmental incidents occurring on the site will be recorded. The following information will be provided:

- Time, date, location and nature of the incident,
- Actions taken and by whom.

EMP.4 Site Cleanliness and Neatness

- Location of a construction camp is to be approved by the Engineer and is to be restored to its previous condition after completion of construction.

- The construction camp should preferably be fenced with a 1.8m bonnox fence or similar approved.
- All materials, equipment, plant and vehicles must be stored within the construction camp.
- A dedicated area must be made available for construction staff to change and store their personal belongings.

EMP.5 Access

- Access to existing roads, schools, buildings, shops and residential properties must not be impeded during construction.
Access roads utilised by the Contractor must be maintained in good condition.

EMP.6 Borrow Pits

- Mining authorizations (permits) for borrow pits must be obtained from the Department of Minerals and Energy (DME) in consultation with the Department of Water Affairs and Forestry (DWAF).
- Spoil dumps resulting from borrow pits must not interfere with any natural surface drainage.
- Borrow pits must be rehabilitated after use in accordance with the requirements of DME and DWAF.
- Borrow pits will be fenced and the necessary warning signs will be erected.

EMP.7 Dust Control / Air Quality

- Dust suppression measures must be implemented during construction by ensuring that all surfaces prone to dust generation are kept damp (e.g. use of water tanker).
- Ensure that vehicles and equipment are in good working conditions and that emissions are not excessive.
- Ensure that vehicles and equipment are in good working conditions and that emissions are not excessive.
- Special care must be taken in areas where the route passes close to schools and residential areas.
The speed of construction vehicles must be reduced.

EMP.8 Fauna

Contractor staff may not chase, catch or kill animals encountered during construction.

EMP.9 Fire Prevention and Control

- Smoking is prohibited in the vicinity of flammable substances.
- The contractor must ensure that fire-fighting equipment is available on site, particularly where flammable substances are being stored or used, and that construction staff are aware of where it is kept and how it is operated.
Fires started for comfort (warmth) are prohibited, due to the risk of veld fires and risk to adjacent property owner's lands.

EMP.10 Grave Sites

Gravesites in close proximity to the road must not be disturbed during construction.

EMP.11 Materials Handling and Spills Management

- Any hazardous materials to be used during construction (e.g. lime, fuel, paint, etc) are to be stored in a designated area at the campsite.
- The storage containers/facilities (including any diesel/petrol tanks) must be placed on an impermeable surface and surrounded by a bund wall, in order to ensure that accidental spillage does not pollute the environment.

- Workers must at all times be made aware of the health and safety risks associated with any hazardous substances used (e.g. smoking near fuel tanks), and must be provided with appropriate protective clothing/equipment in case of spillages or accidents.
- Ensure all staff and contractors undergo relevant training in the maintenance of equipment to prevent the accidental discharge or spill of fuel, oil, lubricants and other chemicals.
- Any spill of potentially hazardous materials must be cleaned up immediately (Potentially hazardous materials on site include paint, oil, grease, fuel, turpentine, etc).
- The area of contaminated soil or spill must be deposited into the hazardous waste container(s).
- The contractor should keep Peat, Sorb or a similar absorbent on site to clean up any spills. The absorbent must be stored in a designated area and be available for inspection.
- All spills are to be recorded in the environmental incident book.

EMP.12Noise

- Noise generating activities must be restricted to between 07:00 and 17:00 Monday to Friday, unless otherwise approved by the appropriate competent person in consultation with adjacent landowners/affected persons.
- All equipment, vehicles and machinery must be in good working condition and be equipped with sound mufflers if necessary.
- Construction staff must be trained and made aware of not creating unnecessary noise such as hooting and shouting.

EMP.13Pollution Control

- Soil and water pollution through usage of fuel, oil, paint, bitumen or other hazardous substances must be avoided.
- All construction vehicles are to be maintained in good working order so as to prevent soil or water pollution from oil, fuel or other leaks, and to reduce noise pollution.

EMP.14Rivers and Streams

- During construction of bridge structures, there must be no obstruction of the water flow of rivers and streams.
- Excavated material must not be stockpiled on or near riverbanks, in order to prevent sedimentation occurring.
- Erosion control measures must be employed both during and after construction.
- No impediments to natural surface water flow, other than approved erosion control measures, must occur.

EMP.15Safety

- Safety measures, such as detour signs, must be implemented during construction to ensure the safety of workers, pedestrians and drivers/passengers in vehicles in the vicinity of construction work.
- Special care must be taken in the vicinity of schools to ensure the safety of children wishing to cross the road under construction.
- The relevant signage (e.g. speed control signs) must be erected alongside the road during the operation phase in order to control traffic.
- Accommodation must be made for pedestrian pathways alongside the road during the construction and operation phases.

EMP.16Soil Management

- Stormwater drainage pipes must be installed alongside the road in all areas susceptible to soil erosion.
- Erosion should be minimized by the construction of meadow drains and the planting of indigenous vegetation on the side slopes and drains to reduce flow velocity of stormwater.
- Spoil from cuts may be used in existing erosion galleys.
- Stone pitching and gabions should be constructed at pipe culvert outlets.
- Accidental spills of contaminants onto the ground e.g., oil, concrete, fuel and chemicals should be removed

together with the contaminated soil.

- If necessary, an absorbent such as Peat Sorb should be used the aid in cleaning up the spill. The contaminated soil should be disposed of in an appropriate container, depending on its classification.
- Servicing and re-fueling of vehicles must only be carried out at construction camp.

EMP.17 Worker Conduct

Code of Conduct for Construction Personnel:

- Do not leave the construction site untidy and strewn with rubbish which will attract animal pests.
- Do not set fires.
- Do not cause any unnecessary, disturbing noise at the construction camp/site or at any designated worker collection/drop off points.
- Do not drive a construction-related vehicle under the influence of alcohol.
- Do not exceed the national speed limits on public roads or exceed the recommended speed limits on the site.
- Do not drive a vehicle which is generating excessive noise or gaseous pollution (noisy vehicles must be reported and repaired as soon as possible).
- Do not litter along the roadsides, including both the public and private roads.
- Do not pollute any water bodies (whether flowing or not).
- No member of the construction team is allowed to enter the areas outside the construction site.

EMP.18 Traffic Disturbances and Diversions

- Any traffic diversions must be undertaken with the approval of all relevant authorities and in accordance with all relevant legislation.
- Wherever possible, traffic diversion must only take place on existing disturbed areas and remain within the existing road reserve.
- Traffic diversion routes must be rehabilitated after use.

EMP.19 Vegetation

- Only vegetation falling directly on the route must be removed where necessary.
- Alien vegetation within the road reserve must be eradicated, and management measures must be implemented for future control of these species.
- Vegetation that has been removed from large areas (e.g. on traffic diversion routes) during construction must be replaced with indigenous vegetation after construction has been completed.

EMP.20 Waste Management

- All general, non-hazardous waste must be placed in a skip container and disposed of at a registered waste disposal site.
- The contractor is to ensure that the portable toilet facilities at the campsite are properly maintained and in working order.
- No disposal, or leakage, of sewage must occur on or near the site.
- All hazardous waste (e.g., oil, paint, empty lime bags, contaminated wash water, etc.) must be stored in leak proof containers and disposed of at a registered hazardous waste disposal site.
- The contents of waste storage containers must, under no circumstances, be emptied to the surrounding area. In general, littering, discarding or burying of any materials is not allowed on site or along the route.
- Adequate waste receptacles must be available at strategic points around the construction camp and site for all domestic refuse and to minimize the occurrence of littering.
- Concrete rubble must be collected and disposed of as directed by the Project Manager.
- Each working area must be cleared of litter and building waste (e.g., rubble, wood, concrete packets etc.) on completion of the day's work.
- Any spill around the container(s) should be treated as per Section EMP11 and EMP16.

SECTION DWK: DAY WORKS

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

DWK. 1 SCOPE

According to clause 37.2 of the General Conditions of Contract for construction works (GCC) 2010 edition, certain work may be carried out using rates tendered in the day work schedule. A schedule of personnel, plant and equipment which may be necessary to perform work on a day work basis is included in the schedule of quantities. The quantities used in the schedule are for tender evaluation purposes only and the use or not of these items shall not constitute a variation in terms of Clause 37 of the General Conditions of Contract 2010 edition.

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

DWK. 2 TYPE OF WORK

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

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

DWK. 3 MATERIALS

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

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

The Contractor shall submit proof of ownership for any materials used in Day works with his day works claim to the Engineer. Further, if specific materials are required for Day works, quotations will be called for as per Clause 37.2.4 of the General Conditions of Contract 2015 edition.

DWK. 4 CONSTRUCTION PLANT HIRE

Where daywork is ordered, the tendered rates for plant hire in Section 1800 shall be used in calculating the payment due for any plant required to execute the daywork. If no rate is included in the schedule for a particular piece of equipment, and where no other rate or combination of rates would provide suitable compensation, then the daywork method of payment described in Clause 37.2.3 of the General Conditions of Contract 2015 3rd edition will be used.

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

DWK. 5 SALARIES AND WAGES OF WORKMEN

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

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

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

DWK. 6 MEASUREMENT AND PAYMENT

The following principles shall also apply to the measurement and payment of day works.

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

The Contractor's attention is drawn to the requirements of Sub-clauses 37.2.5 and 37.2.6 of the General Condition of Contract 2010 edition with regard to the submission of day works claims.

SECTION OHS: OHSA 1993 HEALTH AND SAFETY SPECIFICATION

OHS.1 SCOPE

This specification covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy environment for all workers, employees and subcontractors under his control and for all other persons entering the site of works.

This specification shall be read with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993, and the corresponding Construction Regulations 2014, and all other safety codes and specifications referred to in the said Construction Regulations.

In terms of the OHSA Agreement in Section C1.2.4 of the Contract document, the status of the Contractor as mandatory to the Employer (client) is that of an employer in his own right, responsible to comply with all provisions of OHSA 1993 and the Construction Regulations 2014.

This safety specification and the Contractor's own Safety Plan as well as the Construction Regulations 2014, shall be displayed on site or made available for inspection by all workers, employees, inspectors and any other persons entering the site of works.

The following are possible risks associated with this project:

- Working high above the ground on top and below the bridge, most of the time in a restricted environment with limited landings (working platforms)
- Working above a continuously flowing river and in an flood plain environment subject to flooding
- Lifting and lowering of materials and equipment from the ground to the bridge and vice versa, exposed to cross winds
- Steep and restricted access to the lower flood plain below the bridge
- Potentially dangerous existing services, i.e. gas lines, water and sewerage mains, electrical high voltage cables, on the bridge, buried and overhead
- Deep excavations in soils requiring shoring or reducing of slopes
- Blasting of hard rock or demolition of concrete
- High pressure during testing of the relocated pipe lines, which could result in potentially dangerous situations in the event of the pipeline or fittings failing
- Potentially harmful gasses when tying into the existing sewer mains
- Movement of construction vehicles on site, taking into consideration steep slopes, other traffic and existing services
- Exposure to possible injuries due to mishandling or failure of power and hand tools
- Falling debris, tools and materials from bridge
- Non-conformance to specifications with regards to fasteners and materials
- Risks related to general safety and security on site

Additional risks may arise from specific methods of construction selected by the Contractor which are not necessary covered in the above.

OHS.2 DEFINITIONS

For the purpose of this contract the following shall apply:

- (a) **Employer** where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract and it shall have the exact same meaning as **“client”** as defined in the Construction Regulations 2014. **“Employer”** and **“client”** is therefore interchangeable and shall be read in the context of the relevant document.
- (b) **“Contractor”** wherever used in the contract documents and in this specification, shall have the same meaning as **“Contractor”** as defined in the General Conditions of Contract.

In this specification the terms **“principal contractor”** and **“contractor”** are replaced with **“Contractor”** and **“subcontractor”** respectively.

For the purpose of this contract the **Contractor** will, in terms of OHSA 1993, be the mandatory, without derogating from his status as an employer in his own right.

- (c) “**Engineer**” where used in this specification, means the Engineer as defined in the General Conditions of Contract. In terms of the Construction Regulations the Engineer may act as agent on behalf of the Employer (the client as defined in the Construction Regulations).

OHS.3 TENDERS

The Contractor shall submit the following with his tender:

- (a) a documented Health and Safety Plan as stipulated in Regulation 7 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations 2014 and will be subject to approval by the Employer;
- (b) a declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Construction Regulations 2014;
- (c) a declaration to the effect that he made provision in his tender for the cost of the health and safety measures envisaged in the Construction Regulations.
- (d) Failure to submit the foregoing with his tender, will lead to the conclusion that the Contractor will not be able to carry out the work under the contract safely in accordance with the Construction Regulations.

OHS.4 NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

After award of the contract, but before commencement of construction work, the Contractor shall, in terms of Regulation 4, notify the Provincial Director of the Department of Labour in writing if the following work is involved:

- (a) the demolition of structures and dismantling of fixed plant of height of 3,0m or more;
- (b) the use of explosives;
- (c) construction work that will exceed 30 days or 300 person-days;
- (d) excavation work deeper than 1,0m; or
- (e) working at a height greater than 3,0m above ground or landings.

The notification must be done in the form of the pro forma included under Section 9 (Forms to be Completed by Successful Tenderer) of the tender document.

A copy of the notification form must be kept on site, available for inspection by inspectors, Employer, Engineer, employees and persons on site.

OHS.5 RISK ASSESSMENT

Before commencement of any construction work during the construction period, the Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 9 of the Construction Regulations 2014).

The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

OHS.6 APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

6.1 Health and Safety plan

The Contractor shall appoint his employees and any subcontractors to be employed on the contract, in writing, and he shall provide them with a copy of his documented Health and Safety Plan, or relevant sections thereof. The Contractor shall ensure that all subcontractors and employees are committed to the implementation of his Safety Plan.

6.2 Health and safety induction training

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo a health and safety induction training course by a competent person before commencement of construction work. No visitor or other person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety training pertaining to hazards prevalent on site.

The Contractor shall ensure that every employee on site shall at all times be in possession of proof of the health and safety induction training issued by a competent person prior to commencement of construction work.

OHS.7 APPOINTMENT OF SAFETY PERSONNEL

7.1 Construction Supervisor

The Contractor shall appoint a full-time **Construction Supervisor** with the duty of supervising the performance of the construction work.

He may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

7.2 Construction safety officer

Taking into consideration the size of the project and the hazards or dangers that can be expected, the Contractor shall appoint in writing a full-time or part-time **Construction Safety Officer** if so decided by the Inspector of the Department of Labour. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision shall be made by the Contractor in his rates, to cover the cost of this dedicated construction safety officer appointed after award of the contract.

7.3 Health and safety representatives

In terms of **Section 17 and 18 of the Act (OHSA 1993)** the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a **health and safety representative** whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 100 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters

affecting the health and safety of employees, to inspect the workplace, plant, machinery etc. on a regular base, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

7.4 Health and safety committee

In terms of Sections **17 and 18 of the Act (OHSA 1993)** the Contractor (as employer), shall establish one or more **health and safety committee(s)** where there are two or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals, but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, and to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

7.5 Competent persons

In accordance with the Construction Regulations the Contractor has to appoint in writing **competent persons** responsible for supervising construction work on each of the following work situations that may be expected on the site of the works.

- (a) Risk assessment and induction training as described in Regulation 9 of the Construction Regulations;
- (b) Fall protection as described in Regulation 10;
- (c) Excavation work as described in Regulation 13;
- (d) Demolition work as described in Regulation 14;
- (e) Scaffolding work as described in Regulation 16;
- (f) Suspended platform operations as described in Regulation 17;
- (g) Material hoists as described in Regulation 19;
- (h) Bulk Mixing plant operations as described in Regulation 20;
- (i) Explosive actuated fastening device as described in Regulation 21;
- (j) Cranes as described in Regulation 22;
- (k) Construction vehicle and mobile plant inspections on a daily basis by a competent person as described in Regulation 23(1);
- (l) Control of all temporary electrical installation on the construction site as described in Regulation 24;
- (m) Stacking and storage on construction sites as described in Regulation 28; and
- (n) Fire precautions on construction sites as described in Regulation 29.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work on all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities to comply with **all** requirements of the Construction Regulations.

OHS.8 RECORDS AND REGISTERS

In accordance with the Construction Regulations the Contractor is bound to keep records and registers related to health and safety on site for periodic inspection by inspectors, the Engineer, the Employer, trade union officials and subcontractors and employees. The following records and registers must be kept on site and shall be available for inspection at all times.

- (a) A copy of the OHSA 1993 Construction Regulations 2014;
- (b) A copy of this Health and Safety Specification;
- (c) A copy of the Contractor's Health and Safety Plan (Regulation 7);

- (d) A copy of the Notification of Construction Work (Regulation 4);
- (e) A health and safety file in terms of Regulation 7(1b) with inputs by the Construction Safety Officer (Regulation 8(5));
- (f) A copy of the risk assessment described in Regulation 9;
- (g) A full protection plan and the corresponding records of evaluation and training of employees working from elevated positions as described in Regulation 10;
- (h) Drawings pertaining to the design of structures (Regulation 11(1c)) and temporary works (Regulation 10) must be kept on site;
- (i) Pronouncement of the safety of excavations must be recorded in a register to be kept on site (Regulation 13(2)(h));
- (j) A copy of the certificate of the system design for suspended platforms (Regulation 17(3));
- (k) A notice must be affixed around the base towers of material hoists to indicate the maximum mass load, which may be carried at any one time by material hoists (Regulation 11(2));
- (l) Maintenance records of material hoists and inspection results must be kept in a record book to be kept on site (Regulation 19(8));
- (m) A record of any repairs to or maintenance of a batch plant must be kept on site (Regulations 19(8));
- (n) A warning notice must be displayed in a conspicuous manner when and wherever an explosive powered tool is used (Regulation 21(2));
- (o) A register for recording of findings by the competent person appointed to inspect construction vehicles and mobile plant (Regulation 23(1) (k)).

OHS.9 CONTRACTORS RESPONSIBILITIES

For this contract the Contractor will be the mandatory of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2014.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) to confirm his status as mandatory (employer) for the contract under consideration.

The Contractor's duties and responsibilities are clearly set out in the Construction Regulations 2014, and are not repeated in detail but some important aspects are highlighted hereafter, without relieving the Contractor of any of his duties and responsibilities in terms of the Construction Regulations.

(a) Contractor's position in relation to the Employer (Client) (Regulation 5)

In accordance with Section 4 of the Regulations, the Contractor shall liaise closely with the Employer or the Engineer on behalf of the Employer, to ensure that all requirements of the Act and the Regulations are met and complied with.

(b) The Principal Contractor and Contractor (Regulation 7)

The Contractor is in terms of the definition in Regulation 2(b) the equivalent of Principle Contractor as defined in the Construction Regulations, and he shall comply with all the provisions of Regulation 7.

Any subcontractors employed by the Contractor must be appointed in writing, setting out the terms of the appointment in respect of health and safety. An independent subcontractor shall however provide and demonstrate to the Contractor a suitable, acceptable and sufficiently documented health and safety plan before commencement of the subcontract. In the absence of such a health and safety plan the subcontractor shall undertake in writing that he will comply with the Contractor's safety plan, the health and safety specifications of the Employer and the Construction Regulations 2014.

(c) Management Supervision of construction work (Regulation 8)

The Contractor shall appoint the safety and other personnel and employees as required in terms of Regulation 8 and as set out in paragraph 7 above. Appointment of those personnel and

employees does not relieve the Contractor from any of the obligations under Regulation 8.

(d) Risk assessment for construction works (Regulation 9)

The Contractor shall have the risk assessment made as set out in paragraph 3 above before commencement of the work and it must be available on site for inspection at all times. The Contractor shall consult with the health and safety committee or health and safety representative(s) etc. on a regular basis to ensure that all employees, including subcontractors under his control, are informed and trained by a competent person regarding health hazards and related work procedures.

No subcontractor, employee or visitor shall be allowed to enter the site of works without prior health and safety induction training, all as specified in Regulation 9.

(e) Fall protection (Regulation 10)

Fall protection, if applicable to this contract shall comply in all respects with Regulation 10 of the Construction Regulations.

(f) Structures (Regulation 11)

The Contractor will be liable for all claims arising from collapse or failure of structures if he failed to comply with all the specifications, project specifications and drawings related to the structures, unless it can be proved that such collapse or failure can be attributed to faulty design or insufficient design standards on which the specifications and the drawings are based. In addition, the Contractor shall comply with all aspects of Regulation 11 of the Construction Regulations.

(g) Temporary works (Regulation 12)

The Contractor will be responsible for the adequate design of all formwork and support structures by a competent person.

All drawings pertaining to formwork shall be kept on site and all equipment and materials used in formwork, shall be carefully examined and checked for suitability by a competent person.

The provisions of Regulation 12 of the Construction Regulations shall be followed in every detail.

(h) Excavation (Regulation 13)

It is essential that the Contractor shall follow the instructions and precautions in the Standard Specifications and Project Specifications as well as the provisions of the Construction Regulations to the letter as unsafe excavations can be a major hazard on any construction site. The Contractor shall therefore ensure that all excavation work is carried out under the supervision of a competent person, that inspections are carried out by a Professional Engineer or Technologist, and that all work is done in such a manner that no hazards are created by unsafe excavations and working conditions.

Supervision by a competent person will not relieve the Contractor from any of his duties and responsibilities under Regulation 13 of the Construction Regulations.

(i) Demolition work (Regulation 14)

Whenever demolition work is included in a contract, the Contractor shall comply with all the requirements of Regulation 14 of the Construction Regulations. The fact that a competent person has to be appointed by the Contractor does not relieve the Contractor from any of his responsibilities in respect of safety of demolition work.

(j) Tunneling (Regulation 15)

The Contractor shall comply with Regulation 15 wherever tunneling of any kind is involved.

(k) Scaffolding (Regulation 16)

The Contractor shall ensure that all the provisions of Regulation 16 of the Construction Regulations are complied with. [Note: Reference in the Regulations to “Section 44 of the Act” should read “Section 43 of the Act”].

(l) Suspended platforms (Regulation 17)

Wherever suspended platforms will be necessary on any contract, the Contractor shall ensure that copies of the system design issued by a Professional Engineer are submitted to the Engineer for inspection and approval. The Contractor shall appoint competent persons as supervisors and competent scaffold erectors, operators and inspectors and ensure that all work related to suspended platforms are done in accordance with Regulation 17 of the Construction Regulations.

(m) Rope Access (Regulation 18)

Where rope access is required on the construction site, the Contractor shall comply with Regulation 18.

(n) Material Hoists (Regulation 19)

Wherever applicable, the Contractor shall comply with the provisions of Regulation 19 to the letter.

(o) Bulk Mixing plants (Regulation 20)

Wherever applicable, the Contractor shall ensure that all lifting machines, lifting tackle, conveyors, etc. used in the operation of a batch plant shall comply with, and that all operators, supervisors and employees are strictly held to the provisions of Regulation 20. The Contractor shall ensure that the General Safety Regulations (Government Notice R1031 of 30 May 1986), the Driven Machinery Regulations (Government Notice R295 of 26/2/1988) and the Electrical Installation Regulations (Government Notice R2271 of 11/10/1995) are adhered to by all involved.

In terms of the Regulations, records of repairs and maintenance shall be kept on site.

(p) Explosive actuated fastening devices (Regulation 21)

The Contractor shall ensure that, wherever explosive-powered tools are required to be used, all safety provisions of Regulation 21 are complied with.

It is especially important that warning notices are displayed and that the issue and return of cartridges and spent cartridges be recorded in a register to be kept on site.

(q) Cranes (Regulation 22)

Wherever the use of tower cranes becomes necessary, the provisions of Regulation 22 shall be complied with.

(r) Construction vehicles And mobile plant (Regulation 23)

The Contractor shall ensure that all construction vehicles and plant are in good working condition and safe for use, and that they are used in accordance with their design and intended use. The vehicles and plant shall only be operated by workers or operators who have received appropriate training, all in accordance with all the requirements of Regulation 23.

All vehicles and plant must be inspected on a daily basis, prior to use, by a competent person and

the findings must be recorded in a register to be kept on site.

(s) Electrical installation and machinery on construction sites (Regulation 24)

The Contractor shall comply with the Electrical Installation Regulations (Government Notice R2920 of 23 October 1992) and the Electrical Machinery Regulations (Government Notice R1953 of 12 August 1993). Before commencement of construction, the Contractor shall take adequate steps to ascertain the presence of, and guard against dangers and hazards due to electrical cables and apparatus under, over or on the site.

All temporary electrical installations on the site shall be under the control of a competent person, without relieving the Contractor of his responsibility for the health and safety of all workers and persons on site in terms of Regulation 24.

(t) Use of temporary storage of flammable liquids on construction sites (Regulation 25)

The Contractor shall comply with the provisions of the General Safety Regulations (Government Notice R1031 of 30 May 1986) and all the provisions of Regulation 25 of the Construction Regulations to ensure a safe and hazard-free environment to all workers and other persons on site.

(u) Water environments (Regulation 26)

Where construction work is done over or in close proximity to water, the provisions of Regulation 26 shall apply.

(v) Housekeeping and general safeguarding on construction sites (Regulation 27)

Housekeeping on all construction sites shall be in accordance with the provisions of the environment Regulations for workplaces (Government Notice R2281 of 16 October 1987) and all the provisions of Regulation 27 of the Construction Regulations.

(w) Stacking and storage on construction sites (Regulation 28)

The provisions for the stacking of articles contained in the General Safety Regulations (Government Notice R1031 of 30 May 1986) as well as all the provisions Regulation 28 of the Construction Regulations shall apply.

(x) Fire precautions on construction sites (Regulation 29)

The provisions of the Environmental Regulations for Workplaces (Government Notice R2281 of 16 October 1987) shall apply.

In addition, the necessary precautions shall be taken to prevent the incidence of fires, to provide adequate and sufficient fire protection equipment, sirens, escape routes etc. all-in accordance with Regulation 29 of the Construction Regulations.

(y) Construction welfare facilities (Regulation 30)

The Contractor shall comply with the construction site provisions as in the Facilities Regulations (Government Notice R1593 of 12 August 1988) and the provisions of Regulation 30 of the Construction Regulations.

(z) Non-compliance with the Construction Regulations 2014

The foregoing is a summary of parts of the Construction Regulations applicable to all construction projects.

The Contractor, as employer for the execution of the contract, shall ensure that all provisions of the Construction Regulations applicable to the contract under consideration are complied with to the

letter.

Should the Contractor fail to comply with the provisions of the Regulations 4 to 30 as listed in Regulation 33, he will be guilty of an offence and will be liable, upon conviction, to the fines or imprisonment as set out in Regulation 33.

The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations.

OHS.10 MEASUREMENT AND PAYMENT

10.1 Principles

It is a condition of this contract that Contractors, who submit tenders for this contract, shall make provision in their tenders for the cost of all health and safety measures during the construction process. All associated activities and expenditure are deemed to be included in the Contractor's tendered rates and prices.

(a) Safety personnel

The Construction Supervisor, the Construction Safety Officer, Health and Safety Representatives, Health and Safety Committee and Competent Persons referred to in clauses 9.1 to 9.5 shall be members of the Contractor's personnel, and no additional payment will be made for the appointment of such safety personnel.

(b) Records and Registers

The keeping of health and safety-related records and registers as described in 8 is regarded as a normal duty of the Contractor for which no additional payment will be considered, and which is deemed to be in the Contractor's tendered rates and prices.

C4: SITE INFORMATION

C4.1: SITE INFORMATION

C4.1.1 Material site investigation

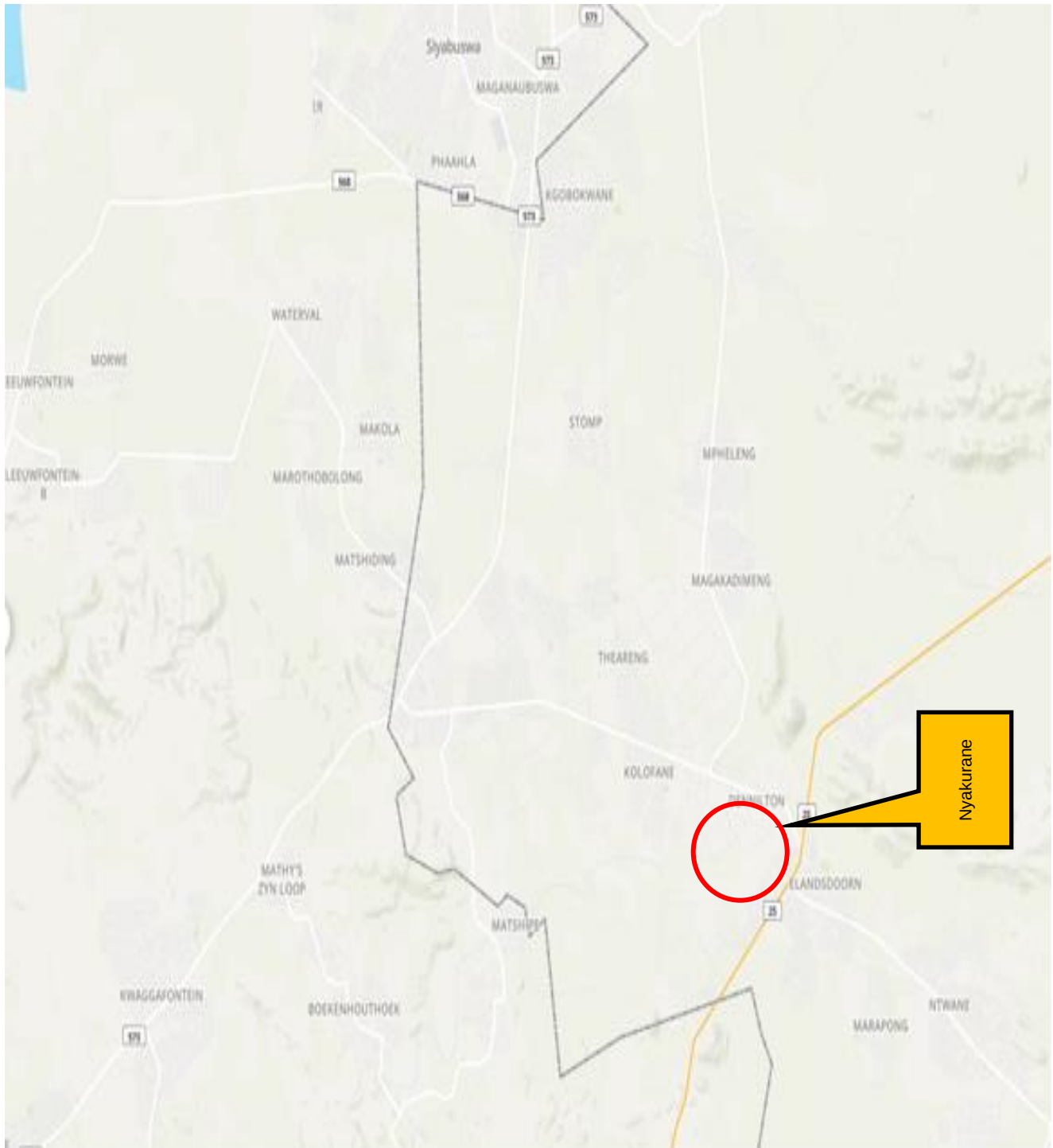
C4.1.2 Pavement and layer works design

In order to optimize the use of the materials available on site and taking into account the insitu sub-grade material which consists of unsuitable quality material and the expected material available from borrow pits, the following pavement design is proposed:

Section

- a) Surfacing:** 80mm thick interlocking Paving.
- b) Subbase Layer:** 150mm thick Gravel Sub-base (chemically stabilized material) compacted to 95% of modified AASHTO density (**C3**)
- d) Roadbed:** Rip and re-compact 150mm thick insitu gravel compacted to 90% of Modified AASHTO Density, (**G7**).

C4.2: LOCALITY PLAN



C4.3 TENDER DRAWINGS

The following is a list of contract drawings included

DESCRIPTION	DRAWING NO.		NO.
KEY PLAN LAYOUT	EMLM17/2023/KEYPLAN/01	-	1
ROAD 1 - CROSS & LONGSECTION Ch 0 - 60	EMLM17/2023/CS/LS/01	-	2
ROAD 2 - CROSS & LONGSECTION Ch 0 - 366	EMLM17/2023/CS/LS/02	-	3
ROAD 3 - CROSS & LONGSECTION Ch 0 - 400	EMLM17/2023/CS/LS/03	-	4
ROAD 3 - CROSS & LONGSECTION Ch 280 - 530	EMLM17/2023/CS/LS/04		
ROAD 4 - CROSS & LONGSECTION Ch 0 - 400	EMLM17/2023/CS/LS/05	-	5
ROAD 4 - CROSS & LONGSECTION Ch 380 - 448		-	6
EMLM17/2023/CS/LS/06			
ROAD 5 - CROSS & LONGSECTION Ch 0 - 400	EMLM17/2023/CS/LS/07	-	7
ROAD 5 - CROSS & LONGSECTION Ch 400 - 510	EMLM17/2023/CS/LS/08	-	8
STANDARD AND TYPICAL DRAWINGS NAME BOARD	EMLM17/2023/NB/TD-01	-	9
STANDARD AND TYPICAL DRAWINGS TYPICAL ROAD CROSSING AND LAYOUT ON TWO LANE ROAD	EMLM17/2023/RCLT/TD-02	-	10
STANDARD AND TYPICAL DRAWINGS TYPICAL ROAD SIGN SEQUENCE FOR HALF-WIDTH CONSTRUCTION	EMLM17/2023/TM/TD-03	-	11
STANDARD AND TYPICAL DRAWINGS TYPICAL CROSS SECTIONS, FIGURE 8C KERB AND CONCRETE CHANNEL	EMLM17/2023/TC/TD-04	-	12
STANDARD AND TYPICAL DRAWINGS STONE PITCHING AND GABION PROTECTION	EMLM17/2023/SP/TD-05	-	13
STANDARD AND TYPICAL DRAWINGS SUBSURFACE DRAINS	EMLM17/2023/SD/TD-06	-	14
STANDARD AND TYPICAL DRAWINGS STORMWATER DETAIL	EMLM17/2023/SW/TD-07	-	15



ELIAS MOTSOLEDI LOCAL MUNICIPALITY

CONTRACT NO.: EMLM17/2023

FOR

UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD
BOOK OF DRAWINGS: TENDER DRAWINGS REV 00

ISSUED BY:

ELIAS MOTSOLEDI LOCAL MUNICIPALITY

THE MUNICIPAL MANAGER

P.O.BOX 48 Tel. No. 013 -262 3056/7/8/9
GROBLERSDAL Fax No. 013 - 262 2893
0470



PREPARED BY:

DOLMEN ENGINEERS

CONSULTING ENGINEERS

P.O.BOX 1209 Tel. No. 015 - 295 4885
FAUNA PARK Fax No. 015 - 295 8384
0787





Curve List							
ROAD1							
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1	0.00	0.00	0.00	0.00	0.00	0:00:00	
ROAD2							
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection	
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1	0.00	0.00	0.00	0.00	0.00	0:00:00	
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2	75.00	0.00	0.00	15.29	15.29	23:02:47	
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END	60	-13479.45	2796373.12
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E.C.C.1	47.00	-13150.26	2796252.95
B.C.C.2	475.58	-13202.60	2795827.59
P2	490.68	-13204.47	2795812.41
E.C.C.2	505.75	-13212.13	2795799.18
B.C.C.3	506.58	-13212.55	2795798.45
P3	518.40	-13218.53	2795788.12
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E.C.C.1	222.88	-13084.71	2795516.67
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Rev.	Description	Date	By
01	FOR TENDER PURPOSE	08/2022	MP

AMENDMENTS

SERVICE

ROADS

DESIGNED	M.P
DRAWN	T. M
CAD FILE NAME	EMLM17/2023/KEYPLAN/01
CHECKED	M.P
APPROVED	M.P

PREPARED BY



P.O. BOX 1209
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0787

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CLIENT: ELIAS MOTSOLEDI LOCAL MUNICIPALITY



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Fax: 013 262 2893

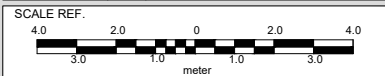
PROJECT

UPGRADING OF NYAKURANE
INTERNAL ACCESS ROAD

TITLE

KEY PLAN LAYOUT
SHEET 1 OF 1

DATE	08/2022
SCALE	A1 AS SHOWN

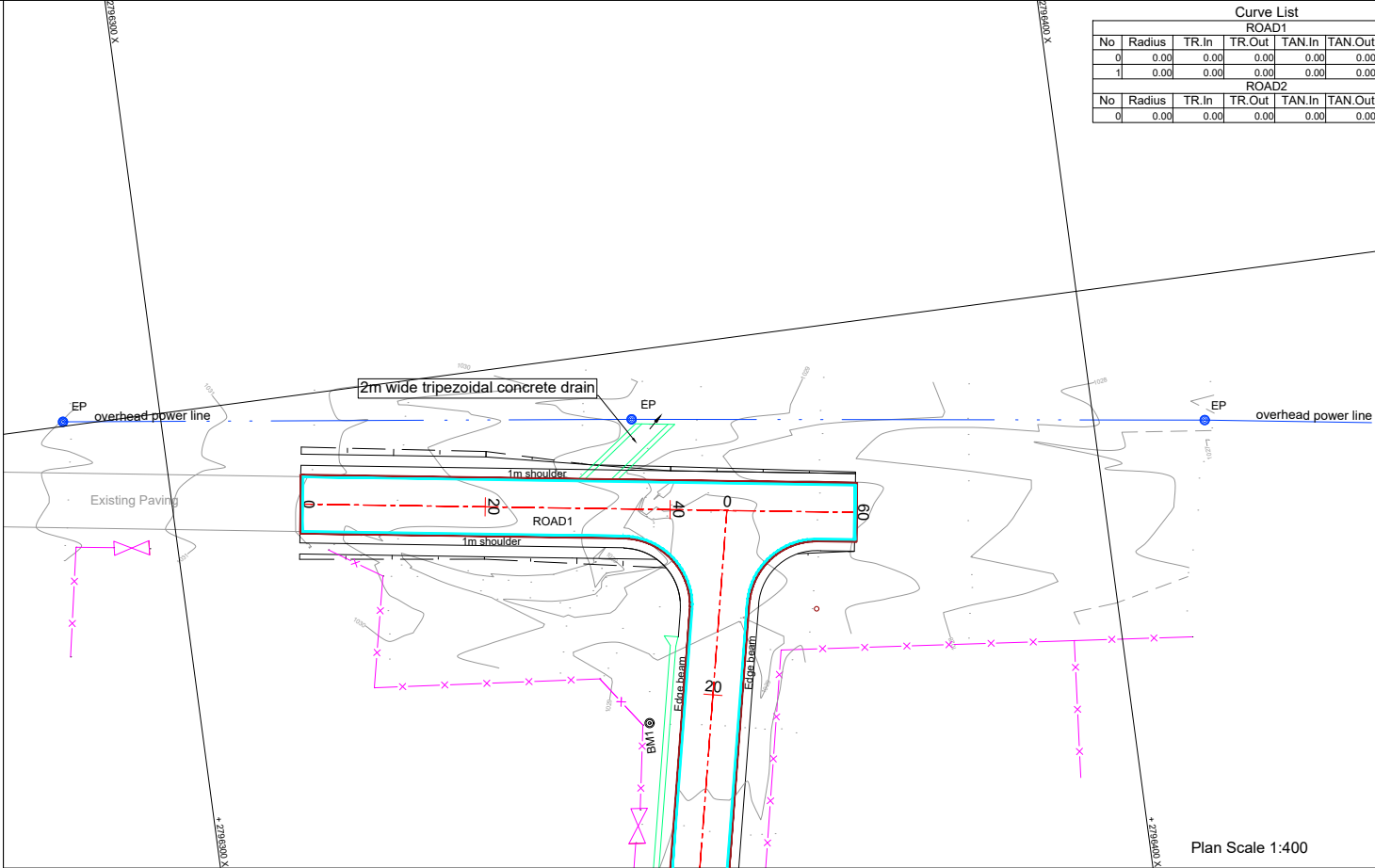


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CLIENT DWG. NO.	EMLM17/2023/KEYPLAN/01
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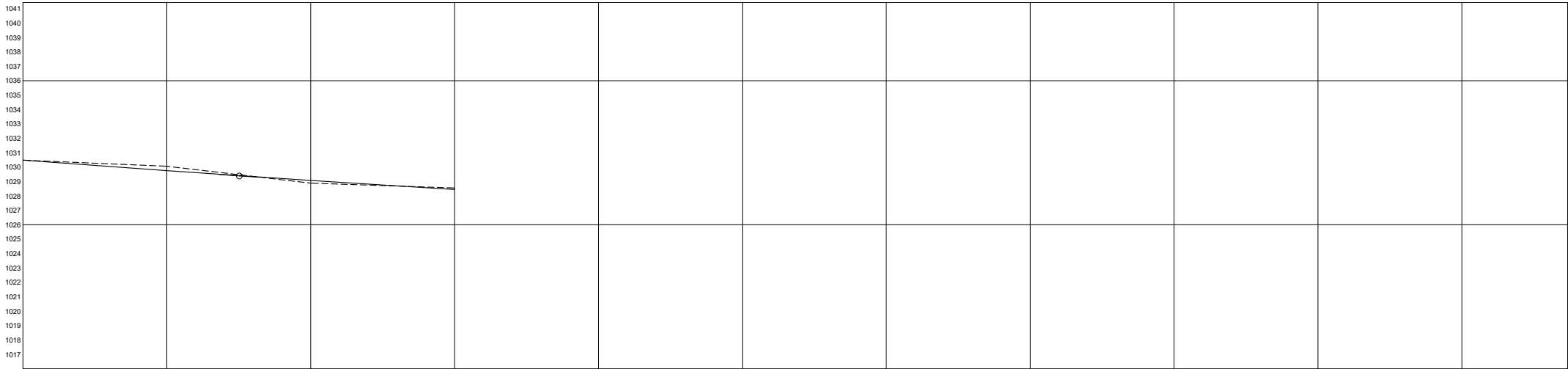
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ROAD2						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0:00:00

Road List				
ROAD1				
Position	SV	Y-Coord	X-Coord	RADIUS
START	0	-13488.27	2796313.77	0.00
END	60	-13479.45	2796373.12	
ROAD2				
Position	SV	Y-Coord	X-Coord	RADIUS
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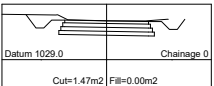
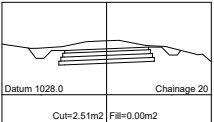
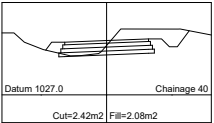
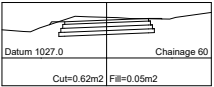


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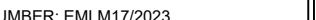


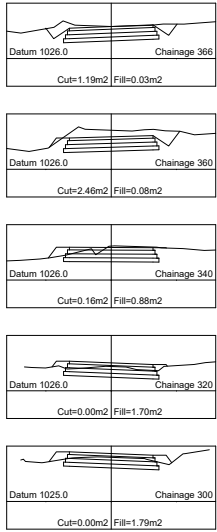
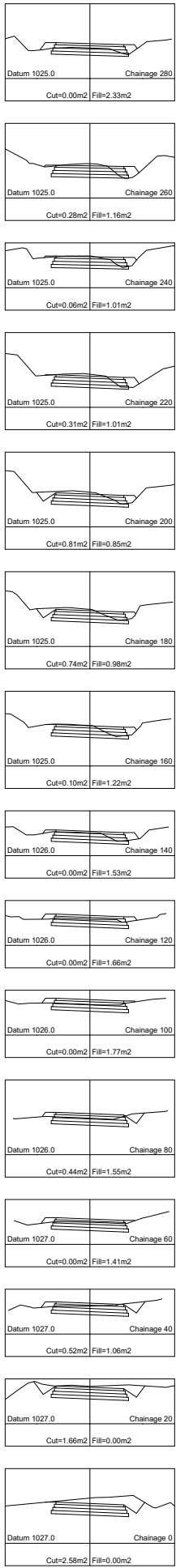
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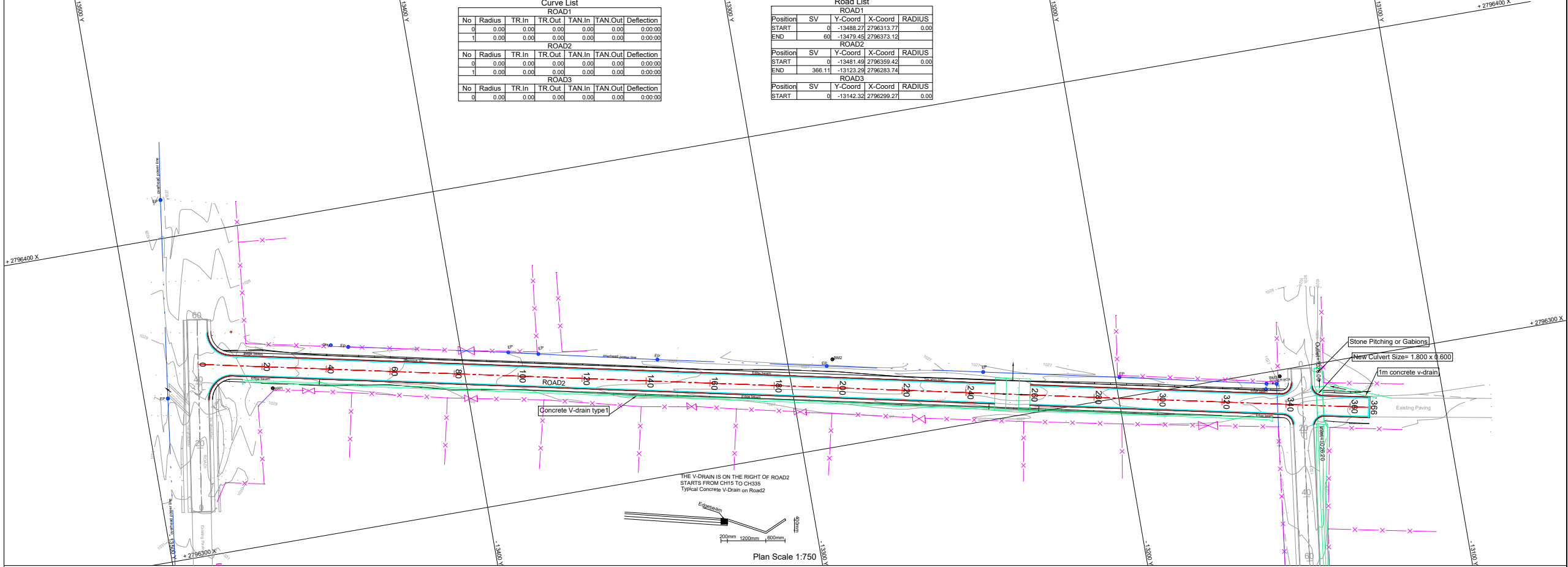
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Vertical Scale 1:200

DESIGNED BY:	MP	TENDER PLAN Full Signatures For Client For Consulting Engineer Consultant's Drawing No.: DE55/CS/LS/01	APPROVED	NO.	REVISION DETAILS	REV NO	DATE	REVISED BY	APPRVD BY	DRAWING STATUS			ELIAS MOTSOALEDI LOCAL MUNICIPALITY P.O. BOX 48 GROBLERSDAL 0470 Tel: 013 262 3056/7/8/9 Fax: 013 262 2893	 DOLMEN CONSULTING ENGINEERS P.O. BOX 468 BENDOR PARK 0713 Tel: 015 295 4885 Fax: 015 295 8384	CONTRACT NUMBER: EMLM17/2023	SHEET 1 OF 8	
DRAWN BY:	TM		For Client 20 / /	01	FOR TENDER PURPOSE	00	08/2022				For Information purpose				☐	PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD	SCALE: AS SHOWN
CHECKED BY:	MP		For Consulting Engineer								For Tender Purpose				☒	CLIENT DRAWING NO: EMLM17/2023/CS/LS/01	
ISSUED BY:	MP		For Consulting Engineer DEC 2020								For Construction				☐	ROAD 1 - CROSS & LONGSECTION Ch 0 - 60	
										AS Built Purpose	☐			REVISION 00			

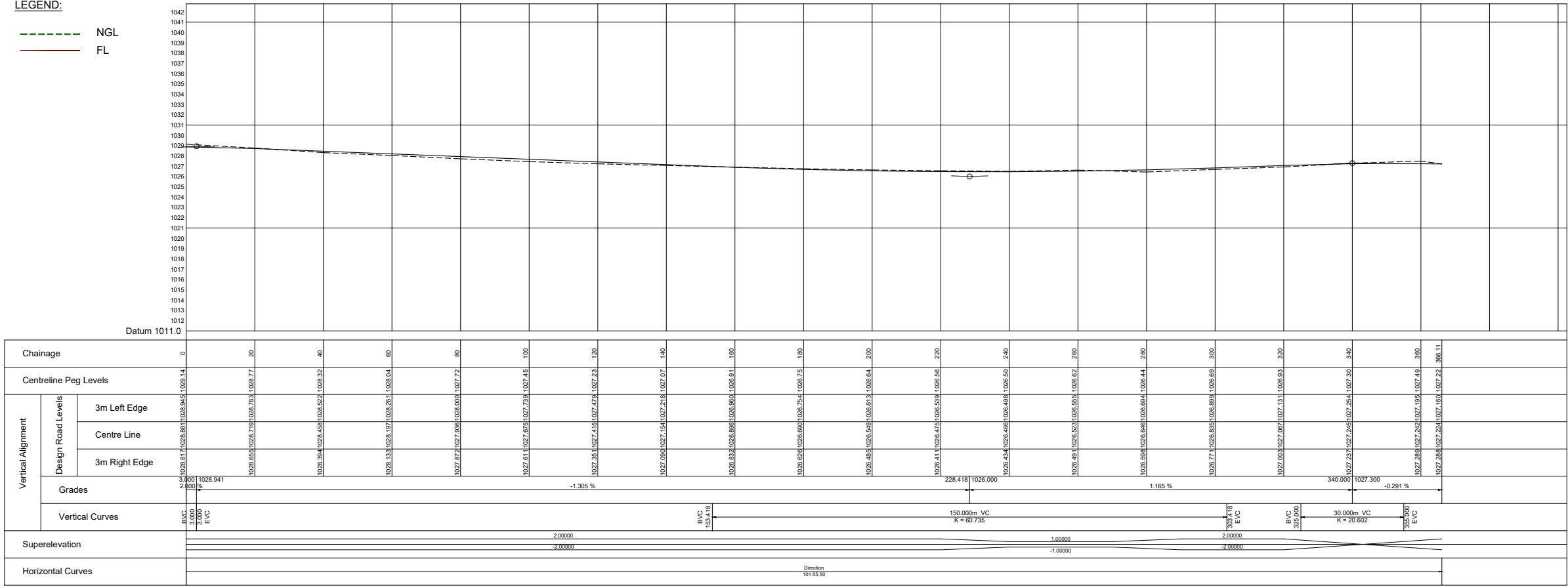


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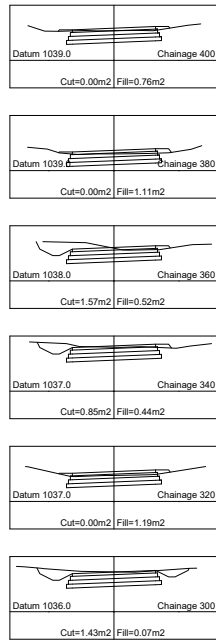
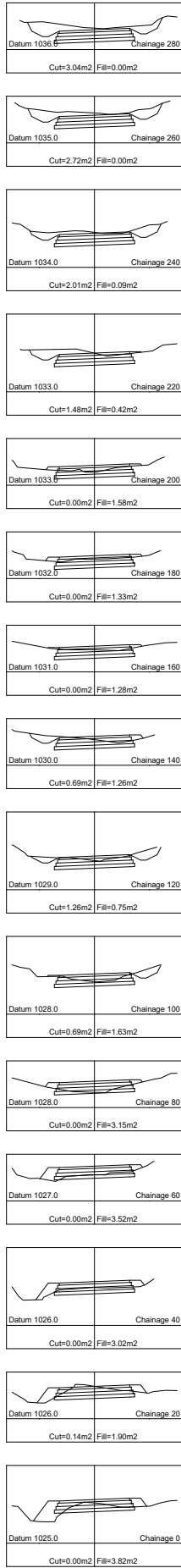
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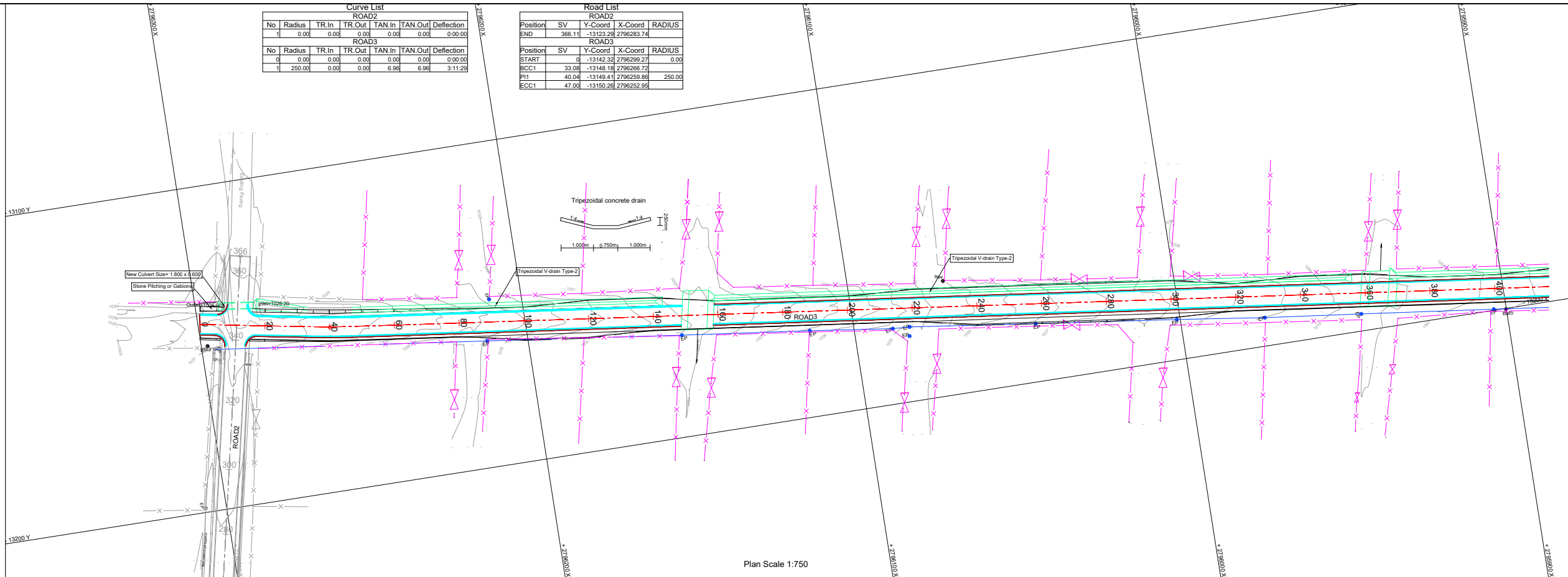


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Vertical Scale 1:250

DESIGNED BY:	MP	TENDER PLAN Full Signatures For Client For Consulting Engineer Consultant's Drawing No.: DE55/CS/LS/02	APPROVED For Client 20 / / For Consulting Engineer DEC 2020	NO.	REVISION DETAILS	REV NO	DATE	REVISED BY	APPRVD BY	DRAWING STATUS		ELIAS MOTSOLEDI LOCAL MUNICIPALITY P.O. BOX 48 GROBLERSDAL 0470 Tel: 013 262 3056/7/8/9 Fax: 013 262 2893	 DOLMEN CONSULTING ENGINEERS P.O. BOX 468 BENDOR PARK 0713 Tel: 015 295 4885 Fax: 015 295 8384	CONTRACT NUMBER: EMLM17/2023	SHEET 2 OF 8
DRAWN BY:	TM			01	FOR TENDER PURPOSE	00	08/2022							For Information purpose	SCALE: AS SHOWN
CHECKED BY:	MP													For Tender Purpose	CLIENT DRAWING NO: EMLM17/2023/CS/LS/02
ISSUED BY:	MP													AS Built Purpose	REVISION 00

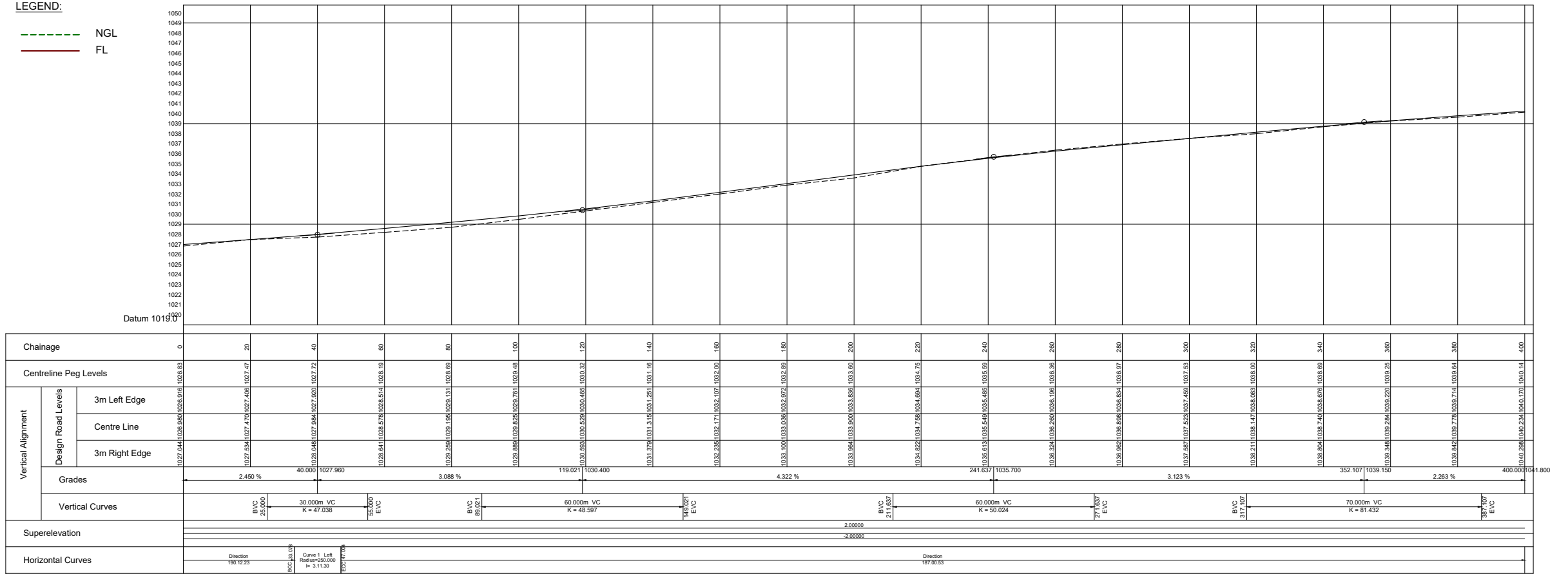


Horizontal Scale 1:300
Vertical Scale 1:150



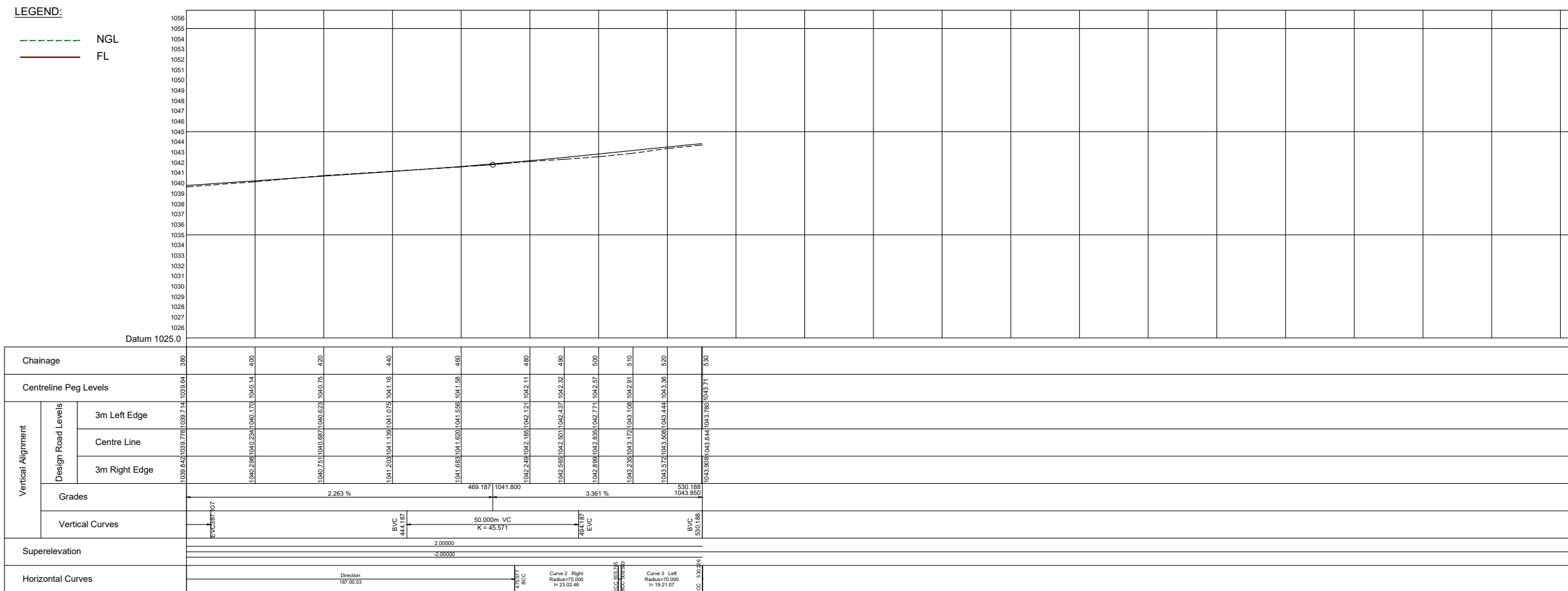
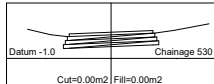
LEGEND:

--- NGL
--- FL



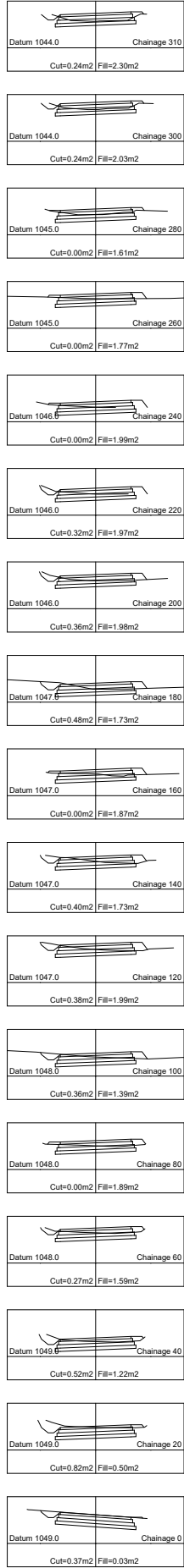
Chainage 0 to 400
Horizontal Scale 1:750
Vertical Scale 1:250

DESIGNED BY:	MP	TENDER PLAN Full Signatures For Client For Consulting Engineer Consultant's Drawing No.: DE55/CS/LS/01	APPROVED	NO.	REVISION DETAILS	REV NO	DATE	REVISED BY	APPRVD BY	DRAWING STATUS		ELIAS MOTSOALEDI LOCAL MUNICIPALITY P.O. BOX 48 GROBLERSDAL 0470 Tel: 013 262 3056/7/8/9 Fax: 013 262 2893	 DOLMEN CONSULTING ENGINEERS P.O. BOX 468 BENDOR PARK 0713 Tel: 015 295 4885 Fax: 015 295 8384	CONTRACT NUMBER: EMLM17/2023	SHEET 3 OF 8	
DRAWN BY:	TM		For Client	01	FOR TENDER PURPOSE	00	08/2022			For Information Purpose				SCALE: AS SHOWN	PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD	CLIENT DRAWING NO: EMLM17/2023/CS/LS/03
CHECKED BY:	MP		For Consulting Engineer							For Construction				ROAD 3 - CROSS & LONGSECTION Ch 0 - 400		
ISSUED BY:	MP			For Consulting Engineer DEC 2020						AS Built Purpose				REVISION 00		

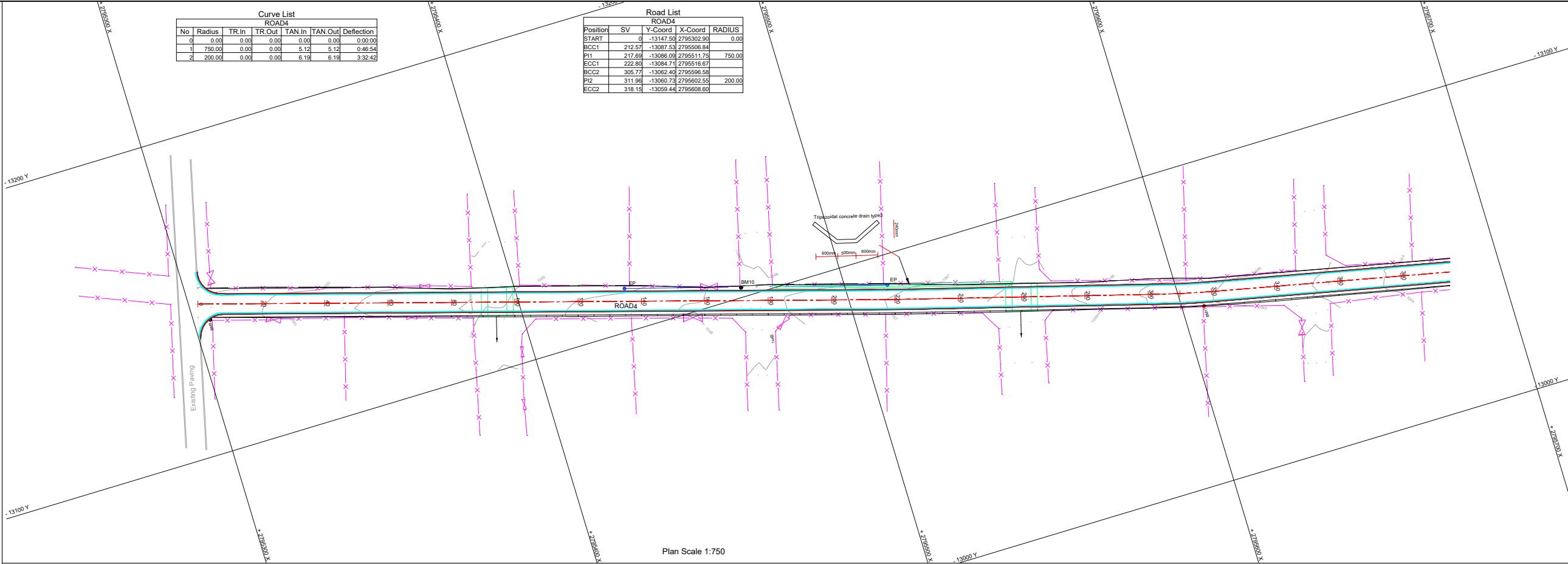


Chainage 380 to 530
Horizontal Scale 1:750
Vertical Scale 1:250

DESIGNED BY:	MP	TENDER PLAN Full Signatures For Client For Consulting Engineer Consultant's Drawing No.: DE55/CS/LS/04	APPROVED For Client 20 / / For Consulting Engineer DEC 2020	NO.	REVISION DETAILS	REV NO	DATE	REVISED BY	APPRV BY	DRAWING STATUS For Information purpose ☐ For Tender Purpose ☒ For Construction ☐ AS Built Purpose ☐		ELIAS MOTSOLEDI LOCAL MUNICIPALITY P.O. BOX 48 GROBLERSDAL 0470 Tel: 013 262 3056/7/8/9 Fax: 013 262 2893	 DOLMEN CONSULTING ENGINEERS P.O. BOX 468 BENDOR PARK 0713 Tel: 015 295 4885 Fax: 015 295 8384	CONTRACT NUMBER: EMLM17/2023 PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD ROAD 3 - CROSS & LONGSECTION Ch 280 - 530	SHEET 4 OF 8 SCALE: AS SHOWN CLIENT DRAWING NO: EMLM17/2023/CS/LS/04 REVISION 00	
DRAWN BY:	TM				01	FOR TENDER PURPOSE	00	08/2022								
CHECKED BY:	MP															
ISSUED BY:	MP															

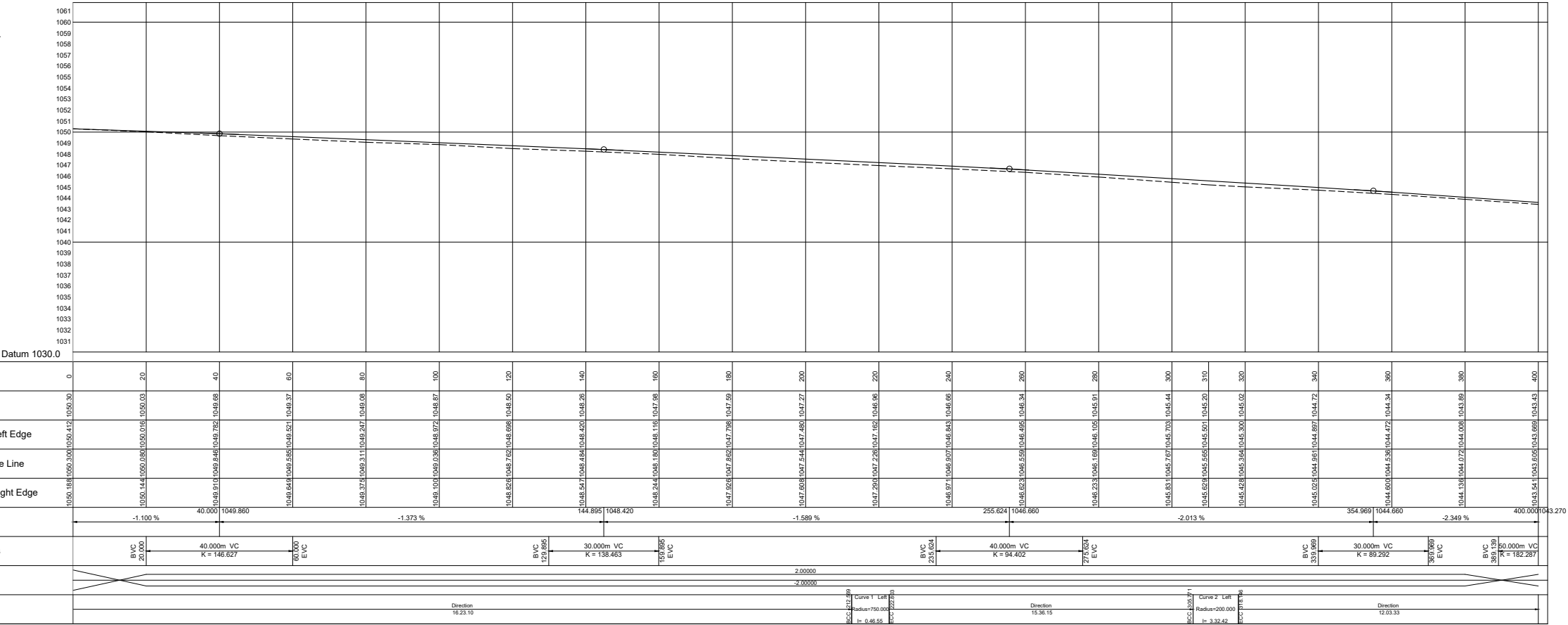


Horizontal Scale 1:300
Vertical Scale 1:150



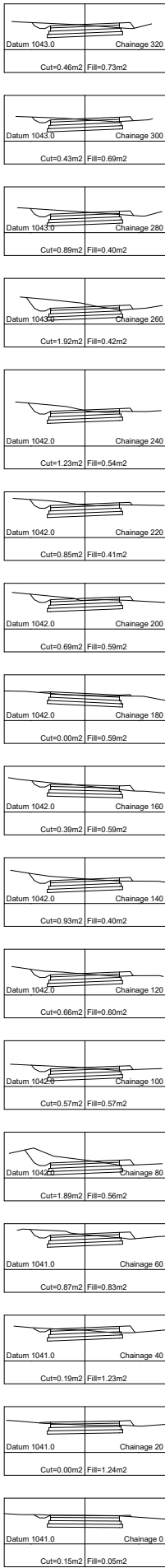
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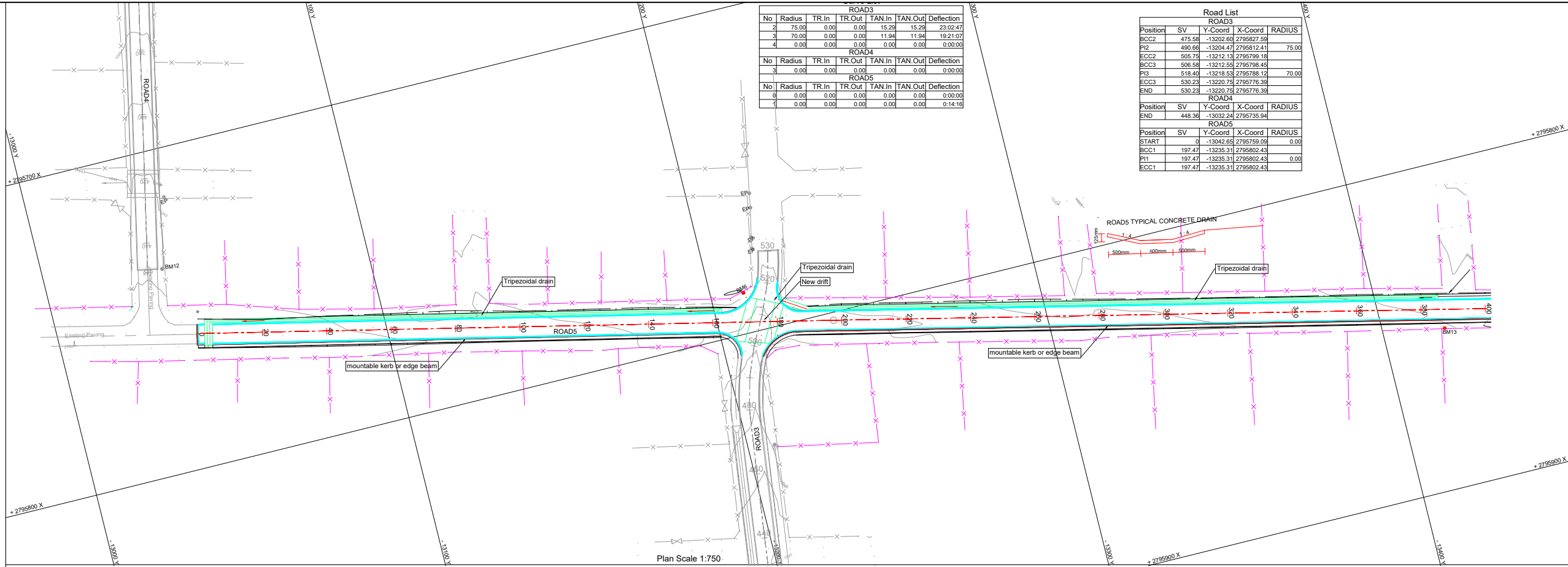


Chainage 0 to 400
Horizontal Scale 1:750
Vertical Scale 1:250

DESIGNED BY:	MP	TENDER PLAN Full Signatures	APPROVED	NO.	REVISION DETAILS	REV NO	DATE	REVISED BY	APPRVD BY	DRAWING STATUS		ELIAS MOTSOALEDI LOCAL MUNICIPALITY P.O. BOX 48 GROBLERSDAL 0470 Tel: 013 262 3056/7/8/9 Fax: 013 262 2893	 DOLMEN CONSULTING ENGINEERS P.O. BOX 468 BENDOR PARK 0713 Tel: 015 295 4885 Fax: 015 295 8384	CONTRACT NUMBER: EMLM17/2023	SHEET 5 OF 8			
DRAWN BY:	TM													For Client	For Client	For Tender Purpose	For Information Purpose	SCALE: AS SHOWN
CHECKED BY:	MP													For Consulting Engineer	For Consulting Engineer	For Construction	For Tender Purpose	CLIENT DRAWING NO: EMLM17/2023/CS/LS/05
ISSUED BY:	MP													Consultant's Drawing No.: DE55/CS/LS/05	For Consulting Engineer DEC 2020	AS Built Purpose	For Construction	REVISION 00

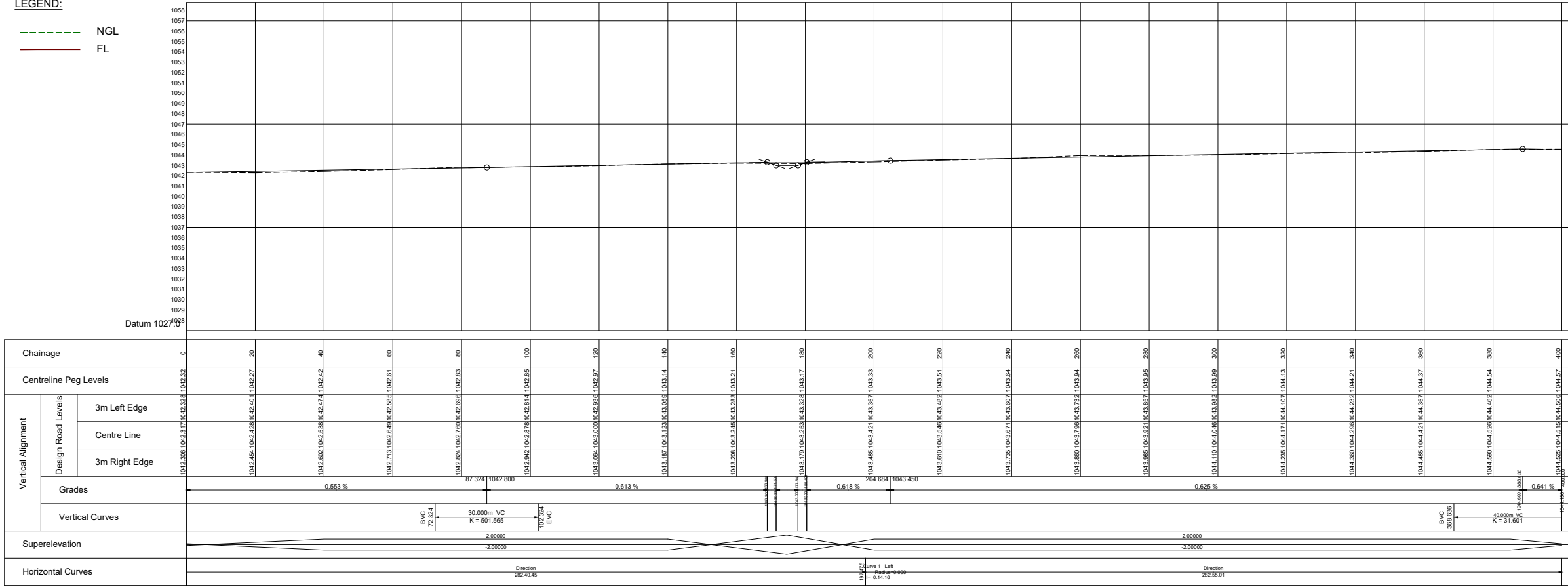


Horizontal Scale 1:300
Vertical Scale 1:150



LEGEND:

--- NGL
--- FL



Chainage 0 to 400
Horizontal Scale 1:750
Vertical Scale 1:250

ROAD3						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
2	75.00	0.00	0.00	15.29	15.29	23.0247
3	70.00	0.00	0.00	11.94	11.94	19.2107
4	0.00	0.00	0.00	0.00	0.00	0.0000

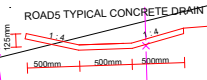
ROAD4						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
3	0.00	0.00	0.00	0.00	0.00	0.0000

ROAD5						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0.0000
1	0.00	0.00	0.00	0.00	0.00	0.1416

Road List				
ROAD3				
Position	SV	Y-Coord	X-Coord	RADIUS
BCC2	475.58	-13202.60	2795827.59	
PI2	490.66	-13204.47	2795812.41	75.00
ECC2	505.75	-13212.13	2795799.18	
BCC3	506.58	-13212.55	2795798.45	
PI3	518.40	-13218.63	2795788.12	70.00
ECC3	530.23	-13220.75	2795776.39	
END	530.23	-13220.75	2795776.39	

ROAD4				
Position	SV	Y-Coord	X-Coord	RADIUS
END	448.36	-13032.24	2795735.94	

ROAD5				
Position	SV	Y-Coord	X-Coord	RADIUS
START	0	-13042.65	2795759.09	0.00
BCC1	197.47	-13235.31	2795802.43	
PI1	197.47	-13235.31	2795802.43	
ECC1	197.47	-13235.31	2795802.43	0.00



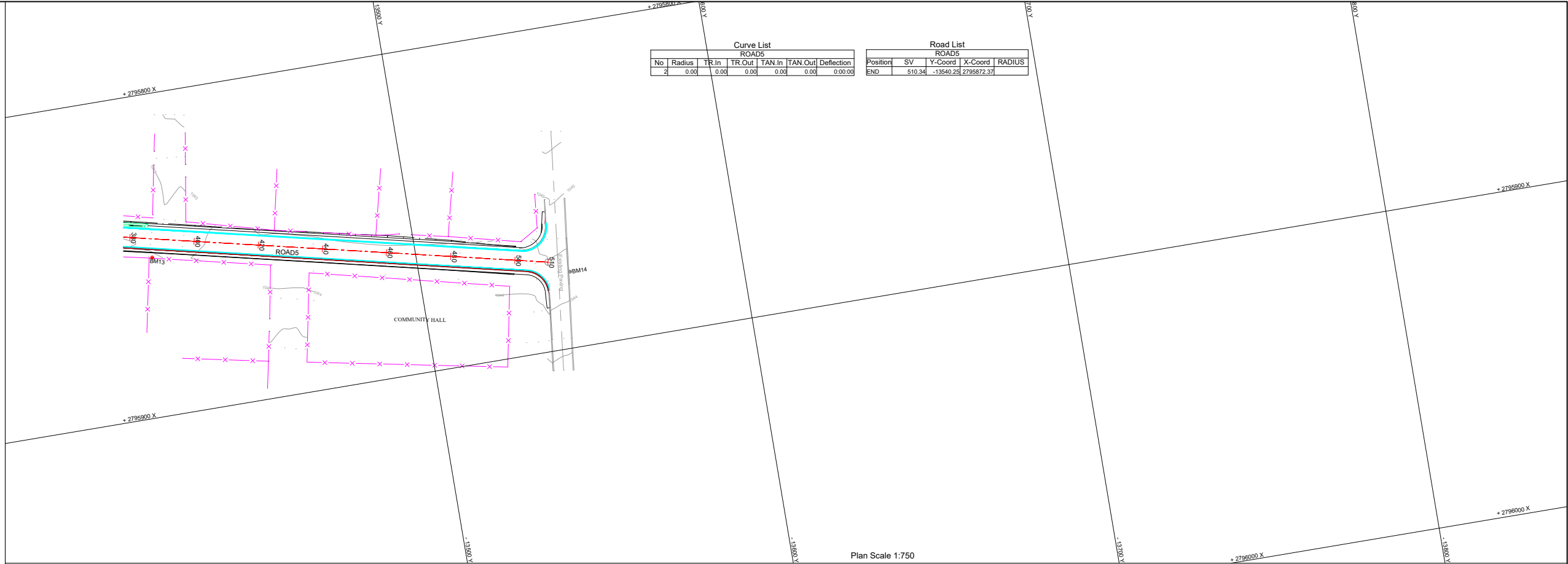
ELIAS MOTSOALEDI LOCAL MUNICIPALITY
P.O. BOX 48
GROBLERSDAL
0470
Tel: 013 262 3056/7/8/9
Fax: 013 262 2893

DOLMEN ENGINEERS
A VISION TO CLEAR SOLUTIONS
DOLMEN CONSULTING ENGINEERS
P.O. BOX 468
BENDOR PARK
0713
Tel: 015 295 4885
Fax: 015 295 8384

CONTRACT NUMBER: EMLM17/2023
PROJECT NAME:
UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD
ROAD 5 - CROSS & LONGSECTION Ch 0 - 400

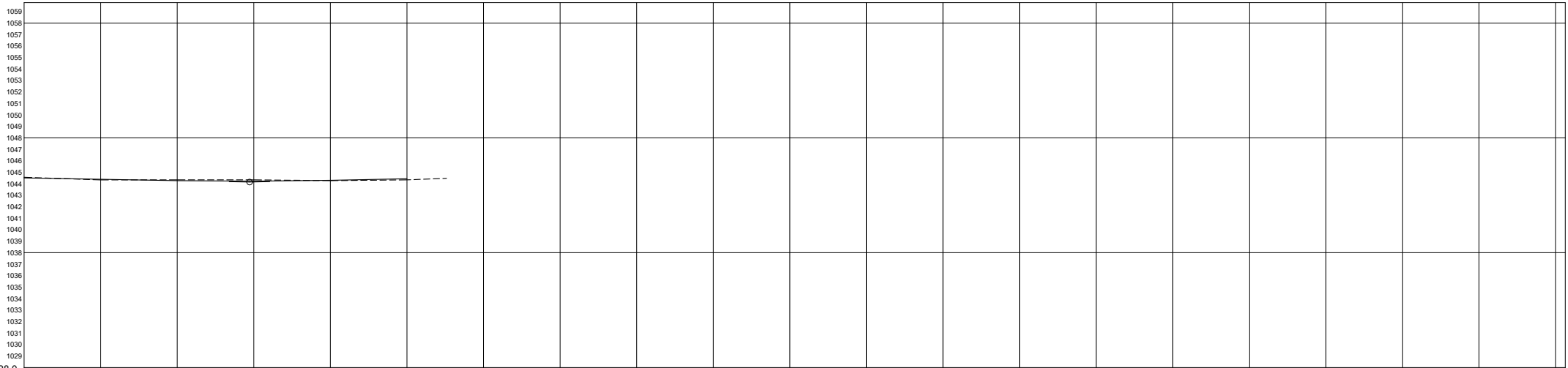
SHEET 7 OF 8
SCALE: AS SHOWN
CLIENT DRAWING NO:
EMLM17/2023/CS/LS/07
REVISION 00

DESIGNED BY:	MP	TENDER PLAN Full Signatures For Client For Consulting Engineer Consultant's Drawing No.: DE55/CS/LS/07	APPROVED For Client 20 / / For Consulting Engineer DEC 2020	NO.	REVISION DETAILS	REV NO	DATE	REVISED BY	APPRVD BY	DRAWING STATUS For Information purpose For Tender Purpose For Construction AS Built Purpose	
DRAWN BY:	TM			01	FOR TENDER PURPOSE	00	08/2022				
CHECKED BY:	MP										
ISSUED BY:	MP										



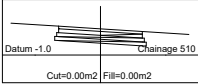
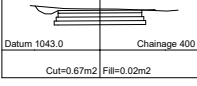
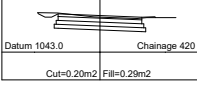
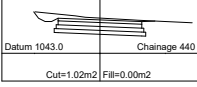
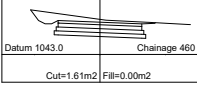
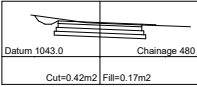
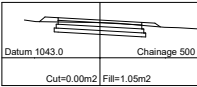
LEGEND:

NGL
FL



Chainage		400	420	440	460	480	500	510.34
Vertical Alignment	Design Road Levels	Left Edge	1044.57	1044.34	1044.35	1044.28	1044.36	1044.28
		Centre Line	1044.57	1044.34	1044.35	1044.28	1044.36	1044.28
		Right Edge	1044.57	1044.34	1044.35	1044.28	1044.36	1044.28
		Grades	-0.641 %	458.879	1044.150	0.713 %	510.212	1044.510
	Vertical Curves	0.000m VC K = 31.808	BVC 458.879	50.000m VC K = 36.938	BVC 488.879	510.212	BVC 510.212	
Superlevation		2.0000 -2.0000						
Horizontal Curves		Direction 332.35.01						

Chainage 400 to 510
Horizontal Scale 1:750
Vertical Scale 1:250



Horizontal Scale 1:300
Vertical Scale 1:150

DESIGNED BY:	MP	TENDER PLAN Full Signatures For Client For Consulting Engineer Consultant's Drawing No.: DE55/CS/LS/08	APPROVED For Client 20 / / For Consulting Engineer DEC 2020	NO.	REVISION DETAILS	REV NO	DATE	REVISED BY	APPRVD BY	DRAWING STATUS For Information purpose For Tender Purpose For Construction AS Built Purpose	 ELIAS MOTSOALEDI LOCAL MUNICIPALITY P.O. BOX 48 GROBLERSDAL 0470 Tel: 013 262 3056/7/8/9 Fax: 013 262 2893	 DOLMEN CONSULTING ENGINEERS P.O. BOX 468 BENDOR PARK 0713 Tel: 015 295 4885 Fax: 015 295 8384	CONTRACT NUMBER: EMLM17/2023	SHEET 8 OF 8		
DRAWN BY:	TM			01	FOR TENDER PURPOSE	00	08/2022								PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD	SCALE: AS SHOWN
CHECKED BY:	MP														CLIENT DRAWING NO: EMLM17/2023/CS/LS/08	
ISSUED BY:	MP														ROAD 5 - CROSS & LONGSECTION Ch 400 - 510	REVISION 00

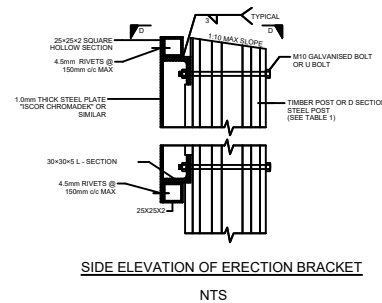
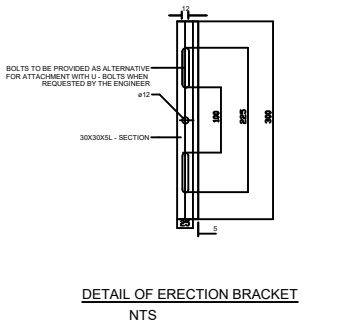
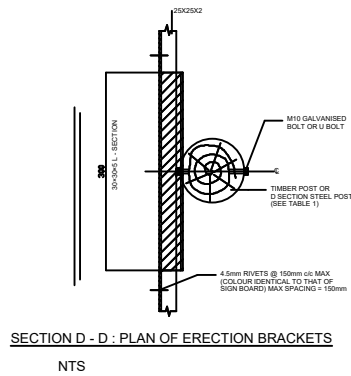
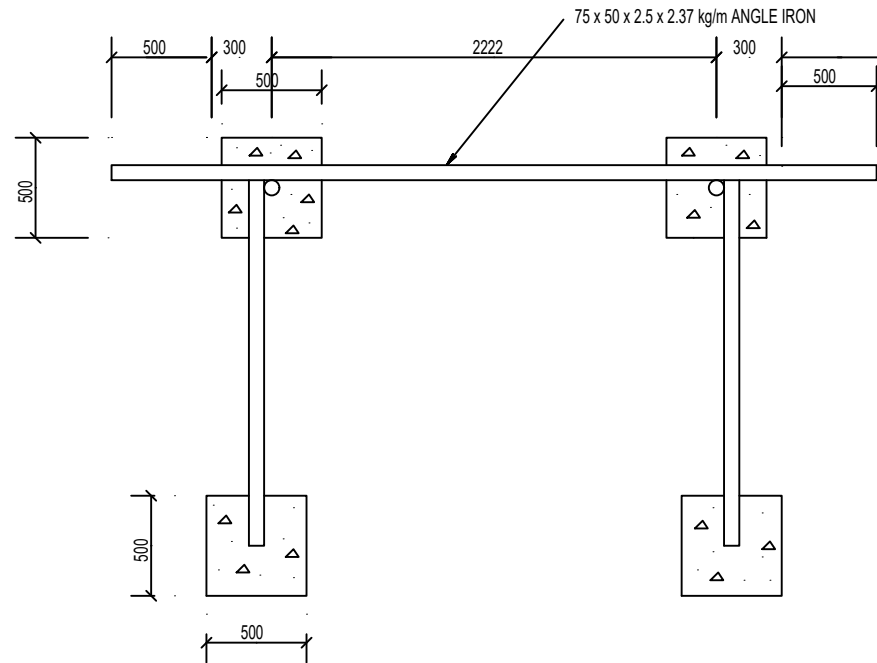
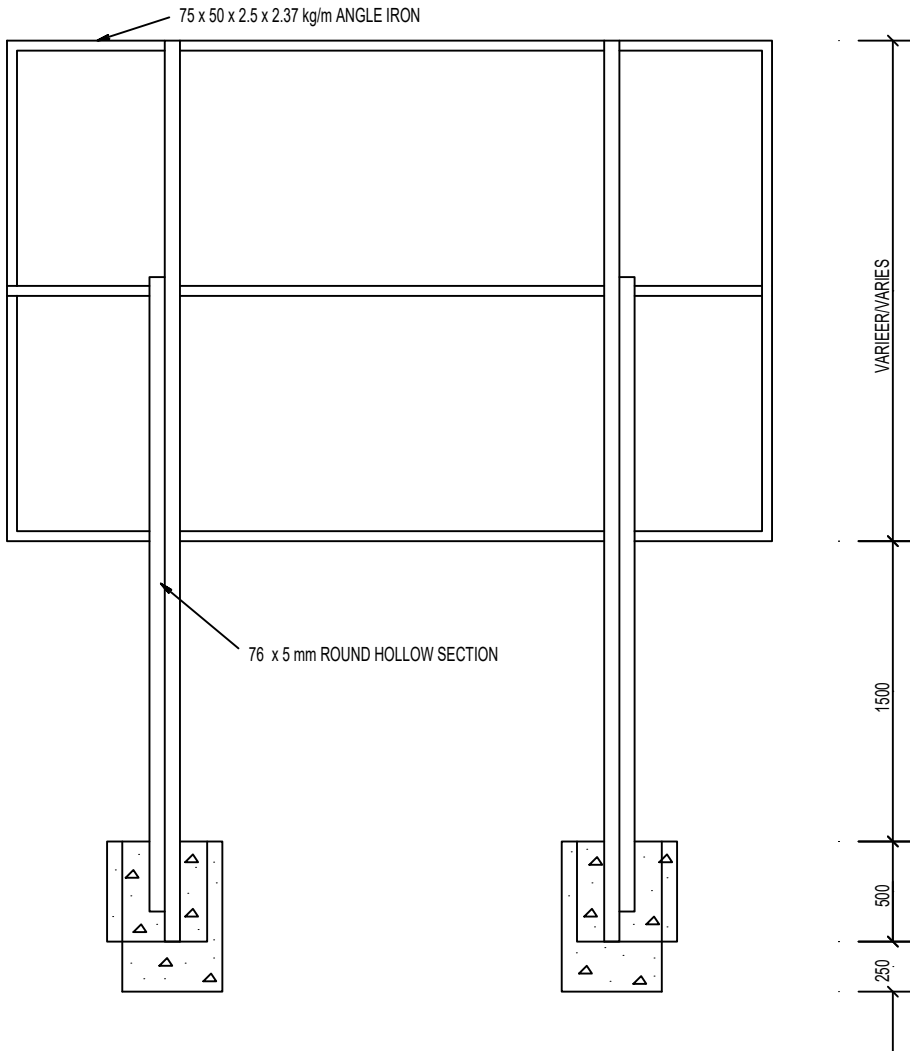
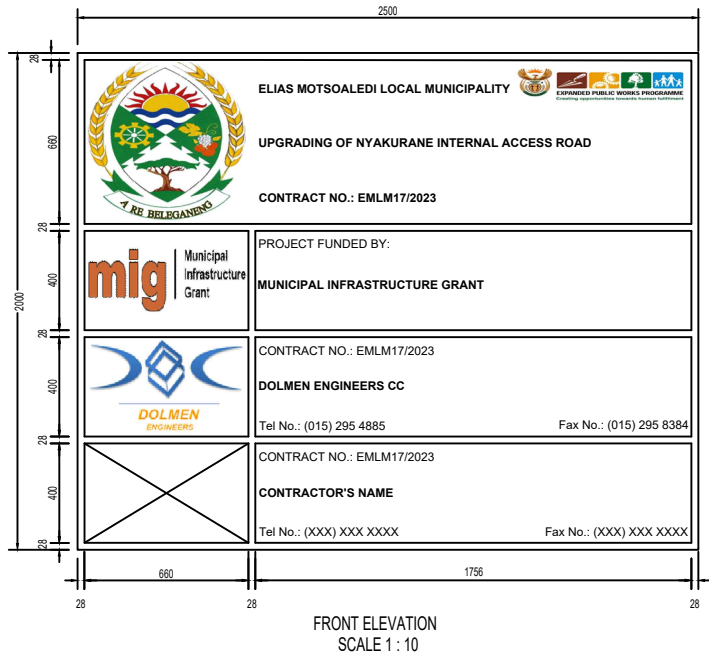


TABLE 1				
ERECTION DETAILS				
TYPE POST	UPRIGHT	STAY	D	B
TIMBER POST AND STAY	100mm	80mm	600mm	650mm
TIMBER POST	100mm	—	1000mm	1450mm
D SECTION STEEL POST	100mm x 5mm	76mm x 5mm	1000mm	1450mm

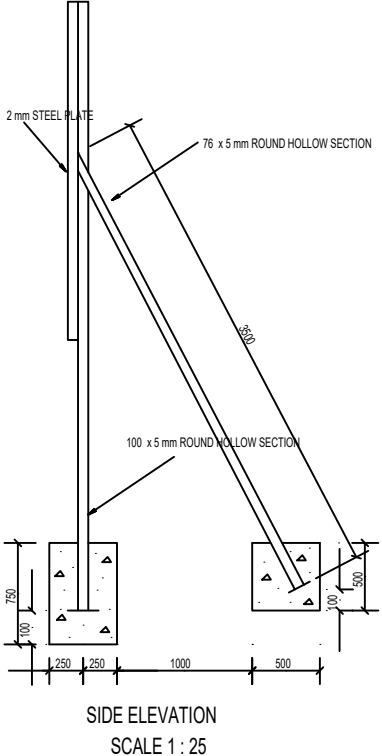
TABLE 1				
ERECTION DETAILS				
TYPE POST	UPRIGHT	STAY	D	B
TIMBER POST AND STAY	100mm	80mm	600mm	650mm
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TABLE 1				
ERECTION DETAILS				
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D SECTION STEEL POST	100mm x 5mm	76mm x 5mm	1000mm	1450mm

- RULES**
- Typeface to be used shall be helvetica medium.
 - Size of lettering and dimensions are indicated on the diagram and shall be strictly adhered to.
 - Height of the board depends on number of professional service displayed.
Note all professional services are to be shown.
 - Project name and owner shall be mayy-black lettering on semi matt smoke grey background.
BORDER shall be in middle blue.
 - Professional crests and company names shall be in black on white.
 - The board shall conform to the diagram subject to rule 4.

NOTE: Paint colours are based on plascon-evans.
White v10: Tequilla v10 ("Velvagio" polyurethane velvet enamel) black ref. 266, middle blue ref. 290 (acrylic road sign paints)

ALL EMBLEMS SHOULD BE IN COLOUR



DESIGNED BY:	MP	TENDER PLAN Full Signatures Client Consulting Engineer Consultant Drawing No.: DE55/NB/TD-01	APPROVED Client 20 / / Consulting Engineer 20 / /	NO.	REVISION DETAILS	REV NO.	DATE	REVISED BY	APPRVD BY	PROJECT STATUS
DRAWN BY:	TM			01	ISSUED FOR TENDER PURPOSES	00	08/2022			Information Drawing
CHECKED BY:	MP									Tender Drawing
ISSUED BY:	MP									Construction Drawing
										AS Built Drawing

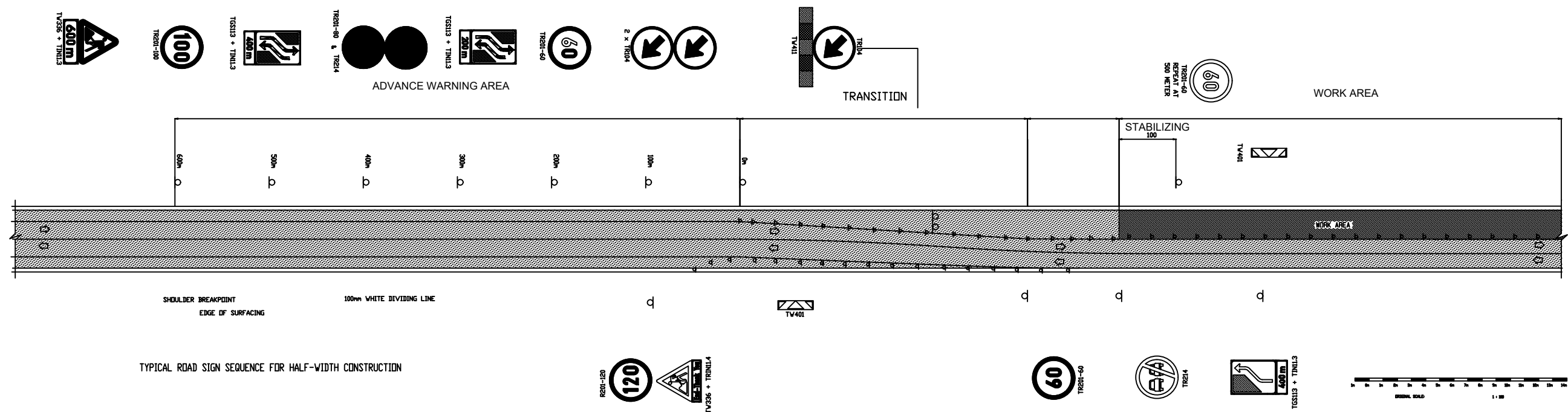
 ELIAS MOTSOALEDI LOCAL MUNICIPALITY P.O. BOX 48 GROBLERSDAL 0470 Tel: 013 262 3056/7/8/9 Fax: 013 262 2893		 DOLMEN ENGINEERS A VISION TO CLEAR SOLUTIONS DOLMEN CONSULTING ENGINEERS P.O. BOX 468 BENDOR PARK 0713 Tel: 015 295 4885 Fax: 015 295 8384		CONTRACT NUMBER: EMLM17/2023	SHEET 1 OF 7
				PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD	SCALE: AS SHOWN
				STANDARD AND TYPICAL DRAWINGS NAME BOARD	CLIENT DRAWING NO: EMLM17/2023/NB/TD-01
					REVISION 00

NOTE:

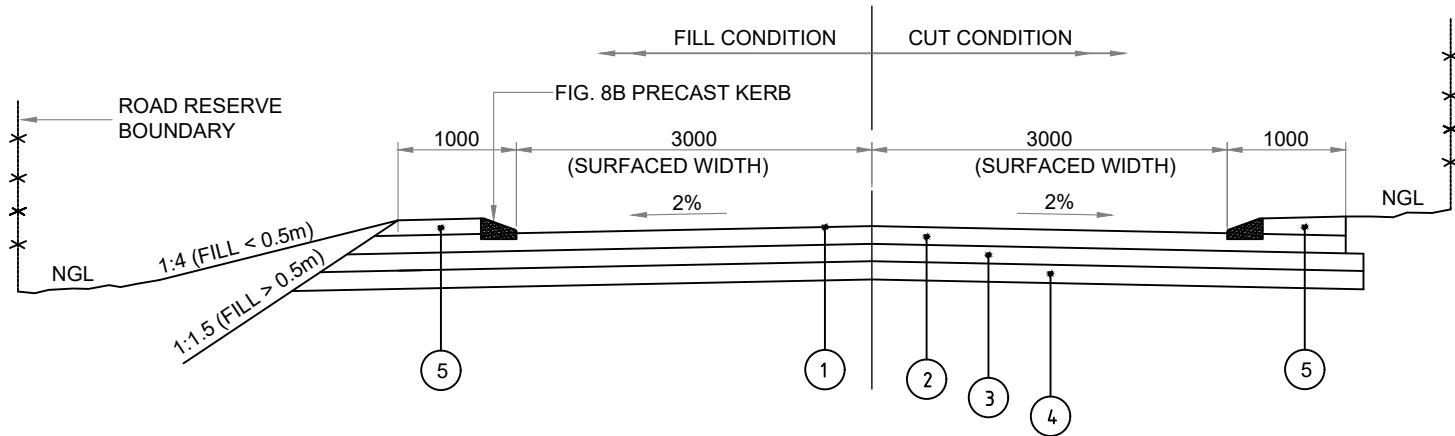
FOR DUAL CARRIAGEWAY ROADS, EACH CARRIAGEWAY MUST BE PROVIDED WITH A COMPLETE SET OF SIGNS AS SHOWN ABOVE ON BOTH THE LEFT-HAND SIDE OF THE CARRIAGEWAY AND IN THE MEDIUM. THE MAXIMUM PERMISSIBLE LENGTH FOR RESEALING / RESURFACING SHALL BE 4.0km.

NOTE : SPACING OF DELINEATORS / CONES

1. TRANSITION AREA : 10m C/C
2. STABILIZING AREA : 10m C/C FOR THE FIRST 50m, THEN 30m C/C ON STRAIGHT.
3. WORK AREA : 30m C/C
4. TERMINATION AREA : 10m C/C
5. TRAFFIC CONES SHALL ONLY BE USED IN THE WORK AREA WITH EVERY FIFTH POSITION TAKEN UP BY A DELINEATOR.



DESIGNED BY:	MP	TENDER PLAN Full Signatures Client Consulting Engineer Consultant Drawing No. -DESS/TM/TD-03	APPROVED Client Consulting Engineer	NO.	REVISION DETAILS	REV NO.	DATE	REVISED BY	APPRVD BY	PROJECT STATUS	
DRAWN BY:	TM			01	ISSUED FOR TENDER PURPOSES	00	08/2022			Information Drawing	☐
CHECKED BY:	MP									Tender Drawing	☒
										Construction Drawing	☐
ISSUED BY:	MP									AS Built Drawing	☐
 ELIAS MOTSOALEDI LOCAL MUNICIPALITY P.O. BOX 48 GROBLERSDAL 0470 Tel: 013 262 3056/7/8/9 Fax: 013 262 2893											
 DOLMEN CONSULTING ENGINEERS P.O. BOX 468 BENDOR PARK 0713 Tel: 015 295 4885 Fax: 015 295 8384											
CONTRACT NUMBER: EMLM17/2023											SHEET 3 OF 7
PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD											SCALE: AS SHOWN
STANDARD AND TYPICAL DRAWINGS TYPICAL ROAD SIGN SEQUENCE FOR HALF-WIDTH CONSTRUCTION											DRAWING NO: EMLM17/2023/TM/TD-03
											REVISION 00

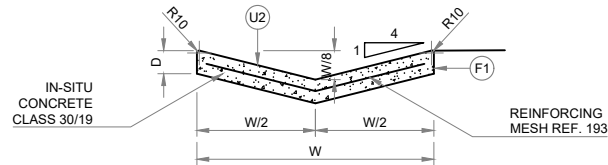


TYPICAL CROSS SECTION
SCALE 1:50

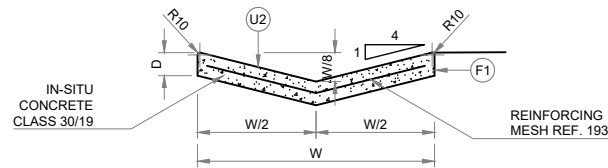
PAVEMENT LAYER DETAILS:

- SURFACING:** 30mm THICK CONTINUOUSLY GRADED ASPHALT SURFACING
- BASE:** 150mm STABILISED GRAVEL (C4) COMPACTED TO 97% MOD AASHTO WITH UCS>750KPa, GM>1.75 AND PI<6.
- SUB-BASE:** 150mm STABILISED GRAVEL (C4) COMPACTED TO 95% MOD AASHTO WITH UCS>500KPa, GM>1.75 AND PI<6.
- ROADBED: MOD** 150mm IN-SITU MATERIAL (G6) RIPPED AND COMPACTED TO 93% AASHTO WITH CBR > 25% AND PI < 12.
- SELECTED FILL:** 150mm NATURAL GRAVEL (G7) COMPACTED TO 93% MOD AASHTO WITH CBR > 15% AND PI < 12.

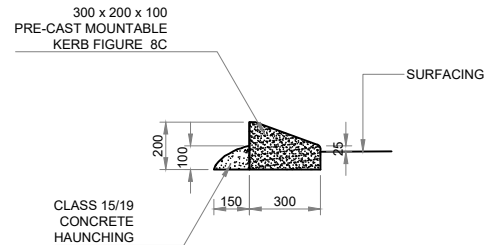
DIMENSIONS OF TYPE 'E' CONCRETE CHANNELS			
W	W/2	W/8	D
750	375	93.75	100
1000	500	125	100
1500	750	188	100
2000	1000	250	100



TYPE 'E' CONCRETE CHANNEL
SCALE 1:20



TYPE 'E' CONCRETE CHANNEL
SCALE 1:20



DETAILS OF FIG. 8C MOUNTABLE KERB
SCALE 1:20

NOTES

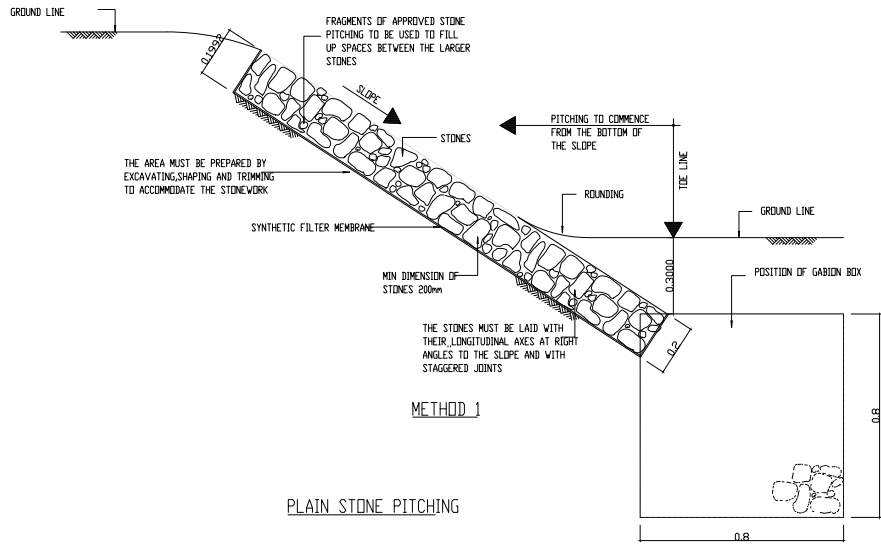
- KERBING, EDGE BEAMS AND CONCRETE CHANNELS TO BE PROVIDED WHERE SPECIFIED BY THE ENGINEER.
- ALL CAST IN-SITU CONCRETE TO BE CLASS 25/19 UNLESS OTHERWISE SPECIFIED.
- CONCRETE SUPPORT TO KERBING TO BE MIN. 250mm LONG ACROSS JOINTS ON STRAIGHT SECTIONS WHERE 1.0m LONG KERBS ARE USED AND CONTINUOUS ON CURVED SECTIONS WHERE 300mm LONG KERBS ARE USED.
- IN-SITU CHANNELS TO BE CAST IN 2m ALTERNATE SECTIONS WITH EXPANSION JOINT EVERY 5th PANEL (10m).
- ALL EXPOSED CORNERS TO BE ROUNDED TO A MINIMUM RADIUS OF 10mm.
- JOINTS SHALL BE 10mm WIDE AND FILLED WITH 1:4 CEMENT: MORTAR.
- THE TYPE OF SURFACE FINISH IS INDICATED AS F1 & U2:
F - FORMED SURFACES
U - UNFORMED SURFACES
- ALL EDGES OF SURFACING TO BE MECHANICALLY SAWN.

DESIGNED BY:	MP	TENDER PLAN Full Signatures _____ Client _____ Consulting Engineer Consultant Drawing No.:DE55/TC/TD-04	APPROVED _____ Client 20 / / _____ Consulting Engineer 20 / /	NO.	REVISION DETAILS	REV NO.	DATE	REVISED BY	APPRVD BY	PROJECT STATUS	
DRAWN BY:	TM			00	ISSUED FOR TENDER PURPOSES	00	08/2022			Information Drawing	○
CHECKED BY:	MP									Tender Drawing	●
ISSUED BY:	MP									Construction Drawing	○
										AS Built Drawing	○

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		PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD	SCALE: AS SHOWN
		STANDARD AND TYPICAL DRAWINGS TYPICAL CROSS SECTIONS,FIGURE 8C KERB AND CONCRETE CHANNEL	DRAWING NO: EMLM17/2023/TC/TD-04
			REVISION 00

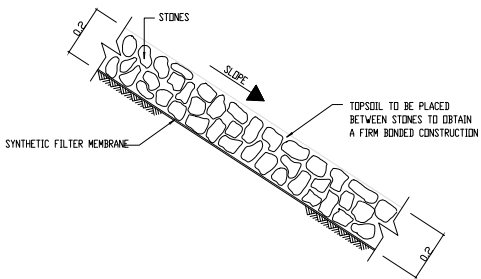
PITCHING AND GABIONS

STONE PITCHING



METHOD 1

PLAIN STONE PITCHING

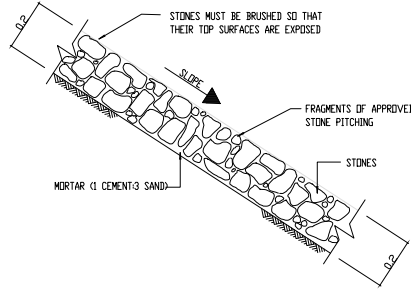


METHOD 2

NOTES:

THE TECHNIQUE AND REQUIREMENTS LAID DOWN IN METHOD 1 SHALL APPLY WITH THE FOLLOWING EXCEPTIONS:

1. NO SMALL STONES SHALL BE USED TO FILL THE SPACES BETWEEN THE LARGER STONES.
2. TOPSOIL SHALL BE INTRODUCED BETWEEN INDIVIDUAL STONES SIMULTANEOUSLY WITH PLACING OF STONES.
3. ROOTED GRASS OR GRASS TUFTS SHALL THEN BE PLACED IN THE TOPSOIL.

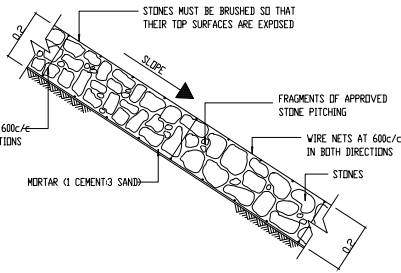


GROUTED STONE PITCHING

NOTES:

THE TECHNIQUE AND REQUIREMENTS LAID DOWN IN METHOD 1 SHALL APPLY WITH THE FOLLOWING EXCEPTION:

1. THE SPACES BETWEEN THE STONES SHALL BE FILLED WITH MORTAR.



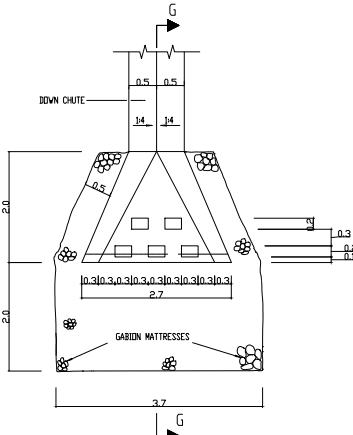
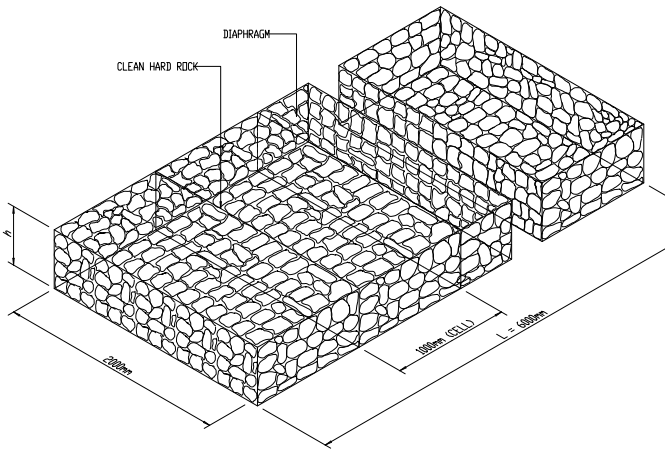
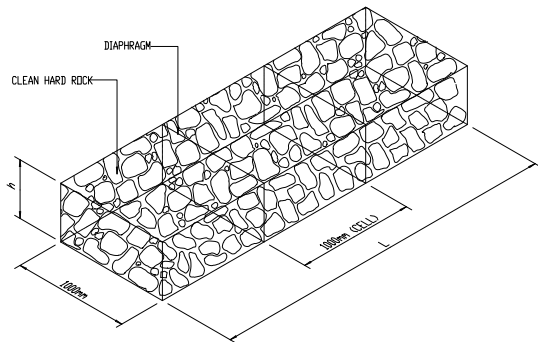
WIRE AND GROUTED STONE PITCHING

NOTES:

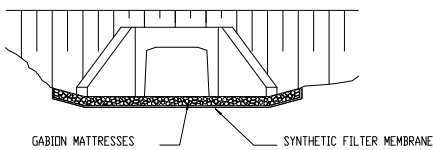
THE TECHNIQUE AND REQUIREMENTS LAID DOWN IN METHOD 1 SHALL APPLY WITH THE FOLLOWING EXCEPTIONS:

1. PITCHING IN ACCORDANCE WITH GROUTED STONE PITCHING.
2. CONSTRUCTION SHALL BE AS FOLLOWS:
 - a) PLACING OF BOTTOM WIRE NET.
 - b) ATTACHING OF WIRE TIES TO BOTTOM MESH.
 - c) PITCHING.
 - d) PLACING THE TOP WIRE NET AND FASTENING WIRE TIES.
 - e) GROUTING.

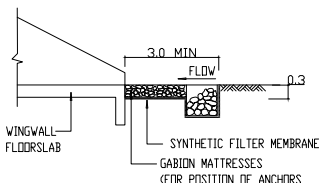
GABIONS



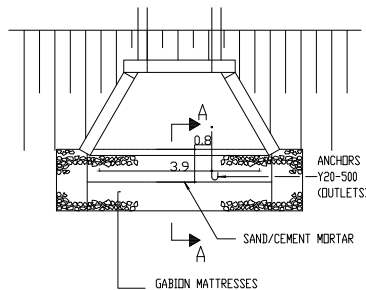
PLAN OF DOWN CHUTE AND ENERGY BREAKER



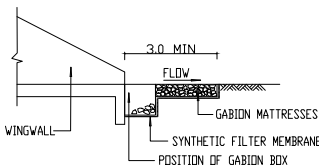
ELEVATION OF INLET/OUTLET



SECTION A-A (INLET)

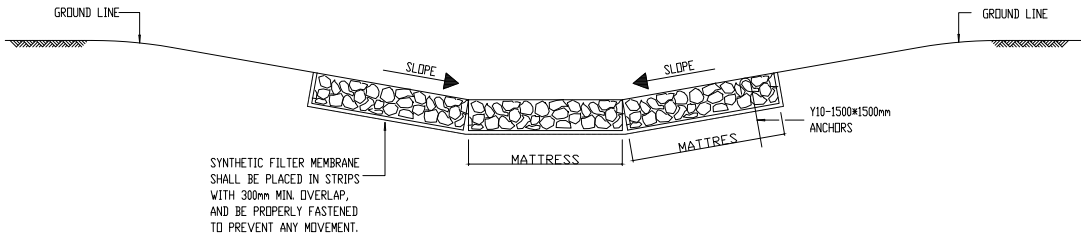


PLAN OF INLET/OUTLET



SECTION A-A (OUTLET)

DETAIL OF GABION MATTRESSES AND BOXES AT INLETS AND OUTLETS



SECTION OF MATTRESS IN CANAL

BOXES

STANDARD SIZES OF BOXES	
LENGTH	1000mm, 2000mm, 3000mm, 4000mm
WIDTH	1000mm
DEPTH	500mm, 1000mm
DIAPHRAGM SPACING	1000mm

DEPTH OF CAGES	ROCK SIZE (DIMENSIONS)	
	MIN. (mm)	MAX. (mm)
230	100	125
300	100	200
500	100	250
1000	100	300

MESH SIZE AND WIRE DIAMETER FOR CAGES		
DEPTH OF GABION AND OVER	MESH SIZE (mm)	WIRE DIA. (mm)
500mm	80 x 100	2,7
200mm TO 300mm	80 x 100	2,5

MATTRESSES

STANDARD SIZES	
LENGTH	6000mm
WIDTH	2000mm
DEPTH	170mm, 230mm, 300mm

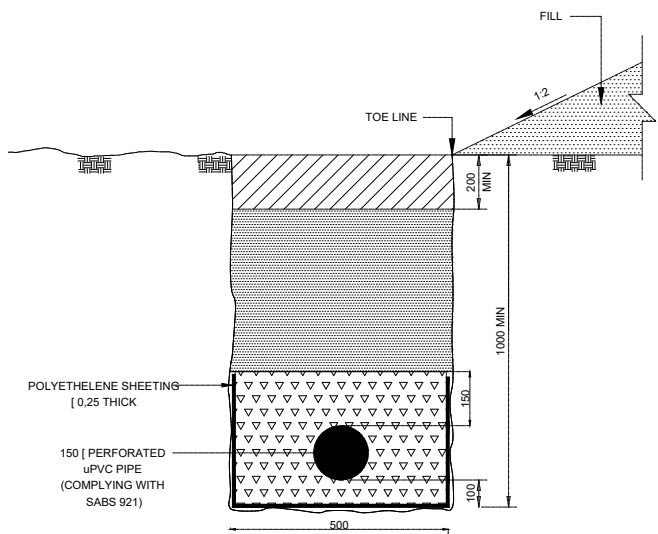
1.5m

Y10-1500*1500mm
Y20-500 (OUTLETS)

ANCHORS FOR GABION MATTRESSES

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DRAWN BY:	TM		For Client	01	ISSUED FOR TENDER PURPOSES	00	08/2022			For Information Purpose			PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD	SCALE : AS SHOWN
CHECKED BY:	MP		For Consulting Engineer							For Tender Purpose			STANDARD AND TYPICAL DRAWINGS STONE PITCHING AND GABION PROTECTION	DRAWING NO: EMLM17/2023/SP/TD-05
ISSUED BY:	MP		For Consulting Engineer							For Construction				REVISION 00

TYPICAL DETAILS OF SUBSURFACE DRAINS



FILL CONDITION
SUBSURFACE DRAIN

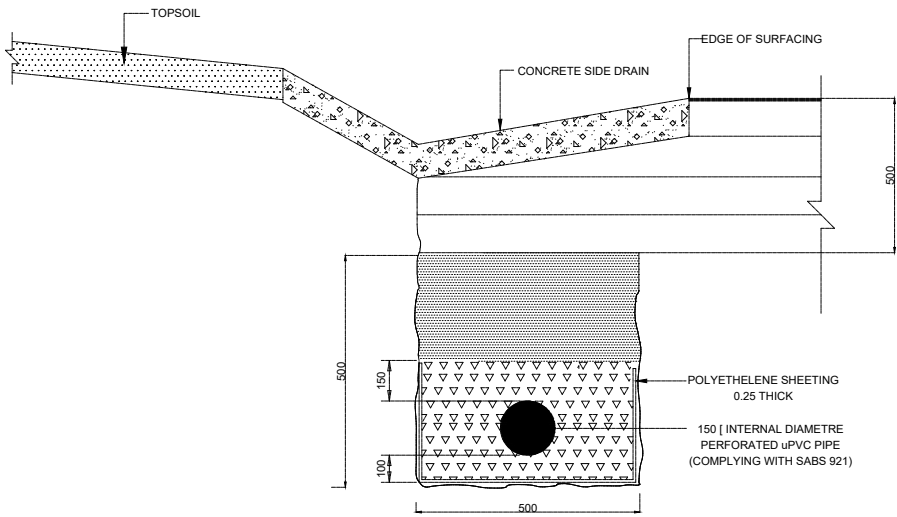
SCALE 1:10

LEGEND

- IMPERMEABLE BACKFILL
- NATURAL PERMEABLE SAND FROM EITHER APPROVED OR COMMERCIAL SOURCES ON SITE.
- GRADED CRUSHED STONE (FINE GRADE)
- GRADED CRUSHED STONE (COARSE GRADE)
- CONCRETE (CLASS 30/19)

NOTE:

IN THE CASE OF SUB-SURFACE DRAINS IN FINE PERMEABLE MATERIALS THE POLYETHYLENE SHEETING CAN BE REPLACED WITH BIDIM U24 APPROVED EQUIVALENT SYNTHETIC-FIBRE FILTER FABRIC. THE BIDIM OVERLAP ENCLOSE THE CRUSHED STONE AND OVERLAP BY 300mm.



DEEP CUT CONDITION
SUBSURFACE DRAIN

SCALE 1:10

GRADING REQUIREMENTS OF
CRUSHED STONE

CRUSHED STONE SHALL BE GRADED CRUSHED STONE, WHICH CONFORMS TO THE FOLLOWING REQUIREMENTS:

PERCENTAGE PASSING THROUGH A -

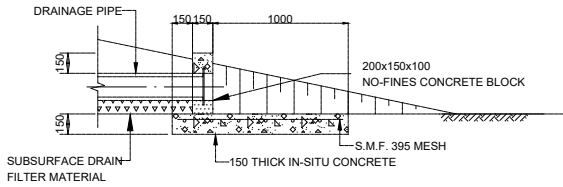
26.6mm SIEVE 100
13.2mm SIEVE 60-85

FINE GRADE STONE:
A MINIMUM OF 15% PASSING THROUGH A 3.35mm SIEVE.
A MAXIMUM OF 15% PASSING THROUGH A 1.18mm SIEVE.

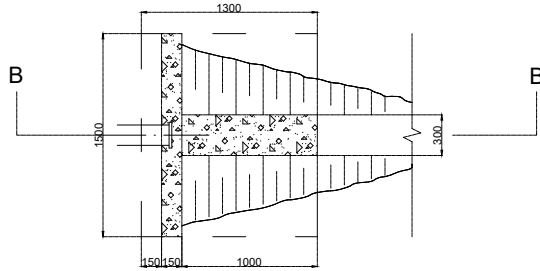
COARSE GRADE STONE:
A MINIMUM OF 15% PASSING THROUGH A 6.70mm SIEVE.
A MAXIMUM OF 15% PASSING THROUGH A 2.36mm SIEVE.

IN THE CASE OF ANY CRUSHED STONE NOT MORE THAN 5% OF THE MATERIAL SHALL PASS THROUGH THE 0.075mm SIEVE.

SUBSURFACE DRAIN DETAIL



SECTION B-B

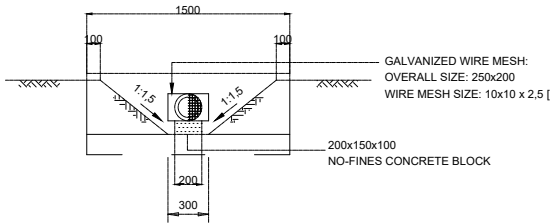


PLAN

SCALE 1:20

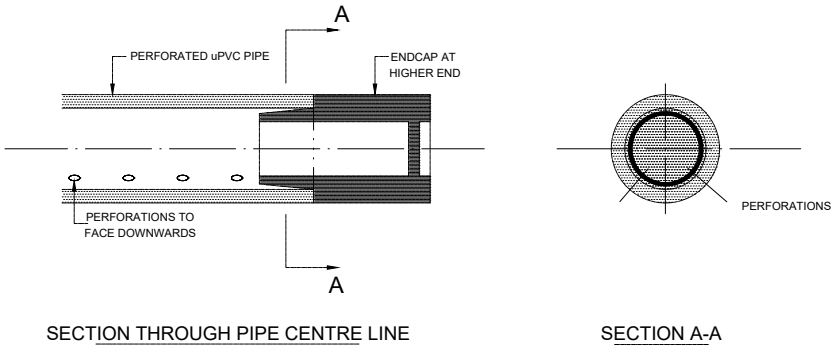
DETAIL OF OUTLET STRUCTURE

SCALE 1:20



FRONT ELEVATION

SCALE 1:20

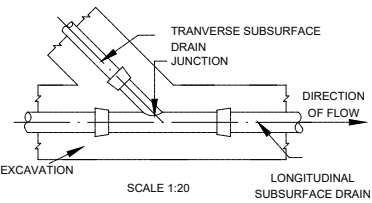


SECTION THROUGH PIPE CENTRE LINE

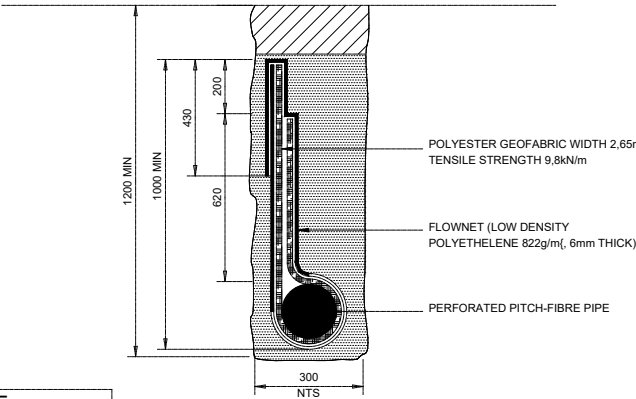
SECTION A-A

ENDCAP DETAIL

SCALE 1:5



JUNCTION DETAIL: TRANVERSE
DIAGONAL SUBSURFACE DRAINS

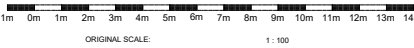


SANDY CONDITION
TYPE "C" SUBSURFACE DRAIN

SCALE 1:10

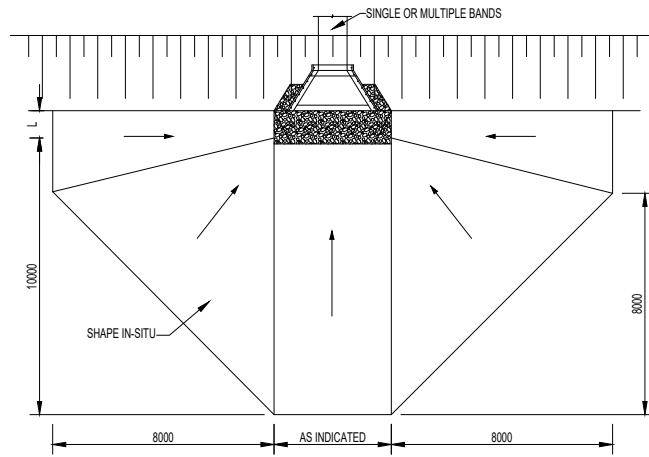
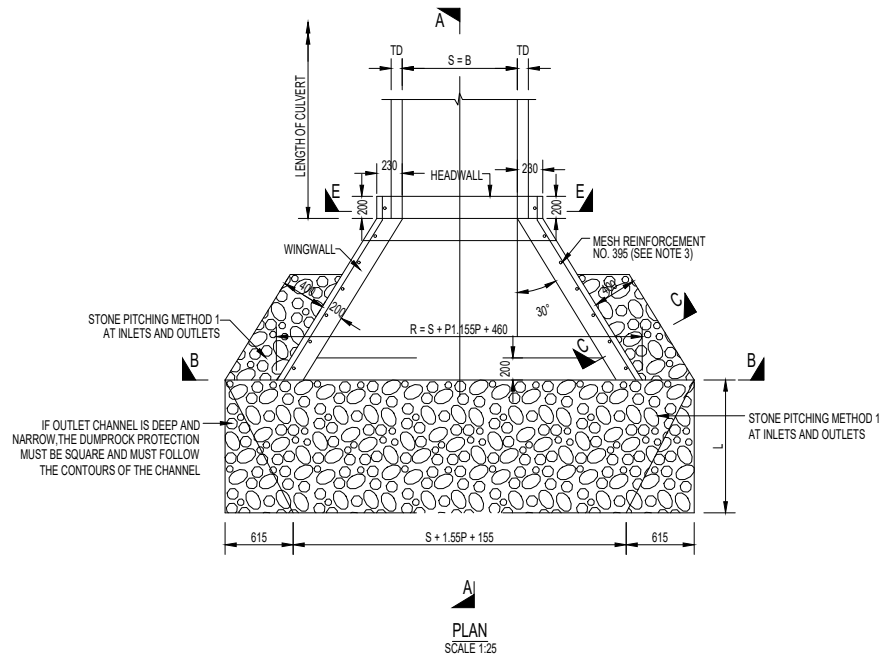
NOTE:

FLOWNET AND PITCH FIBRE ONLY TO BE INSTALLED AT THE ENGINEER'S REQUEST

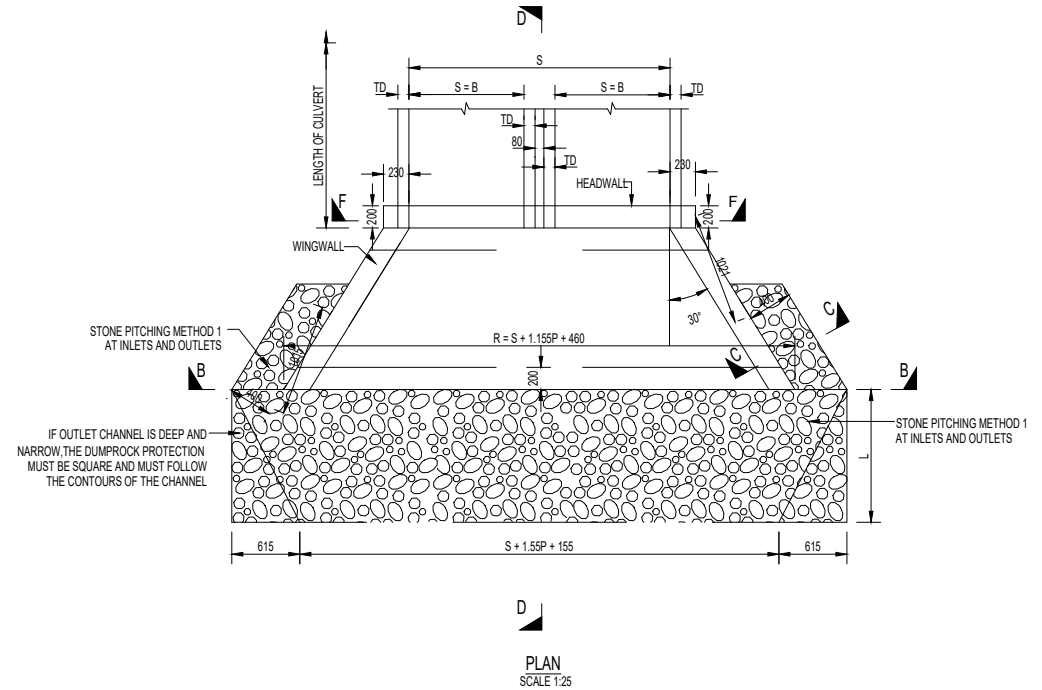


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DRAWN BY:	TM		For Client	01	ISSUED FOR TENDER PURPOSES	00	08/2022			For Information Purpose	☐			PROJECT NAME: UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD	SCALE : AS SHOWN
CHECKED BY:	MP		For Consulting Engineer							For Tender Purpose	☒			DRAWING NO: EMLM17/2023/SD/TD-06	
ISSUED BY:	MP		For Consulting Engineer							For Construction	☐			STANDARD AND TYPICAL DRAWINGS SUBSURFACE DRAINS	
										For Asbuilt	☐				REVISION 00

SINGLE PORTAL CULVERT INLET OR OUTLET TYPE 1

DROP INLET EARTHWORKS WHERE IN - SITU GROUND LEVEL > INLET LEVEL
SCALE 1:100

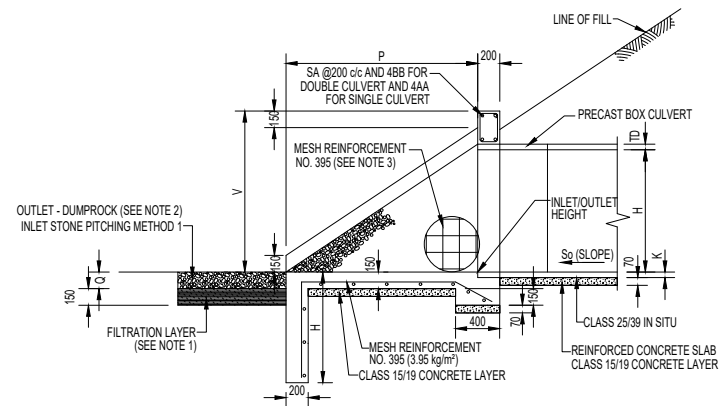
MULTIPLE PORTAL CULVERT INLET OR OUTLET TYPE 2



NOTES

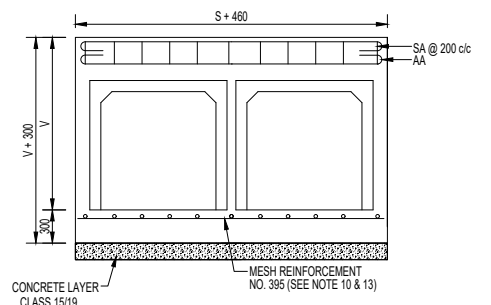
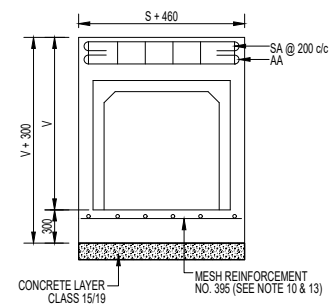
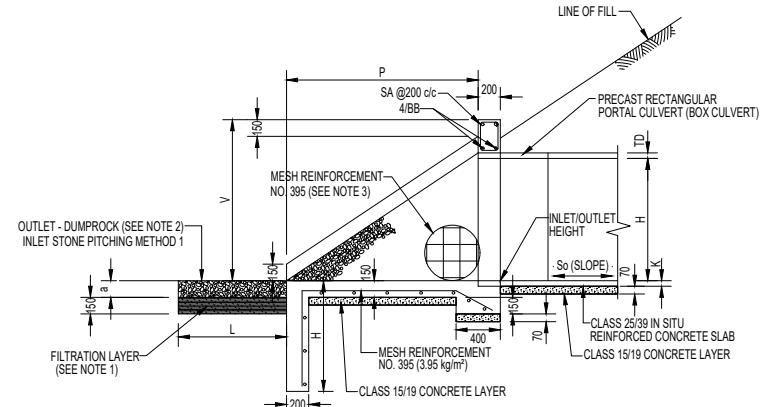
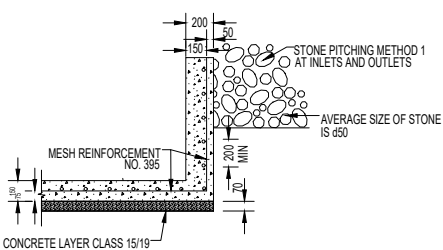
- FILTRATION LAYER CONSISTS OF CLASS 1 PERMEABLE MATERIAL AS AN ALTERNATIVE, AN APPROVED FILTRATION CLOTH MAY BE USED.
- PITCHING METHOD 1 CONSISTS OF A PROTECTIVE LAYER WITH DIMENSIONS AND SIDE SLOPES AS SHOWN. THE AVERAGE STONE SIZE IS 450 AND THE THICKNESS OF THE LAYER IS A DUMPROCK AT CULVERT OUTLETS CONSISTS OF TIGHTLY PACKED STONES WITH AN AVERAGE SIZE OF 450 AS AN ALTERNATIVE P.O.C COVERED CORERS MAY BE PRESCRIBED IN THAT CASE. DIMENSION 'a' BECOMES 1000 TO 3000mm AND THE AVERAGE SIZE OF STONE FILL IS UNCHANGED AND AS DESCRIBED IN 1 ABOVE. SEE DRAINAGE SCHEDULES FOR SIZES 'a' AND 'd50'.
- ALL IN - SITU CAST STRUCTURE ELEMENTS OF THE INLET OR OUTLET MUST BE REINFORCED WITH HIGH TENSILE MESH REINFORCING PLACED IN THE MIDDLE OF SUCH AN ELEMENT UNLESS OTHERWISE INDICATED WHERE THE MESH REINFORCEMENT HAS TO BE JOINED IT MUST OVERLAP BY A MINIMUM OF 200mm. THE MINIMUM COVER FOR ALL REINFORCEMENT IS 25mm (WITH 40mm IN THE FLOOR SLAB).
- ALL CONCRETE USED IN THE INLET OR OUTLET MUST BE CLASS 25/19 CONCRETE, UNLESS OTHERWISE INDICATED IN SITU CAST CONCRETE FLOORS FOR BOX CULVERTS ARE CLASS 25/38 CONCRETE.
- FOR THE TYPE IN - OR OUTLET USED SEE DRAINAGE SCHEDULES.
- FOR DIMENSIONS TO D.D.S AND THICKNESS OF CULVERT TOP SLAB SEE THE MANUFACTURER'S DETAIL DRAWINGS. FOR DIMENSIONS 'P' AND 'L' SEE DRAINAGE SCHEDULE.
- ALL REINFORCEMENT MUST COMPLY WITH SABS 820 HIGH YIELD STEEL. ALL HIGH TENSILE MESH MUST COMPLY WITH SABS 1024.
- PRECAST PIPE CULVERTS MUST COMPLY WITH SABS 677 AND PRECAST RECTANGULAR PORTAL CULVERTS WITH SABS 986.
- FOR INDIVIDUAL PERMISSIBLE WORK TENSIONS SEE DRAINAGE SCHEDULES.
- IF 'V' IS SMALLER THAN 1.2m, THE MESH REINFORCING IN THE FLOOR AND WINGWALLS CAN BE LEFT OUT IF APPROVED BY THE SITE ENGINEER.
- DIMENSION 'V' IS NORMALLY (0.6 * P + 300) BUT VARIES FOR SKIRM CULVERTS.
- PAVING ON THE INLET SIDE MUST BE UP TO DESIGN FLOOD LEVEL PLUS 200mm.
- DESIGN MASS OF FILL IS TAKEN AS 2050 kg/m³.
- JOINT FACTOR FOR TEST LOADING SABS 985 + 1.5.
- HIGH TENSILE (V) REINFORCING WORK TENSION = 2075MPa.
- PRECAST REINFORCED BOX CULVERTS MUST COMPLY WITH THE REQUIREMENTS OF SABS 986 AS WELL AS ADDITIONAL TEST LOADING AS SPECIFIED.
- FOR DIMENSIONS AND DETAIL OF IN SITU CONCRETE FLOORS SEE TYPICAL DRAWING MRS01/04/34. DIMENSIONS AND REINFORCING DETAIL FOR IN SITU CONCRETE FLOORS ARE ONLY VALID.
 - IF THE HEIGHT OF FILL ABOVE THE CULVERT IS LESS THAN THE FOLLOWING.

HEIGHT OF FILL	REINFORCEMENT
600 mm	5 m
750 mm	4 m
900 mm	3 m
1200 mm	2.5 m
1500 mm	2.0 m
1800 mm	1.5 m
2400 mm	1.0 m
3000 mm	0.5 m
 - WHERE THE TYPE OF MATERIAL UNDER THE FLOOR SLAB IS NOT ROCK.
- THE DIMENSIONS AS GIVEN IN THE TABLE WILL NOT NECESSARILY CORRESPOND WITH THOSE OF ALL THE UNITS WHICH ARE MARKED. IT MAY BE NECESSARY TO AMEND THE TABULATED DIMENSIONS.



BENDING SCHEDULE FOR WINGWALLS OF TYPE 1 AND 2				
STAFF MARK	DIAMETER	LENGTH	BEND	
AA	Y12	S + 600	AA OR BB	
BB	Y16	S + 600	S + 400	
SA	R10	400 + 2X	@ 200 c/c	

X = V - D - 50 - THICKNESS OF CULVERT WALL
(X AND 150 ARE OUTSIDE DIMENSIONS)
Y = HIGH TENSILE STEEL 410 MPa
R = MILD STEEL



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										For Asbuilt	☐

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CONTRACT NUMBER: EMLM17/2023

PROJECT NAME:
UPGRADING OF NYAKURANE INTERNAL ACCESS ROAD

STANDARD AND TYPICAL DRAWINGS
STORMWATER DETAIL

SHEET 7 OF 7

SCALE : AS SHOWN

DRAWING NO:

EMLM17/2023/SW/TD-07

REVISION 00