TSWAING LOCAL MUNICIPALITY

TENDER NO: SCM 005/2022/23

FRISGEWAAGT INTERNAL ROADS AND STORMWATER - PHASE 1 IN WARD 6

TENDER DOCUMENT

JULY 2022

ISSUED BY: **TSWAING LOCAL MUNICIPALITY**
P. O. BOX 24
DELAREYVILLE
2770
Contact: 053 948 0073

NAME OF TENDERER: ……..

TENDERED AMOUNT: ……..

CONTACT PERSON: ……..

CONTACT NUMBER: ……..

E-MAIL ADDRESS: ……..

CIDB CRS NUMBER: ……..

CSD MAAA NUMBER: ……..

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

PARTICULARS OF THE BIDDER						
NAME OF THE BIDDING OR TENDERING COMPANY						
POSTAL ADDRESS	POSTAL CODE					
STREET ADDRESS (PHYICAL ADDRESS)	POSTAL CODE					
E-MAIL ADDRESS						
TELEPHONE NUMBER (TELKOM LINE)						
CELLPHONE NUMBER						
ALTERNATIVE CELLPHONE NUMBER						
CIDB GRADING (5CE OR HIGHER)						
CIDB CRS NUMBER						
CENTRAL SUPPLIER DATABASE NUMBER OF THE BIDDING COMPANY						
CLOSING DATE	10 AUG 2022	CLOSING TIME	12H00am	CD/USB SUBMITTED	YES	NO

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

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TSWAING LOCAL MUNICIPALITY

INVITATION TO TENDER

Qualified and experienced Contractors are hereby invited to submit tenders/proposals for the following projects:

Tender No.	Description	Project Management Unit	Briefing Session	Supply Chain Management	CIBD Grading	Points
SCM 005/2022/23	Frisgewaagt Internal Roads and Stormwater, Phase 1	Ms. G. Moipolai 053 948 0073	N/A	Mr. T. Melken 053 948 1943	5CE or HIGHER	80/20
SCM 006/2022/23	Letsopa Internal Roads and Stormwater, Phase 6	Ms. G. Moipolai 053 948 0073	N/A	Mr. T. Melken 053 948 1943	4CEPE or HIGHER	80/20

EVALUATION CRITERIA: 70/100

Criteria	Points
Company Track Record	35
Personnel Credentials and Experience	35
Financial rating	10
Locality	15
Plant	10

EVALUATION OF TENDERS

The method for the evaluation of tenders is Method 4.

Points awarded for functionality — The Tenderer will be required to achieve a minimum score of **70 points** in the **technical evaluation** to be considered further in the evaluation process.

Functionality — For a Tenderer to qualify it is a requirement to score a minimum of **70 points** out of a maximum of **100 points** for **functionality**.

DOCUMENTS AVAILABILITY

Tender documents will be available on the e-tender portal from Friday; **22nd July 2022** to be downloaded for free and can be requested through e-mail from the Project Management Unit at **pmucontracts@aol.com** and **pmu@tswaing.gov.za** before **16H30pm** on **Friday; 05th August 2022**; **NO** requests will be responded to after the dateline and time.

TENDER CLOSING DATE AND TIME

Tenders will close on Wednesday, **10th August 2022** at **12H00 Midday**. Late tenders will not be accepted. There will be no tender opening.

TENDERS' SUBMISSION AND DELIVERY ADDRESS

Tender documents must be sealed in one envelope containing administrative and functionality evaluation documents and endorsed as follows:

Tender
"Number"
"Description"
"Closing date and time"
"Delivery address"
"Tenderer address on the back of the envelope"

Tender and supporting documents in a sealed envelope must be placed in a tender box situated at:

Physical Address
Tswaing Local Municipality Main Building (Main Entrance)
Corner General Delareyville and Government Streets
DELAREYVILLE
2770

Tenders and supporting documents submitted by post must reach the Supply Chain Management in time for them to be placed in a tender box before the closing time and date.

Postal Address
The Supply Chain Manager
Tswaing Local Municipality
P. O. Box 24
DELAREYVILLE
2770

TENDER RESPONSIVENESS

- Municipal tender document (original, fully completed, signed and witnessed where required).
- CSD summary report of less than 30 days at closing.
- Compliant tax status as at closing date.
- Joint Venture Agreement signed by both partners if tendering as a Joint Venture.
- Original certified copies of IDs of company directors.
- Proof of company registration documents.
- Proof of relevant required CIDB registration or grading or proof of upgrade application from CIDB.
- CD or USB included (empty CD or USB will render tender submission nonresponsive).
- **Electronic Priced Bill of Quantities saved on USB or CD as separate document.**

CONDITIONS

- The Council will not be responsible for tenders not received or received late by mail.
- Tenders will remain valid for ninety (90) days.
- Tenderers will also be required to show compliance with B-BBEE and Preferential Procurement Policy.
- An updated record of payment of rates, taxes and services to the relevant Municipality must be attached, failure to do so will invalidate the bid submitted unless proved to be in a Tribal land or a Lease Agreement is attached.

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

- No tenders will be considered form any person/s in the service of the State as defined in Regulation 1 of the Local Government: Municipal Supply Chain Regulation.
- All tenders must be submitted on the official forms provided, and
- The successful Tenderer will be required to fill and sign a written Contract Form (MBD 7) with a Service Level Agreement (SLA).

ENQUIRIES

- For technical enquiries, contact Ms. G. Moipolai at **pmucontracts@aol.com** with copy to **pmu@tswaing.gov.za**.
- For tendering procedures, contact Mr. T. Melken on **scm@tswaing.gov.za**.
- Only queries and questions received via e-mail shall be responded to.
- Telephonic queries and questions will not be accepted and will not be responded to.
- Queries and questions received after **Friday; 05th August 2022** will not be responded to.

(Duly signed)
Mr. IR. Jonas
Municipal Manager

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement (May 2010). (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of Tenderers as an Annexure to this Tender Data.

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

Clause No.	
F.1.1	**The Name and Address of the Employer is:** Tswaing Local Municipality Corner General Delarey and Government Streets P O Box 24 **Delareyville** 2770
F.1.2	**The tender document's contents are as follows:** **Part T1 : Tendering Procedures** T1.1 Tender Notice and invitation to tender (WHITE) T1.2 Tender Data (PINK) **Part T2: Returnable Documents** T2.1 List of Returnable documents (YELLOW) T2.2 Returnable schedules (YELLOW) **THE CONTRACT** **Part C1: Agreements and Contract Data** C1.1 Form of Offer and Acceptance (YELLOW) C1.2 Contract Data (YELLOW) C1.3 Form of Guarantee (YELLOW) **Part C2: Pricing Data** C2.1 Pricing Instructions (YELLOW) C2.2 Bill of Quantities (YELLOW) **Part C3: Scope of Work** C3 Scope of Work (BLUE) **Part C4: Site Information** C4 Site Information (GREEN) **Part C5:Additional Relevant Documents** (WHITE) **Part C6: Tender Drawings (WHITE)**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F1.3	**Interpretation** The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these tender conditions.	
F1.3.2	***Replace the contents of the clause with the following*:** The Standard Conditions of Tender, the Tender Data, List of Returnable Documents and Returnable Schedules which are required for the tender evaluation purposes, shall form part of the Contract arising from the invitation to tender.	
F.1.4	**The Employer's Representative is:**	Ms. Gomolemo Moipolai **Project Management Unit Manager** Tel: 053 948 0073 Email: pmucontracts@aol.com pmu@tswaing.gov.za
	Attention is drawn to the fact that verbal communication given by the Employer's representative prior to the close of tenders will not be regarded as binding on the employer. Only information issued formally by the Employer in writing to the Tenderers, under the signature of the Accounting Officer or his nominee will be regarded as amending the tender documents. Tender offer communicated on paper shall be submitted as an original. In the event that no correspondence or communication is received from the Tswaing Local Municipality (TLM) within Ninety (90) days after the stipulated closing date and time of the tender, the tender proposal will be deemed to be unsuccessful.	
F.1.5.1	**Reject or Accept** The Employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The Employer shall not accept or incur any liability to a Tenderer for such a cancellation and rejection, but will give written reasons for such action upon written request to do so from the Tenderers.	
F.2.1	**Eligibility** Only those Tenderers who satisfy the following criteria are eligible to submit tenders:	
	Those Tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions with application or submission proof (to be confirmed with CIDB) of registration attached, in a Contractor Grading Designation equal to or higher than a Contractor Grading Designation determined in accordance with the sum tendered for a CE class of construction work, are eligible to submit tenders. **<u>Joint ventures are Eligible to Submit Tenders Provided that:</u>** 1. Every member of the joint venture is registered with the CIDB; 2. The lead partner has a Contractor Grading Designation in the 5CEPE. 3. The combined Contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a Contractor Grading Designation determined in accordance with the sum tendered for a 5CEPE or HIGHER class of construction work. 4. Prospective Bidder must comply with Circular 81 of MFMA (Registration and Compliance with the CSD). 5. Failure to submit a signed (By all members of each company) Joint Venture Agreement for Bidders intending to bid as Joint Venture Partners and any form of MISREPRESENTATION of facts of the companies, Tenderer will be disqualified. The agreement must declare the following information; Bank account to be used, contribution, allocation, profits sharing etc.	

	Tenderers faced with the above scenario and who fail to meet the combined designation grading will not be considered for the tender. 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.
F.2.2	**Compensation for Tendering** Accept that the Employer will not compensate the Tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer satisfy requirements.
F.2.3	**Check Documents** Check the tender documents on receipt for completeness and notify the Employer of any discrepancy or omission.
F.2.4	**Confidentiality and Copyright** Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the Employer only for the purpose of preparing and submitting a tender offer in response to the invitation.
F.2.5	**Reference Documents** Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.
F2.6	**Acknowledge Addenda** Acknowledge receipt of addenda to the tender documents, which the Employer may issue, and if necessary, apply for an extension of the closing time stated in the tender data, in order to take the addenda into account.
F.2.7	**Compulsory Clarification Meeting** No clarification meeting or session. Should there be any addendum it will be published on either/or on the following websites E-Tender, CIDB and Municipal website.
F.2.8	**Seek Clarification** Questions or queries must be submitted to **pmucontracts@aol.com / pmu@tswaing.gov.za** before **05th August 2022**. However, Tswaing Local Municipality shall not be liable nor assume liability for failure to respond to any questions and / or queries raised by the Tenderer.
F.2.10	**Pricing the Tender** State the rates and prices in Rand.
F.2.10.5	**Pricing and Tender Offer** ***Add the following to the clause:*** A digital copy of the Bill of Quantities can be requested and obtained from **Ms. Gomolemo Moipolai** on **pmucotracts@aol.com / pmu@tswaing.gov.za** before **05th August 2022**.
F.2.11	**Alterations to Documents** Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the Employer. ***Add the following to the clause:*** To correct errors made, draw a line through the incorrect entry and write the correct entry above in black ink and place the full signatures of the authorized signatories next to the correct entry.

F.2.12	**Alternative Tender Offers** If a Tenderer wishes to submit an alternative tender offer, the only criteria permitted for such alternative tender offer is that it demonstrably satisfies the Employer's standards and requirements, the details of which may be obtained from the Employer. Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions. Pricing Data must reflect all assumptions in the development of the pricing proposal. Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the contract for the Tenderer, in the event that the alternative is accepted, to accept full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements. The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed. Failure to properly comply with this clause, thereby preventing the Employer and/or the Engineer to properly assess the full implications of the alternative tender, is likely to disqualify the alternative offered from further consideration. No submission by the Contractor after award for additional payment or time for completion of Works relating to the alternative offer will be considered, the tendered rates submitted shall be considered to reflect the full and final cost implications of the alternative offer.
F.2.13	**Submitting a Tender Offer** No late, faxed, emailed or other form of tender will be accepted. Completed tenders with attached documents, if any, must be submitted in Black ink in sealed envelopes. Accept that a tender submitted to the Employer cannot be withdrawn or substituted. No substitute tenders will be considered. All tenders received by the Tswaing Local Municipality will remain in the Municipality's possession until after the stipulated closing date and time. ***Add the following to the clause:*** No claim will be entertained for faults in the tender price resulting from any discrepancies, omissions or indistinct figures.
F.2.13.2	***Replace the contents of the clause with the following:*** Return all volumes of the tender document to Employer after completion of relevant sections of each volume in their entirety by writing in black ink. All volumes are to be left intact in its original format and no pages shall be removed or rearranged.
F.2.13.3	***Add the following to clause:*** Parts of each tender offer communicated on paper shall be submitted as an original.
F.2.13.4	***Add the following to clause:*** Only authorized signatories may sign the original Tender Offer where required in terms of 2.14.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.2.13.5	**Tender Delivery Address** The Employer's address for delivery of tender offers and identification details to be reflected on each tender offer package are: **Location of Tender Box: Tswaing Local Municipality Main Office Entrance Foyer**, CNR General Delarey and Government Streets, **Delareyville**, 2770 **Physical Address:** **Tswaing Local Municipality Main Office Building**, CNR General Delarey and Government Streets, **Delareyville**, 2770 **Postal Address:** P. O. Box 24, **Delareyville**, 2770 **Tender Identification Details** **Tender Number:** SCM005/2022/23 **Tender Description:** Appointment of a Contractor for the Construction of Frisgewaagt Internal Roads and Stormwater Phase 1 in Ward 6 **NB! The closing date and time must be reflected on the envelope. The name and address of the Tenderer must be reflected on the back of the envelope.**
F2.13.19	***Add the following to the clause:*** Accept that all conditions, which are printed or written upon any stationary used by the Tenderer for the purpose of or in connection with the submission of a tender offer for this Contract, which are in conflict with the conditions laid down in this document shall be waived, renounced and abandoned.
F.2.14	**Information and Data to be Completed in all Respects** Accept that tender offers, which do not provide all the data or information requested completely and, in the form, required, may be regarded by the Employer as Non-Responsive. Responsive tenders are **ONLY** those tenders with all documents and pages, contained herein, that have been signed by the responsible person duly authorized to sign all documents indicated on the returnable document **"FORM T2.2.16 Authority of Signatory."** ***Add the following clause:*** The Tenderer is required to enter information in the following sections of the document. Section T2.2..... : Returnable Schedules Section Section C1.1 ..... : Form of Offer and Acceptance Section Section C1.2 ..... : Contract Data (Part 2) Section C2.2 ..... : Bill of Quantities **The above sections shall be signed by the Tenderer and witnesses where required.** Individual pages of the **FORM OF ACCEPTANCE** should only be completed, signed and initialed by the successful Tenderer and witnessed after acceptance by the Employer of the Tender Offer; all other pages must be signed, initialed and witnessed. The Tenderer shall complete and sign the **FORM OF OFFER** prior to the submission of a Tender Offer. The Schedule of Deviations (if applicable) shall be signed by the successful Tenderer after acceptance by the Employer of the Tender Offer.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

	Accept that the Employer shall in the evaluation of tender offers take due account of the Tenderer's past performance in the execution of similar Engineering works of comparable magnitude, and the degree to which he possesses the necessary technical, financial and other resources to enable him to complete the Works successfully within the contract period. Satisfy the Employer and the Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, and furnish details in section T2.2.2 of contracts of a similar nature and magnitude which they have successfully executed in the past. Accept that the Employer is restricted in accordance with clause 4.(4) of the Construction Regulations 2003, to only appoint a Contractor whom he is satisfied has the necessary competencies and resources to carry out the work safely. Accept that submitting inferior and inadequate information relating to health and safety shall be regarded as justifiable and compelling reasons not to accept the Tender Offer of the Tenderer scoring the highest number of tender evaluation points.
F.2.15.1	**Tender Closing Date and Time** The closing time and date for submission of tender offers is as stated in the Tender Notice and Invitation to Tender as follows: **Date:** Wednesday, 10th August 2022 **Time:** 12h00 Midday
F.2.15.2	**Non-Acceptable Submission** Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
F.2.16.	**Tender Offer Validity** The Tender offers will remain valid for a period of Ninety (90) Days without an option of withdrawal by the Tenderer.
F.2.16.1	***Add the following to the clause:*** If the tender validity expires on a Saturday, Sunday or public holiday, the tender shall remain valid and open for acceptance until the closure of business on the following working day.
F.2.18	**Provide Other Material** The Tenderer shall, when requested by the Employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements. ***Add the following to the clause:*** Accept that if requested, the Tenderer shall within 14 days of the date upon which he is requested to do so, submit a full report from his banker as to his financial standing. The Employer may, in its discretion, and subject to the provisions of Section 4(1)(d) of the State Tender Board Act 86 of 1968, condone any failure to comply with the foregoing condition. **1. Proposed Key Personnel** The Tenderer shall indicate I. All staff positions/tittles proposed for the team and the relationship between them. II. Names of key professional people, and III. Parent firm abbreviation and in brackets (for JVs) after each professional person

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

	The text of this section shall include the concise statement of the duties of each individual of the organisation and the suitability of his/her qualifications for the assignment. In this part of the tender, the Tenderer shall also supply Curriculum Vitae **[CV's** of **NOT MORETHAN FOUR (4) PAGES]** for the Professional Staff named on the organizational chart and working on full time basis for the Tenderer. The CV should follow the normal Professional Format as used by Professional Service Providers. Each CV should give at least the following: ▪ Name, Age, parent firm, position in the parent firm and within the organization of this assignment. ▪ Educational qualifications. ▪ Relevant experience (actual duties performed, involvement and responsibility), including locations, dates and durations of assignments, starting with the latest. ▪ Summary of experience. ▪ Language proficiency, and ▪ References (company name, individual name, position held, contact details). The CV must include a statement dated and signed by the individual, indicating his agreement to work on the assignment. Much importance will be placed on the experience of the staff proposed. The Tender must ensure that, if selected, the nominated staff will be assigned as proposed. Failure to do so may result in the annulment of any acceptance of the Tenders' proposal and/ or Agreement entered into by the Client for the execution of the services. **2. Joint Venture arrangements should be in accordance with the CIDB Guidelines (D2 or latest version),** Joint Venture must be constituted by means of a comprehensive and fair, written agreement between the members, which sets out their obligations, rights, risks and rewards. Joint Venture members should share at least the following aspects of the Joint Venture activities in a meaningful and equitable manner: 1. Control 2. Management 3. Operations 4. Risk 5. Profit and Loss The Tenderer shall list in the appropriate Forms the appropriate related projects undertaken by the member firms of the Tenderer within the last five (5) years. Provide short precise report on 3 completed projects with Client Specific Evidential Information (or Consultant Specific **ONLY** in the absence of Client Specific Formats). Please fill in the exact required information, failing which your bid will be rendered non-responsive. The Tenderer shall provide documentation of company experience of each member of the Consortium/Joint Venture in construction of roads and storm water related projects.
F.2.20	***Add the following to the clause:*** Accept that the Employer, reserves the right to approach the Tenderer's Banker or Guarantor(s) as indicated in the tender document, or the Bankers of each of the individual members of any Joint Venture that is constituted for purposes of ascertaining the financial strength of the Tenderer or of the individual member of such venture; and affirmation of the letter of intent referred to below.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

	The tenderer is required to submit with his tender a letter of intent from an approved financial institution undertaking to provide the Construction Guarantee in the format included in Part C1.3 of this procurement document; and such guarantee will be put in place upon appointment.
F.2.22	**Return of Other Documents** Return all retained tender documents prior to the closing time for the submission of Tender Offers.
F.2.23	**Certificates** The Tenderer is required to submit with this tender the following: 1. In case of Joint Venture – the Joint Venture Agreement. 2. Tax Compliance Status PIN Certificate issued by the South African Revenue Services. 3. Certified copy of the Company/Partnership/Close Corporation Registration Documents; in case of Joint Venture, both Partners must submit Registration Documents. Certificate of Contractor (CIDB) Registration or Proof of Upgrading issued by the Construction Industry Development Board. 4. Bank Rating Letter, only original letters will be accepted, **NO COPIES**. 5. Recent copy of the CSD summary report less than 30 days at closing of tender. 6. Certificate of Good Standing with Compensation Commissioner or FEMA. 7. Documents and Schedules listed in Part T2 Non-Submission of the above documents will result in automatic disqualification of the tender.
F.3.2.	**Issue Addenda** If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who drew documents.
F.3.3.	**Return Late Tender Offers** Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.
F.3.4	**Opening of Tender Submissions** Tenders will **NOT** be opened in public, but will be opened immediately after the closing time to confirm check compliance. Submission list compliance will be emailed to tenderers on request within the expiry of the validity period.
F.3.5	**Two Envelope System** A two-envelope procedure will not be followed.
F.3.6	**Non-disclosure** After the opening of the tender offers, no information relating to the clarification, determination of responsiveness, evaluation and comparison of tender offers and recommendations concerning the award of the tender shall be disclosed to any other Tenderer or persons not concerned with such process until the award of the Tender has been announced by the Tswaing Local Municipality.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.3.7.	**Grounds for Rejection and Disqualification** Determine whether there has been any effort by a tenderer to influence the processing of tender offers and instantly disqualify a tenderer (and his tender offer) if it is established that he engaged in corrupt or fraudulent practices.
F.3.8.	**Test for Responsiveness**
F.3.8.1.	Determine, after opening and before detailed evaluation, whether each tender offer properly received: a) Complies with the requirements of these Conditions of Tender, b) Has been properly and fully completed and signed, and c) Is responsive to the other requirements of the tender documents.
F.3.8.2.	A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would: a) Detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work, b) Significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or c) Affect the competitive position of either tenderer presenting responsive tenders, if it were to be rectified. d) Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.
F.3.9.	**Arithmetical Errors, Omissions and Discrepancies**
F.3.9.1.	Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.
F.3.9.2.	Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with F.3.11 for: a) The gross misplacement of the decimal point in any unit rate. b) Omissions made in completing the pricing schedule or bills of quantities; or c) Arithmetic errors in line-item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or ii) the summation of the prices.
F.3.9.3.	Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.
F.3.9.4.	Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows: a) If bills of quantities or pricing schedules apply and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the line-item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line-item total as quoted shall govern, and the unit rate shall be corrected.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

F.3.10. **Clarification of a Tender Offer**
Obtain clarification from a tenderer on any matter that could give rise to ambiguity in a contract arising from the tender offer.

F.3.11 **Evaluation of Tender offers**
Tenderers notice is drawn to the fact that the evaluation, adjudication and awarding of this tender will be in terms of the Supply Chain Management Policy of the Tswaing Local Municipality and the Preferential Procurement Regulations of 2017.

The procedure for the evaluation of responsive tenders is Method 4 (financial offer made, preference claimed if any, and the quality offered - **functionality, 80/20 Preferential Point System**).

Add the following to the clause:

Points Awarded for Technical Evaluation
The tenderer will be required to achieve a minimum score of 70 points in the technical evaluation to be considered further in the evaluation process for functionality.

FUNCTIONALITY TABLE

ITEM	CRITERIA	WEIGHT	VALUE	SCORE
1	**Company Experience** – (Attach appointment letters with corresponding completion certificates on Client's letter head. Should the bidder be appointed through subcontracting, the main Contractor's appointment, completion certificate and appointment letter of the sub-contracting and completion certificate should be attached). Completed in the past five years (2017-2022).	**35**		
	R 1 – R3 million (value = 01)	*25*		
	R 3 – R6 million projects (value = 03)	*30*		
	R 6 million and above (value = 05)	*35*		
2	Key Personnel Experience - **Contracts Manager** (Detailed CV, not more than **4 pages**, with Relevant experience on Roads and Storm Water Projects with traceable references with a minimum qualification of BTech/Degree in Civil Engineering which is SAQA accredited.	**15**		
	1-5 years (value = 01)	*5*		
	6-10 years (value = 03)	*10*		
	11 years and above (value = 05)	*15*		

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

ITEM	CRITERIA	WEIGHT	VALUE	SCORE
3	Key Personnel Experience - **Site Agent** (Detailed CV with Relevant experience on Roads and Storm Water Projects with traceable references) Minimum National. Diploma qualification in Civil Engineering which is SAQA accredited.	**10**		
	1-5 years (value = 01)	*6*		
	6- 10 years (value = 03)	*8*		
	11 years and above (value = 05)	*10*		
4	Key Personnel Experience - **Safety Officer** [Experience as a Safety Officer in Roads and Storm water projects. With a minimum Qualification N. Dip or Certified Safety officer] Minimum National Diploma or Certified Safety officer or SAMTRAC which is SAQA accredited.	**10**		
	1-5 years (value = 01)	*6*		
	6- 10 years (value = 03)	*8*		
	11 years and above (value = 05)	*10*		
5	**Bank Rating** (Attach original confirmation letter from the bank, JV both Companies must attach original confirmation letters)	**10**		
	C = (value = 01)	*6*		
	B = (value = 03)	*8*		
	A = (value = 05)	*10*		
6	**Locality of Office** (Attach rates and taxes/lease agreement of the Company or a Tribal Authority Confirmation on a Letter Head or Original Stamped. **Statement of Account from the Estates Body Corporate / Metering Services MAY NOT BE ATTACHED)**	**15**		
	Within the Tswaing Local Municipality Jurisdiction area (value = 5)	*15*		
	Within the Ngaka Modiri Molema District Municipality (value = 3)	*10*		
	Within the North West Province (value = 1)	*5*		
7	**Available Plant** (Attach Proof of Registration or a Letter of Intent) ▪ 1 x TLB ▪ 1 x Excavator ▪ 2 x Tipper Trucks ▪ 1 x 12 000L Water Tanker ▪ 1 x Vibratory Roller	**5**		
	4 – 5 items Available (value = 5)	*5*		
	3 - 4 items **NOT** Available (value = 3)	*3*		
	1 - 2 items **NOT** Available (value = 1)	*1*		
	TOTAL	**100**		

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

NB! For item 2, 3 and 45 on the functionality, please attach an organogram indicating the positions and qualifications of personnel.

- Value: 1 = Poor;
- Value: 3 = Good;
- Value: 5 = Excellent

Weighting				
35 Points	**15 Points**	**10 Points**	**5 Points**	**Values Ranging**
30 – 35 = 5	10 – 15 = 5	8 – 10 = 5	4 – 5 = 5	5 – Excellent
25 – 30 = 3	5 – 10 = 3	6 – 8 = 3	3 – 4 = 3	3 – Good
1 – 25 = 1	1 – 5 = 1	1 – 6 = 1	1 – 2 = 1	1 – Poor

$\mathbf{P_s} = \mathbf{S_o}/\mathbf{M_s} \times 100$

Where $\mathbf{P_s}$ is the percentage scored for functionality by the tender.
$\mathbf{S_o}$ is the total score of the tender.
$\mathbf{M_s}$ is the maximum possible score.

Minimum score of **70%** for functionality should be obtained for the bidder to be further evaluated.

Add the following to the clause:

The Tenderer is to note that the following **Additional Relevant Documents** will form part of this contract:

(i) Tswaing Local Municipality Supply Chain Management Policy,
(ii) The Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017 including the following:
(iii) Tswaing Local Municipality Health and Safety Specifications.

Add the following to the clause:

The Preference Points System assigns a score to each tender price and on the tenderer's B-BBEE status. These scores are combined to determine an overall score for tender. The tender with the highest score will be considered for acceptance.

The weighting of tender Price and Preference for the tender will be done by way of a point system:

In the case of acquisition of services, works or goods up to a Rand Value equal to or above R 30 000 and up to R 50 million:

- 80 points are assigned to Price; and
- 20 points are assigned to Preference.

The total points for Price and Preference in each case above must add up to 100 points. Points scored will be rounded off to the nearest 2 decimal places.

FORMULA FOR SCORING TENDER PRICE

The following formula will be used to calculate the points for price.

$$Ps = x\left[1 - \frac{Pt - Pmin}{Pmin}\right]$$

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

where:

Ps is the points scored for comparative price of tender under consideration.
Pt is the comparative price of tender under consideration.
Pmin is the comparative price of lowest acceptable tender.
X is the points assigned to price.

FORMULA FOR SCORING B-BBEE STATUS

The points allocated to a tenderer will be in accordance with the Preferential Procurement Regulations, 2017 published in Government Gazette No. 40553 dated 20 January 2017.

The following table is applicable:

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

Add the following to the clause:

1. Compliance with Tender Conditions:

If the Tender does not comply with the Tender conditions, the Tender may be rejected. If specifications are not met, the Tender may also be rejected. With regard to the above, certain actions or errors are unacceptable, and warrants **REJECTION OF THE TENDER**, for example:

- Non submission of SARS Tax Pin Certificate.
- Non submission of company registration certificates.
- Non submission of the offer in the prescribed format.
- Pages removed from the tender document, and have therefore not been submitted (Submitting mixed up document), pages numbering must be sequential.
- Failure to fully complete the schedule of quantities as required.
- Failure to fully complete form of offer in words and figures.
- Scratching out without initialling next to the amended rates or information.
- Writing over / painting out rates / the use of tippex or any erasable ink, e.g. pencil.
- Failure to complete the document with black non erasable ink.
- The Tender has not been properly signed by a party having the authority to do so, according to the **Form C – "Authority for Signatory".**
- No authority for signatory submitted on company letterhead.
- Failure to submit a scanned document and attachments (CD or USB).

- Failure to submit certified copies of registration certificates and qualifications of proposed personnel.
- Particulars required in respect of the Tender have not been provided – non-compliance of Tender requirements and/or specifications.
- The Tenderer's attempts to influence, or has in fact influenced the evaluation and/or awarding of the contract.
- The Tender has been submitted after the relevant closing date and time.
- If any municipal rates and taxes or municipal service charges owed by that Tenderer or any of its directors to the municipality, or to any other municipality or municipal entity, are in arrears for more than three months.
- If any Tenderer who during the last five years has failed to perform satisfactorily on a previous contract with the municipality or any other organ of state after written notice was given to that Tenderer that performance was unsatisfactory.
- Failure to complete in all returnable schedules and signing thereof will results an automatic disqualification.

2. Size of Enterprise and Current Workload

Evaluation of the Tenderer's position in terms of:

- Previous and expected current annual turnover.
- Current contractual obligations.
- Capacity to execute the contract.

3.Staffing Profile

Evaluation of the Tenderer's position in terms of:

- Staff available for this contract being Tendered for.
- Qualifications, registration and experience of key staff to be utilised on this contract.

4. Previous Experience

Evaluation of the Tenderer's position in terms of his previous experience. Emphasis will be placed on the following:

- Experience in the relevant technical field.
- Experience of contracts of similar size.
- Some or all of the references will be contacted to obtain their input.

5. Financial Ability to Execute the Contract:

Evaluation of the Tenderer's financial ability to execute the contract. Emphasis will be placed on the following:

- Contact the Tender's bank manager to assess the Tenderer's financial ability to execute the contract and the Tenderer hereby grants his consent for this purpose.

6. Good Standing with SA Revenue Services

- Determine whether an original valid SARS Tax Pin Certificate has been submitted.
- The Tenderer must affix an original valid SARS Tax Pin Certificate in the Appendix.

If the Tender does **not** meet the requirements contained in the Tswaing Local Municipality Supply Chain Policy, and the mentioned Framework, it will be rejected by the Council, and may not subsequently be made acceptable by correction or withdrawal of the non-conforming deviation or reservation.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

7. Penalties

Tswaing Local Municipality will if upon investigation it is found that a preference in terms of the Act and these regulations has been obtained on a fraudulent basis, or any specified goals are not attained in the performance of the contract, one or more of the following penalties will be imposed:

- Cancel the contract and recover all losses or damages incurred or sustained from the Tenderer.
- Impose a financial penalty of twice the theoretical financial preference associated with the claim, which was made in the Tender.
- Restrict the firm, its shareholders and directors on obtaining any business from the Tswaing Local Municipality for a period of 5 years.
- Report the firm to Treasury and CIDB for blacklisting.

8. Tender evaluation points

Tender evaluation points will be allocated as per the Supply Chain Management Policy and the Preferential Procurement Policy Framework Act, 2000: Preferential Procurement Regulations, 2017 including the following:

Preference points for this bid shall be awarded for:

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

	POINTS
PRICE	**80**
B-BBEE STATUS LEVEL OF CONTRIBUTION	**20**

Add the following to the clause:

Regulations of disputes, objections, complaints and queries will be handled in accordance with the Supply Chain Management Policy of Tswaing Local Municipality.

F.3.11.1. **General**

Appoint an Evaluation Panel of **NOT LESS THAN THREE PERSONS** that shall review a report prepared by the Appointed Professional Service Provider (Consultant) to complete Adjudication and Evaluation Report by reducing each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

F.3.11.5 The procedure for the evaluation of responsive tenders is **Method 4**: Financial offer, Quality and Preferences;

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

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

$T_{EV} = N_{FO} + N_P + N_Q$

where: N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7.
N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.
N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

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

F.3.11.6. **Decimal Places**

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

F.3.11.7. **Scoring Financial Offers**

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

$N_{FO} = W_1 \times A$

where: N_{FO} 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.
A is a number calculated using the formula and option described in Table F.1 below.

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

Formula	Comparison aimed at achieving	Option 1a	Option 2 a
1	Highest price or discount	$(1 + \frac{(P - Pm)}{Pm})$	A = P / Pm
2	Lowest price or percentage commission / fee	$(1 - \frac{(P - Pm)}{Pm})$	A = Pm / P

where:

Pm is the comparative offers of the most favorable tender offer.
P is the comparative offers of tender offer under consideration.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.3.11.8.	**Scoring Preferences** Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences. Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.
F3.11.9.	**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 using the following formula: $\mathbf{N_Q} = \mathbf{W_2} \times \mathbf{S_O} / \mathbf{M_S}$ where: $\mathbf{S_O}$ is the score for quality allocated to the submission under consideration; $\mathbf{M_S}$ is the maximum possible score for quality in respect of a submission; and $\mathbf{W_2}$ is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data.
F.3.12.	**Insurance Provided by the Employer** There is NO insurance to be provided by the Employer on this contract. BUT if requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.
F.3.13.	**Acceptance of Tender Offer** Accept the tender offer, if in the opinion of the employer, it does not present any unacceptable commercial risk and only if the tenderer: a) Is not under restrictions, or has principals who are under restrictions, preventing participating in the Employer's procurement, b) Can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract, c) Has the legal capacity to enter into the contract, d) Is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a Court or a Judicial Officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing, e) Complies with the legal requirements, if any, stated in the tender data, and f) Is able, in the opinion of the Employer, to perform the contract free of conflicts of interest.
F.3.14	**Prepare Contract Documents**
F.3.14.1	If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of: ▪ Addenda issued during the tender period, ▪ Inclusion of some of the returnable documents, and ▪ Other revisions agreed between the employer and the successful tenderer.
F.3.14.2	Complete the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.15.	**Complete Adjudicator's Contract** Unless alternative arrangements have been agreed or otherwise provided for in the contract, arrange for both parties to complete formalities for appointing the selected adjudicator at the same time as the main contract is signed.
F.3.16.	**Notice to Unsuccessful Tenderers**
F.3.16.1.	Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data, or agreed additional period.
F.3.16.2.	After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.
F.3.17.	**Provide Copies of the Contract** Provide to the successful tenderer **ONE COPY** of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.
F.3.18.	**Provide Written Reasons for Actions Taken** Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender, but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.

Annex: Standard Conditions of Tender

(As contained in Annexure F of the CIDB Standard for Uniformity in Construction Procurement (as amended in Board Notice 86 of 2010 (May 2010))

F.1.	**General**
F.1.1.	**Actions**
F.1.1.1.	The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in F.2 and F.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.
F.1.1.2.	The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict, and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

	Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result. 2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.
F.1.1.3.	The employer shall not seek, and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.
F.1.2.	**Tender Documents** The documents issued by the employer for the purpose of a tender offer are listed in the tender data.
F.1.3.	**Interpretation**
F.1.3.1.	The tender data and additional requirements contained in the tender schedules that are included in the returnable documents are deemed to be part of these conditions of tender.
F.1.3.2.	These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.
F.1.3.3.	For the purposes of these conditions of tender, the following definitions apply: a) **Conflict of interest** means any situation in which: i. someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially. ii. an individual or organization is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or iii. incompatibility or contradictory interests exist between an employee and the organization which employs that employee. b) **Comparative offer** means the tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis c) **Corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and d) **Fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels e) **Organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body f) **Quality** (functionality) means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.1.4.	**Communication and Employer's Agent** Each communication between the employer and a tenderer shall be to or from the employer's agent only, and in a form that can be readily read, copied and recorded. Communications shall be in the English language. The employer shall not take any responsibility for non-receipt of communications from or by a tenderer. The name and contact details of the employer's agent are stated in the tender data.
F.1.5.	**The Employer's Right to Accept or Reject any Tender Offer**
F.1.1.	The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection but will give written reasons for such action upon written request to do so.
F.1.2.	The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers reissue a tender covering substantially the same scope of work within a period of six months unless only one tender was received, and such tender was returned unopened to the tenderer.
F.1.6.	**Procurement Procedures**
F.1.6.1.	**General** Unless otherwise stated in the tender data, a contract will, subject to F.3.13, be concluded with the tenderer who in terms of F.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.
F.1.6.2.	**Competitive Negotiation Procedure**
F.1.6.2.1.	Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of F.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of F.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.
F.1.6.2.2.	All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.
F.1.6.2.3.	At the conclusion of each round of negotiations, tenderers shall be invited by the employer to make a fresh tender offer, based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.
F.1.6.2.4.	The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have been requested to submit their best and final offer.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.1.6.3.	**Proposal Procedure using the Two-Stage System** A two-stage system will not be followed.
F.1.6.3.1	**Option 1** Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.
F.1.6.3.2.	**Option 2**
F.1.6.3.2.1.	Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.
F.1.6.3.2.2.	The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data and award the contract in terms of these conditions of tender.
F.2.	**Tenderer's Obligations**
F.2.1.	**Eligibility**
F.2.1.1.	Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.
F.2.1.2.	Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.
F.2.2.	**Cost of Tendering** Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer comply with requirements.
F.2.3	**Check Documents** Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.
F.2.4.	**Confidentiality and Copyright of Documents** Treat as confidential all matters arising in connection with the tender. Use and copy the documents issued by the employer only for the purpose of preparing and submitting a tender offer in response to the invitation.
F.2.5.	**Reference Documents** Obtain, as necessary for submitting a tender offer, copies of the latest versions of standards, specifications, conditions of contract and other publications, which are not attached but which are incorporated into the tender documents by reference.
F.2.6.	**Acknowledge Addenda** Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary, apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.2.7.	**Clarification Meeting** Attend, where required, a clarification meeting at which tenderers may familiarize themselves with aspects of the proposed work, services or supply and raise questions. Details of the meeting(s) are stated in the tender data. ***Add the following to the clause:*** No clarification meeting will be held. It is the onus of the tenderers to seek more information and familiarize themselves with the conditions prevailing and demographics around the project area. (Clarification meeting is Not Applicable - N/A).
F.2.8.	**Seek Clarification** Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data.
F.2.9	**Insurance** Be aware that the extent of insurance to be provided by the employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance that will be of full cover.
F.2.10.	**Pricing the Tender Offer**
F.2.10.1.	Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.
F.2.10.2.	**Show** VAT payable by the employer separately as an addition to the tendered total of the prices.
F.2.10.3.	Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.
F.2.10.4.	State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.
F.2.11	**Alterations to Documents** Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations. Erasures and the use of masking fluid are prohibited.
F.2.12	**Alternative Tender Offers**
F.2.12.1.	Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.
F.2.12.2	Accept that an alternative tender offer may be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.
F.2.13	**Submitting a Tender Offer**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.2.13.1.	Submit one tender offer only with a CD or USB, either as a single tendering entity or as a member in a Joint Venture to provide the whole of the works, services or supply identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.
F.2.13.2.	Return all returnable documents including a CD or USB to the Employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in NO erasable ink.
F.2.13.3.	Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the Employer.
F.2.13.4.	Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.
F.2.13.5.	Seal the original marking the package as "ORIGINAL COPY". The package shall state on the outside the Employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
F.2.13.6.	Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked “financial proposal” and place the remaining returnable documents in an envelope marked “technical proposal”. Each envelope shall state on the outside the employer’s address and identification details stated in the tender data, as well as the tenderer's name and contact address.
F.2.13.7.	Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
F.2.13.8.	Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
F.2.13.9	Accept that tender offers submitted by facsimile or email will be rejected by the employer, unless stated otherwise in the tender data.
F.2.14.	**Information and Data to be Completed in all Respects** Accept that tender offers, which do not provide all the data or information requested completely and, in the form, required, may be regarded by the employer as nonresponsive.
F.2.15.	**Closing Time**
F.2.15.1.	Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting and courier shall not be accepted as proof of delivery.
F.2.15.2.	Accept that, if the employer extends the closing date and time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

F.2.16	**Tender Offer Validity**
F.2.16.1.	Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing date and time stated in the tender data.
F.2.16.2.	If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.
F.2.16.3.	Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.
F.2.16.4.	Where a tender submission is to be substituted, submit a substitute tender in accordance with the requirements of F.2.13 with the packages clearly marked as "SUBSTITUTE".
F.2.17.	**Clarification of Tender Offer after Submission** Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted. **Note:** Sub-clause F.2.17 does not preclude the negotiation of the final terms of the contract with a preferred tenderer following a competitive selection process, should the Employer elect to do so.
F.2.18.	**Provide Other Material**
F.2.18.1.	Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non- responsive.
F.2.18.2.	Dispose of samples of materials provided for evaluation by the employer, where required.
F.2.19.	**Inspections, Tests and Analysis** Provide access during working hours to premises for inspections, tests and analysis as provided for in the tender data.
F.2.20.	**Submit Securities, Bonds, Policies, etc.** If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies and certificates of insurance required in terms of the conditions of contract identified in the contract data.
F.2.21	**Check Final Draft** Check the final draft of the contract provided by the employer within the time available for the employer to issue the contract.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.2.22	**Return of Other Tender Documents** If so, instructed by the employer, return all retained tender documents within 28 days after the expiry of the validity period stated in the tender data.
F.2.23.	**Certificates** Include in the tender submission or provide the employer with any certificates as stated in the tender data.
F.3.	**The Employer's Undertakings**
F.3.1.	**Respond to Requests from the Tenderer**
F.3.1.1.	Unless otherwise stated in the tender Data, respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.
F.3.1.2	Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence: a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements. b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the functionality process.
F.3.1.3.	**Issue Addenda** If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who drew documents.
F.3.1.3.	**Return Late Tender Offers** Return tender offers received after the closing time stated in the Tender Data, unopened, (unless it is necessary to open a tender submission to obtain a forwarding address), to the tenderer concerned.
F.3.4.	**Opening of Tender Submissions**
F.3.4.1.	Unless the two-envelope system is to be followed, open valid tender submissions in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data. Tender submissions for which acceptable reasons for withdrawal have been submitted will not be opened. ***Add the following to the clause:*** There will be **NO** tender opening, but tenders will be opened to check responsiveness by the Client after closing time and date.
F.3.4.2.	Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, preferences claimed and time for completion for the main tender offer only.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

	Add the following to the clause: Tender opening meeting will **NEITHER** be arranged **NOR** held.
F.3.4.3.	Make available the record outlined in F.3.4.2 to all interested persons upon request.
F.3.11.	**Evaluation of Tender Offers**
F.3.11.1.	**General** Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data and methods.
F.3.11.2.	**Method 1: Financial Offer** **In the case of a financial offer:** a) Rank tender offers from the most favourable to the least favourable comparative offer. b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so. c) Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.
F.3.11.4.	**Method 3: Financial Offer and Quality** **In the case of a financial offer and quality:** a) Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F.3.11.7 and F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any. b) Calculate the total number of tender evaluation points (TEV) in accordance with the following formula: **TEV =NFO + NQ** **where:** **NFO** is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7. **NQ** is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9. c) Rank tender offers from the highest number of tender evaluation points to the lowest. d) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so. e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub clause is repeated.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

F.3.11.5. **Method 4: Financial Offer, Quality and Preferences**

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

a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of F.3.11.7 to F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.

b) Calculate the total number of tender evaluation points (TEV) in accordance with the following formula, unless otherwise stated in the Tender Data:

$$TEV = NFO + NP + NQ$$

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

NQ is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

c) Rank tender offers from the highest number of tender evaluation points to the lowest.

d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

THE TENDER
PART T2: RETURNABLE DOCUMENTS

T2.1 List of Returnable Documents

T2.2 Returnable Documents

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

T2.1 LIST OF RETURNABLE DOCUMENTS

1. Proposed implementation methodology and implementation plan.
2. Failure to fully complete and sign the relevant returnable documents shall render such a tender offer unresponsive.
3. Tenderers shall note that their signatures appended to each returnable form represents a declaration that they vouch for the accuracy and correctness of the information provided, including the information provided by candidates proposed for the specified key positions.
3. Notwithstanding any check or audit conducted by or on behalf of the Employer, the information provided in the returnable documents is accepted in good faith and as justification for entering into a contract with a Tenderer. If subsequently any information is found to be incorrect such discovery shall be taken as wilful misrepresentation by that Tenderer to induce the contract. In such event the Employer has the discretionary right to terminate the contract and take further steps in black listing the Tenderer with CIDB and to report such to Treasury.
4. Tenderers are required to submit the following with their tenders or within three days of receipt of the Employer's or his Agent's written request for same:
    a. A copy of Workmen's Compensation Certificate, Act 4 of 2002,
    b. Curriculum vitae of the person who prepares the Contractor's Health and Safety Plan,
    c. Curriculum vitae of the Health and Safety Officer the successful tenderer intends appointing in accordance with the Occupational Health and Safety Act (Act 85 of 1993).
    d. Curriculum Vitae of all supervisory staff.
    e. Insurance – minimum liability of **R 5 million.**
    f. Proof of Performance Guarantee or a letter of intend or indicating relevant choice.
5. The returnable schedules included in Section T2.2 will be used to evaluate tenders received. These schedules will also form part of the Contract.

The Tenderer must complete and sign the following returnable Schedules:

Returnable Schedules Required for Tender evaluation purposes

T2.2.1 : Record of Addenda to Tender Documents
T2.2.2 : Implementation Methodology and Plan (Technical, Administrative and OHSA)
T2.2.3 : Compulsory Enterprise Questionnaire
T2.2.4 : Certificate of authority for joint ventures (where applicable)
T2.2.5 : Schedule of Proposed Sub-Contractors
T2.2.6 : Schedule of Plant and Equipment
T2.2.7 Schedule of Infrastructure
T2.2.8 : Schedule of the Tenderer's Experience
T2.2.9 : Schedule of the Tenderer's Commitments
T2.2.10 : Bank Rating and Financial References
T2.2.11 : Proposed Amendments and Qualifications
T2.2.12 : Supervisory and Safety Personnel
T2.2.13 : Labour Utilization
T2.2.14 : Compliance with OHSA (Act 85 of 1993)
T2.2.15 : Site Inspection Certificate
T2.2.16 : Authority of Signatory
T2.2.17 : General Conditions of Contract
T2.2.18 : MBD Pricing Schedule
T2.2.19 : MBD 4 Declaration of Interest
T2.2.20 : MBD 5 Declaration of Procurement above R 10 million
T2.2.21 : MBD 6.1 Preference Points Claim Form in terms of PPR 2017
T2.2.22 : MBD 6.2 Declaration Certificate for Local Production and Content for Designated Sectors
T2.2.23 : MBD 8 Past Supply Chain Management Practices
T2.2.24 : MBD 9 Certificate of Independent Bid Determination
T2.2.25 : Section 38 – Declaration Form
T2.2.26 : Confirmation of Outstanding Municipal Rates and Taxes
T2.2.27 : Declaration of Good Standing Regarding Tax
T2.2.28 : Proposed Preliminary Programme of Works
T2.2.29 : Proposed Preliminary Cash Flow
T2.2.30 : Proof of Good Standing with Compensation Commissioner
T2.2.31 : Tenderer's Litigation History Declaration

Returnable Documents that will be incorporated into the contract

C1.1 1. Offer Portion of Form of Offer and Acceptance
C1.2 2. Contract Date (Part 2)
C1.3 3. Form of Guarantee
C2.2 4. Bill of Quantities

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

T2.2 RETURNABLE DOCUMENTS

RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

T2.2.1: 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.		

Attach additional pages if more space is required.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.2: Proposed Implementation Methodology and Plan

The Tenderer must provide his/her proposed project implementation methodology & plan and append it to the returnable attachments. The proposed project implementation methodology and plan must, but not limited to address the following:

1. Introduction.
2. Understanding the scope of work.
3. Works execution.
   - 3.1. Technical approach.
   - 3.2. Plant.
   - 3.3. Proposed programme of works (in relation to the prescribed contract period)
   - 3.4. Financial planning and management.
4. Quality control.
5. Safety management.
6. Subcontracting.
7. Community empowerment.
8. Training.
9. Skills transfer.
10. Labour intensive construction.
11. Personnel (indicate % availability/commitment to the project)
    - 11.1. Project engineer.
    - 11.2. Contracts manager.
    - 11.3. Site agent.
    - 11.4. Safety officer.
    - 11.5. Foreman.
    - 11.6. Geotechnical engineer/laboratory.
    - 11.7. Surveyor.
12. Closing statement.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.3: Compulsory Enterprise Questionnaire

The following particulars must be furnished. In the case of a Joint Venture, **separate** Enterprise Questionnaires in respect of each partner must be completed and submitted.

Section 1: Name of Enterprise:

Section 2: VAT Registration Number, if any:

Section 3: CIDB Registration Number, if any:

Section 4: Particulars of Sole Proprietors and Partners in Partnerships

Name*	Identity Number*	Personal Income Tax Number*

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

Section 5: Particulars of Companies and Close Corporations

Company Registration Number _____

Close Corporation Number _____

Tax Reference Number _____

Section 6: Record of Service of the state

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

	a Member of any Municipal Council		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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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

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

***Insert separate page if necessary**

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

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

	a Member of any Municipal Council		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

***Insert separate page if necessary**

Name of Spouse, Child or Parent	Name of Institution, Public Office, Board or Organ of State and Position Held	Status of Service (tick appropriate column)	
		Current	Within last 12 Months

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.3: Continued

8.	Contact Person					
9.	Contact Number					
10.	Email Address					
11.	Postal Address					
13.	Physical Address					
14	Tax Reference Number					
15.	CIDB Grading					
16.	Has a BBBEE Status Level Verification Certificate been submitted?	Yes		No		
If Yes, who was the Certificate issued by?						
17.	An Accounting Officer as contemplated in the Close Corporation act (CCA)					
18.	A Verification Agency Accredited by the South African National Accreditation System (SANAS)					
19.	A Registered Auditor					
20.	Companies and Intellectual Property Corporation (CIPC)					
21.	South African Police Services Sworn Affidavit (SAPSSA)					

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

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

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.4: Certificate of Authority for Joint Ventures

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 AUTHORISED SIGNATORY
		Signature: ……..…….. Name: ……..……. Designation: ……..……..
		Signature: ……..…….. Name: ……..……. Designation: ……..……..
		Signature: ……..…….. Name: ……..……. Designation: ……..……..
		Signature: ……..…….. Name: ……..……. Designation: ……..……..

Pro-Forma

Signatories for the Joint Venture shall confirm their authority by attaching in the appendix/returnables a **duly signed and dated original or certified copy on the Company Letterhead** of the relevant resolution of their members or their board of directors, as the case may be.

T2.2.5: Schedule of Proposed Sub-Contractors

We notify you that it is our intention to employ the following Sub-Contractors 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 Sub-Contractors 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 Sub-Contractors who are contracted to construct a house are registered as home builders with the National Home Builders Registration Council.

	Name and Address of Proposed Sub-Contractor	Nature and Extent of Work	Previous Experience with Sub-Contractor.
1.			
2.			
3.			
4.			

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.6: 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

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

Attach additional pages if more space is required.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.7: Schedule of Infrastructure

Provide information on the following infrastructure available for this project:

Infrastructure and resources available for this project:

1. Physical facilities and Buildings.

Description	Address	Owned	Leased

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.8: Schedule of the Tenderer's Previous Projects and Experience

The procedure for the evaluation of responsive Bids will be on the average of the **PREVIOUS THREE PROJECTS** in the past five (5) years where the firm was involved for TSWAING LOCAL MUNICIPALITY (TLM) projects or other Clients. Reference of Clients other than TLM **MUST** be provided.

Evaluation of the Tenderer's position in terms of his previous experience. Emphasis will be placed on the following:

- **Experience in the relevant technical field**
- **Experience of contracts of similar size**
- **At least three of the references will be contacted to obtain their input**.

Provide the following information on relevant previous experience (indicate specifically projects of similar or larger size and/or which is similar with regard to type of work. **This information is material to the award of the Contract.**

Description	Value (R) VAT excluded	Period work executed		Reference		
		Appointment Date	Completion Date	Name	Organisation	Tel No and Fax

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.9: Schedule of the Tenderer's Current Projects

Provide the following information on current projects

This information is material to the award of the Contract.

Description	Value (R) VAT excluded	Appointment Date	Expected Completion Date	Reference		
				Name	Organisation	Tel No and Fax

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.10: Financial References and Bank Rating

(a) **JOINT VENTURE**
In the case of a Joint Venture, a **separate** submission in respect of each partner must be completed, attached and submitted.

(b) **FINANCIAL STATEMENTS**
I/We agree, if required, to furnish an audited copy of the latest set of financial statements together with my/our Directors' and Auditors' report for consideration by the Employer.

(c) **DETAILS OF COMPANY'S BANK**
I/We hereby authorize the Employer/Engineer to approach all or any of the following banks for a reference:

DESCRIPTION OF BANK DETAIL	BANK DETAIL APPLICABLE TO COMPANY HEAD OFFICE	BANK DETAIL APPLICABLE TO THE SITE OF THE WORKS
Name of Bank		
Branch Name		
Branch Code		
Street Address		
Postal Address		
Name of Manager		
Telephone Number	( )	( )
Fax Number	( )	( )
Account Number		
Account Holder		
Bank Rating		

How long has this account been in existence; please tick the appropriate box	0-6 months	
	7-12 months	
	13-24 months	
	More than 24 months	

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.11: 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.

Page	Clause or Item	Proposal

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.12: Supervisory and Safety Personnel

PREVIOUS EXPERIENCE ON WORKS OF A SIMILAR NATURE DURING THE LAST FIVE YEARS

Name	% Time on Site	Position (Current)	Service (Years)	Name of One (1) Project (Nature & Magnitude) and Year Executed	Value of Works	Position Occupied
	50%	Contracts Manager				
	100%	Site Agent				
	100%	Foremen				
	100%	OHS Officer				
Geotechnical Laboratory	To be nominated as and when required on site depending on Contractor's request and progress.					
Surveyor	To be nominated as and when required on site depending on Contractor's request and progress.					

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.13: Labour Utilization

Labour Categories - Definitions

NOTE: These definitions serve as a guideline to complete the following table and will in no respect alter the Project Specifications or Standardized Specifications

1. **General Foreman / Foreman**
An employee who gives out work to and directly co-ordinates and supervises employees. His duties encompass any one or more of the following activities:

   a) Supervision.
   b) Maintaining discipline.
   c) Ensuring safety on the workplace.
   d) Being responsible to the Contractor for efficiency and production for his portion of the works; and
   e) Performing skilled work, whether in an instructional capacity or otherwise.

2. **Charge Hand**
An employee engaged in any one or more of the following activities:

   a) Being primarily employed in a supervisory capacity, but who may also be doing the work of an artisan.
   b) Giving out work to other employees under his control and supervision.
   c) Ensuring safety on the workplace.
   d) Maintaining discipline; and
   e) Being directly responsible to a general foreman or foreman or the Contractor or the Contractor's representative for efficiency and production for his portion of the works.

3. **Artisan**
An employee who has successfully completed all prescribed courses at a practical institutional training center for a particular trade and who has successfully completed the on-site period of training as prescribed and who has successfully passed the prescribed trade tests.

4. **Team Leader**
An employee engaged in any one or more of the following activities:

   a) Being employed in a supervisory capacity, but who may also be doing the work of a skilled person.
   b) Giving out work to other employees under his control and supervision.
   c) Maintaining discipline.
   d) Being directly responsible to a Charge hand or a foreman or a general foreman or the employer's authorized representative for efficiency and production for his portion of the works.

5. **Skilled Employee**
An employee engaged in an ancillary trade or an assistant artisan.

6. **Semi-Skilled Employee**
An employee with any specified skills, an apprentice or a trainee-artisan.

7. **Unskilled Employee**
An employee engaged on any task or operation not specified above.

8. **Imported Employee**
Personnel permanently employed by Contractor.

9. **Local Employee**
Temporary workforce employed through Labour Desk.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

MAN DAYS

Categories	**a)** No. of Man Days		
	b) Imported	**c)** Local	**d)** HDI (Y/N)
1. Contracts Manager			
2. Site Agent			
3. Foreman/Supervisors (specify type)			
3.1.			
3.2.			
3.3.			
4. Safety Inspectors (specify type)			
4.1.			
4.2.			
5. Charge Hands			
6. Artisans			
7. Operators/Drivers			
8. Clerks/ Storeman			

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Categories	**a)** No. of Man Days		
	b) Imported	**c)** Local	**d)** HDI (Y/N)
9. Team Leader			
10. Skilled Labour			
11. Semi-Skilled Labour			
12. Unskilled Labour			

Man-Days	**=**	**Number of Persons**	**X**	**Actual Time to Complete a Task in Hours**

Note:

i. Make sure that all calculations are correct.

ii. Calculations will be checked against the proposed programme of works and number of planned workforce (employees / labourers).

iii. Man-days claimed must be achieved on site, or a penalty of 1 employees' man-day will be charged daily per task.

iv. No unskilled or semi-skilled labourers are to be imported.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.14: Occupational Health and Safety Act: Statement by Tendering Entity

I, _____duly authorized

to represent _____

_____ (Company Name)

in my capacity as _____

hereby confirm that I accept full and exclusive responsibility for compliance by myself and all persons who perform work for me with the **Provisions of the Occupational Health and Safety Act, No. 85 of 1993 (as amended)** and all **Regulations Promulgated** from **Time** to **Time**, whilst performing work on _____

_____

_____

I confirm that all employees who perform work on the site shall be properly trained to do this in a manner which is safe and without risk to health and safety to themselves and others in the vicinity and undertake to have our activities adequately supervised in the interest of health and safety.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.15: Site Inspection Certificate

a) **NEITHER SITE BRIEFING NOR CLARIFICATION MEETING** will be arranged by the Client.

b) Tenderers are encouraged to familiarize themselves with the conditions and demographics around the project area including construction water accessibility.

c) As required by Clause 2.7 of the Tender Data, I/We agree and give concern that I/We will proceed with the tendering on this tender in concern that no site inspection or clarification meeting was arranged.

d) I/We will make own arrangements and initiatives to familiarize ourselves with the conditions prevailing around the project area including availability of construction water and borrow pit access and distance to be travelled.

e) I/We confirm that I/We are satisfied with information and description of the work explanation given in the document and tender drawings.

f) I/We confirm that should there be arise for a need for clarity, I/We shall contact the Client and Project Engineer on pmucontracts@aol.com with a copy of the email to pmu@tswaing.gov.za five days before the tender closing date and time.

g) I/We confirm that I/We shall hold the Employer harmless for any major factor that I/We might overlook in pricing as a results of My/Our inadequate research regarding the project.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.16: Authority of Signatory

With reference to Clause 2.13.4 of the Tender Data, I/we herewith certify that this tender is submitted by:

(Mark applicable block)

a) A company, and attach hereto a certified copy of the required resolution of the Board of Directors ☐

b) A partnership, and attach hereto a certified copy of the required resolution by all partners ☐

c) A close corporation, and attach hereto a certified copy of the required resolution of the Board of Officials ☐

d) A one-man business, and attach hereto certified proof that I am the sole owner of the business submitting this tender ☐

e) A Joint Venture, and attach hereto ☐

- notarial certified copy of the original document under which the joint venture was constituted; and
- certified authorization by the participating members of the undersigned to submit tenders and conclude contracts on behalf of the joint venture

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.16: Authority of Signatory *(Continued)*

Details of person responsible for tender process:

Name: _____

Contact number: _____

Office address: _____

_____

Signatories for Close Corporations and Companies shall confirm their authority by attaching in the appendix (returnable) a **duly signed and dated original or certified copy on the Company Letterhead** of the relevant resolution of their members or their board of directors, as the case may be.

PRO-FORMA FOR COMPANIES AND CLOSE CORPORATIONS:

"By resolution of the board of directors passed on *(date)* _____

Mr/Ms. _____

has been duly authorized to sign all documents in connection with the Tender for Contract Number

_____ and any Contract which may arise there from on behalf of

_____

(NAME OF TENDERER IN BLOCK CAPTIAL LETTERS)

SIGNED ON BEHALF OF THE COMPANY _____

IN HIS CAPACITY AS _____

DATE _____

FULL NAMES OF SIGNATORY _____

Witnesses

1 _____ _____
Name Signature

2 _____ _____
Name Signature

Pro-Forma

T2.2.17: General Conditions of Contract

(NOT TO BE ALTERED)

PROCUREMENT: GENERAL CONDITIONS OF CONTRACT

Dated July 2010 as set out by the National Treasury: Republic of South Africa

1. Definitions
2. Application
3. General
4. Standards
5. Use of contract documents and information inspection
6. Patent rights
7. Performance security
8. Inspections, tests and analyses
9. Packing
10. Delivery and documents
11. Insurance
12. Transportation
13. Incidental services
14. Spare parts
15. Warranty
16. Payment
17. Prices
18. Variation orders
19. Assignment
20. Subcontracts
21. Delays in the supplier's performance
22. Penalties
23. Termination of default
24. Anti-dumping and countervailing duties and rights
25. Force Majeure
26. Termination for insolvency
27. Settlement of Disputes
28. Limitation of Liability
29. Government language
30. Applicable law
31. Notices
32. Taxes and duties
33. Transfer of contracts
34. Amendments of contracts
35. Prohibition of restrictive practices
36. Special Conditions of Contract

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

General Conditions of Contract

1.	**Definitions** "The following terms shall be interpreted as indicated"
1.1.	"Closing time" means the date and hour specified in the bidding documents for the receipt of bids.
1.2.	"Contract" means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.'[
1.3.	"Contract price" means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.
1.4.	"Corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.
1.5.	"Countervailing duties" are imposed in cases where an enterprise abroad is subsidized by its government and encouraged to market its products internationally.
1.6.	"Country of origin" means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
1.7.	"Day" means calendar day.
1.8.	"Delivery" means delivery in compliance of the conditions of the contract or order.
1.9.	"Delivery ex stock" means immediate delivery directly from stock actually on hand.
1.10.	"Delivery into consignees store or to his site" means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the goods are so delivered and a valid receipt is obtained.
1.11.	"Dumping" occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.
1.12.	" Force majeure" means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
1.13.	"Fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non- competitive levels and to deprive the bidder of the benefits of free and open competition.
1.14.	"GCC" means the General Conditions of Contract.
1.15.	"Goods" means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.
1.16.	"Imported content" means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his Sub-Contractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the goods covered by the bid will be manufactured.
1.17.	"Local content" means that portion of the bidding price, which is not included in the imported content provided that local manufacture does take place.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

1.18.	"Manufacture" means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.
1.19.1	"Order" means an official written order issued for the supply of goods or works or the rendering of a service.
1.20.	"Project site," where applicable, means the place indicated in bidding documents.
1.21.	"Purchaser" means the organization purchasing the goods.
1.22.	"Republic" means the Republic of South Africa.
1.23.	"SCC" means the Special Conditions of Contract.
1.24.	"Services" means those functional services ancillaries to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.
1.25	"Supplier" means the successful bidder who is awarded the contract to maintain and administer the required and specified service(s) to the State.
1.26.	"Tort" means in breach of contract.
1.27.	"Turnkey" means a procurement process where one service provider assumes total responsibility for all aspects of the project and delivers the full end product / service required by the contract.
1.28.	"Written" or "in writing" means hand-written in ink or any form of electronic or mechanical writing.
2.	**Application**
2.1.	These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services (excluding professional services related to the building and construction industry), sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.
2.2.	Where applicable, special conditions of contract are also laid down to cover specific goods, services or works.
2.3.	Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.
3	**General**
3.1.	Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.
3.2.	Invitations to bid are usually published in locally distributed news media and on the municipality/municipal entity website.
4	**Standards**
4.1.	The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.
5	**Use of contract documents and information inspection**
5.1.	The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.
5.2.	The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.
5.3.	Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so, required by the purchaser.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

5.4.	The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so, required by the purchaser.
6	**Patent Rights**
6.1.	The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.
6.2.	When a supplier developed documentation / projects for the municipality / municipal entity, the intellectual, copy and patent rights or ownership of such documents or projects will vest in the municipality / municipal entity.
7	**Performance security**
7.1.	Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.
7.2.	The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.
7.3.	The performance security shall be denominated in the currency of the contract or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms: a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or b) a cashier's or certified cheque.
7.4.	The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified.
8.	**Inspections, Tests and Analyses**
8.1.	All pre-bidding testing will be for the account of the bidder.
8.2.	If it is a bid condition that goods to be produced or services to be rendered should at any stage be subject to inspections, tests and analyses, the bidder or Contractor's premises shall be open, at all reasonable hours, for inspection by a representative of the purchaser or organization acting on behalf of the purchaser.
8.3.	If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.
8.4.	If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the goods to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.
8.5.	Where the goods or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such goods or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.
8.6.	Goods and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.
8.7.	Any contract goods may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected goods shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with goods, which do comply with the requirements of the contract. Failing such removal, the rejected goods shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute goods forthwith, the purchaser may, without giving the supplier further opportunity to substitute the

	rejected goods, purchase such goods as may be necessary at the expense of the supplier.
8.8.	The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 22 of GCC.
9.	**Packing**
9.1.	The supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.
9.2.	The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the contract, including additional requirements, if any, and in any subsequent instructions ordered by the purchaser.
10.	**Delivery and documents**
10.1.	Delivery of the goods and arrangements for shipping and clearance obligations shall be made by the supplier in accordance with the terms specified in the contract.
11.	**Insurance**
11.1.	The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified.
12.	**Transportation**
12.1	Should a price other than an all-inclusive delivered price be required, this shall be specified.
13.	**Incidental Services**
13.1.	The supplier may be required to provide any or all of the following services, including additional services, if any: a) performance or supervision of on-site assembly and/or commissioning of the supplied goods. b) furnishing of tools required for assembly and/or maintenance of the supplied goods. c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods. d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start- up, operation, maintenance, and/or repair of the supplied goods.
13.2.	Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.
14.	**Spare Parts**
	As specified, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier: a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract, and. b) in the event of termination of production of the spare parts: i. advance notification to the purchaser of the pending termination, in sufficient

	time to permit the purchaser to procure needed requirements; and ii. following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.
15.	**Warranty**
15.1.	The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.
15.2.	This warranty shall remain valid for twelve (12) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise.
15.3.	The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.
15.4.	Upon receipt of such notice, the supplier shall, within the period specified and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.
15.5.	If the supplier, having been notified, fails to remedy the defect(s) within the period specified, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.
16.	**Payment**
16.1.	The method and conditions of payment to be made to the supplier under this contract shall be specified.
16.2.	The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.
16.3.	Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.
16.4.	Payment will be made in Rand unless otherwise stipulated.
17.	**Prices**
17.1.	Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorized or in the purchaser's request for bid validity extension, as the case may be.
18.	**Variation Orders**
18.1.	In cases where the estimated value of the envisaged changes in purchase does not vary more than 15% of the total value of the original contract, the Contractor may be instructed to deliver the goods or render the services as such. In cases of measurable quantities, the Contractor may be approached to reduce the unit price, and such offers may be accepted provided that there is no escalation in price.
19.	**Assignment**
19.1.	The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.
20.	**Subcontracts**
20.1.	The supplier shall notify the purchaser in writing of all subcontracts awarded under these contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.

21.	**Delays in the Supplier's Delivery and/or Performance**
21.1.	Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.
21.2.	If at any time during performance of the contract, the supplier or its Sub-Contractor/s should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, it's likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.
21.3.	The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the goods are required, or the supplier's services are not readily available.
21.4.	Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of penalties.
21.5.	Upon any delay beyond the delivery period in the case of a goods contract, the purchaser shall, without cancelling the contract, be entitled to purchase goods of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.
22.	**Penalties**
22.1.	Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.
23	**Termination for Default**
23.1.	The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part: a) if the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof granted by the purchaser pursuant to GCC Clause 21.2; b) if the supplier fails to perform any other obligation(s) under the contract; or c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.
23.2.	In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner, as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.
23.3.	Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.
23.4.	If a purchaser intends imposing a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than fourteen (14) days to provide reasons why the envisaged restriction should not be imposed. Should the

	supplier fail to respond within the stipulated fourteen (14) days the purchaser may regard the supplier as having no objection and proceed with the restriction.
23.5.	Any restriction imposed on any person by the purchaser will, at the discretion of the purchaser, also be applicable to any other enterprise or any partner, manager, director or other person who wholly or partly exercises or exercised or may exercise control over the enterprise of the first-mentioned person, and with which enterprise or person the first-mentioned person, is or was in the opinion of the purchaser actively associated.
23.6.	If a restriction is imposed, the purchaser must, within five (5) working days of such imposition, furnish the National Treasury, with the following information: i. the name and address of the supplier and / or person restricted by the purchaser. ii. the date of commencement of the restriction iii. the period of restriction; and iv. the reasons for the restriction. These details will be loaded in the National Treasury's central database of suppliers or persons prohibited from doing business with the public sector**.**
23.7.	If a court of law convicts a person of an offence as contemplated in sections 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the Register for Tender Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than five years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury website.
24.	**Antidumping and Countervailing Duties and Rights**
24.1.	When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the supplier to the purchaser or the purchaser may deduct such amounts from moneys (if any) which may otherwise be due to the supplier in regard to goods or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.
25.	**Force Majeure**
25.1.	Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in Performance or other failure to perform his obligations under the contract is the result of an event of force majeure.
25.2.	If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the force majeure event.
26.	**Termination for Insolvency**
26.1.	The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the purchaser.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

27.	**Settlement of Disputes**
27.1.	If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
27.2.	If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.
27.3.	Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.
27.4.	Notwithstanding any reference to mediation and/or court proceedings herein, a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and b) the purchaser shall pay the supplier any monies due the supplier for goods delivered and / or services rendered according to the prescripts of the contract.
28.	**Limitation of Liability**
28.1.	Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6; (a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage does not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and (b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.
29.	**Governing Language**
29.1.	The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
30.	**Applicable Law**
30.1.	The contract shall be interpreted in accordance with South African laws, unless otherwise specified.
31.	**Notices**
31.1.	Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.
31.2.	The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.
32.	**Taxes and Duties**
32.1.	A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.
32.2.	A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.
32.3.	No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid SARS must have certified that the tax matters of the preferred bidder are in order.
32.4.	No contract shall be concluded with any bidder whose municipal rates and taxes and municipal services charges are in arrears.
33.	**Transfer of Contracts**
33.1.	The Contractor shall not abandon, transfer, cede assign or sublet a contract or part thereof without the written permission of the purchaser.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

34.	**Amendment of Contracts**
34.1.	No agreement to amend or vary a contract or order or the conditions, stipulations or provisions thereof shall be valid and of any force unless such agreement to amend or vary is entered into in writing and signed by the contracting parties. Any waiver of the requirement that the agreement to amend or vary shall be in writing, shall also be in writing.
35.	**Prohibition of Restrictive Practices**
35.1.	In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of restrictive practices 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder(s) is / are or a Contractor(s) was / were involved in collusive bidding.
35.2.	If a bidder(s) or Contractor(s) based on reasonable grounds or evidence obtained by the purchaser has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in section 59 of the Competition Act No 89 0f 1998.
35.3.	If a bidder(s) or Contractor(s) has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or Contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or Contractor(s) concerned.

Special Conditions of Contract

36.	**Termination by Employer and Appointment of a Completion Service Provider (Contractor)**
36.1.	In an event where the successful Service Provider (Contractor) has failed to execute the contract as per the conditions of the contract, thus resulting in termination of the contract as per *Clauses 9.2.1.1, 9.2.1.2, 9.2.1.3 (1)(2)(3)(4)(5)(6)(7)(8),* **of the** General Conditions of Contract 2015, Third Edition. Then, the Employer (Tswaing Local Municipality) reserves the right to appoint the second highest scoring bidder in the same tender for completion of the contract.
36.2.	Any incurred losses and damages will be claimed against the terminated Service Provider (Contractor).

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.18: Good Standing Regarding Tax

MBD 2

Declaration of Good Standing Regarding Tax

The original Sars Tax Pin Certificate must be submitted together with the bid. Failure to submit the original and valid Sars Tax Pin Certificate will result in the invalidation of the bid. Compliance will be confirmed using **Sars Pin** or **CSD MAAA** Number.

In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate

Sars Tax Pin Certificate must be attached to the annexures/appendix in the returnable attachments.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.19: Declaration of Interest

MBD 4

DECLARATION OF INTEREST

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

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

3.1. Full Name of tenderer or his or her representative: _____

3.2. Identity Number: _____

3.3. Position occupied in the Company (director, trustee, hareholder²): _____

3.4. Company Registration Number: _____

3.5. Tax Reference Number: _____

3.6. VAT Registration Number: _____

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

3.8. Are you presently in the service of the state? *[TICK APPLICABLE BOX]* ☐ YES ☐ NO

3.8.1. If yes, furnish particulars. _____

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

a) a member of –
   (i) any municipal council.
   (ii) any provincial legislature; or
   (iii) the national Assembly or the national Council of provinces.
b) a member of the board of directors of any municipal entity;
c) an official of any municipality or municipal entity.
d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999).
e) a member of the accounting authority of any national or provincial public entity; or
f) an employee of Parliament or a provincial legislature.

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

3.9. Have you been in the service of the state for the past 12 months? [*TICK APPLICABLE BOX*] ☐ YES ☐ NO

3.9.1. If yes, furnish particulars _____

_____

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

3.10.1. If yes, furnish particulars_____

_____

3.11. Are you, aware of any relationship (family, friend, other) between any any other tenderer and any persons in the service of the state who may be involved of the state who may be involved with the evaluation and or adjudication of this bid? [*TICK APPLICABLE BOX*] ☐ YES ☐ NO

3.11.1. If yes, furnish particulars _____

_____

3.12. Are any of the company's directors, trustees, managers, principal shareholders or stakeholders in service of the state? [*TICK APPLICABLE BOX*] ☐ YES ☐NO

3.12.1. If yes, furnish particulars _____

_____

3.13. Are any spouse, child or parent of the company directors' trustees, managers, principal shareholders or stakeholders in service of the state? [*TICK APPLICABLE BOX*] ☐ YES ☐ NO

3.13.1. If yes, furnish particulars _____

_____

3.14. Do you or any of the directors, trustees, managers, principal shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are tendering for for this contract. [*TICK APPLICABLE BOX*] ☐ YES ☐ NO

3.14.1. If yes, furnish particulars _____

_____

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

Full Name	Identity Number	Personal Reference Tax Number	State Employee Number

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.20: Declaration for Procurement Above R 10 million (All Applicable Taxes Included)

MBD 5

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

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

1 Are you by law required to prepare annual financial statements for auditing? [*TICK APPLICABLE BOX*] ☐ *YES ☐ NO

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

_____

2. Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days? [*TICK APPLICABLE BOX*] ☐ *YES ☐ NO

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

2.2. If yes, provide particulars.

_____

_____

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

3.1. If yes, furnish particulars

_____

_____

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

4.1. If yes, furnish particulars

_____

_____

I, THE UNDERSIGNED (FULL NAME & SURNAME) _____

_____

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

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

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.21: Preference Claimed in Terms of the Preferential Procurement Regulations, 2017

MBD 6.1

PREFERENCE CLAIMED IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017

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

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

---

1. **GENERAL CONDITIONS**

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

- the 80/20 system for requirements with a Rand value of up to R50 000 000.00 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000.00 (all applicable taxes included).

1.2 The value of this bid is estimated to be below R50 000 000.00 (all applicable taxes included) and therefore the……**80/20**……system shall be applicable.

1.3 Preference points for this bid shall be awarded for:

(c) Price; and
(d) B-BBEE Status Level of Contribution.

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

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

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

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

2 DEFINITIONS

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

2.2 "B-BBEE" means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;

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

2.4 "bid" means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services, works or goods, through price quotations, advertised competitive bidding processes or offers;

2.5 "Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

2.6 "comparative price" means the price after the factors of a non-firm price and all unconditional discounts that can be utilized have been taken into consideration;

2.7 "consortium or joint venture" means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract;

2.8 "contract" means the agreement that results from the acceptance of a bid by an organ of state;

2.9 "EME" means any enterprise with an annual total revenue of R5 million or less .

2.10 "Firm price" means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition, or abolition of customs or excise duty and any other duty, levy, or tax, which, in terms of the law or regulation, is binding on the contractor and demonstrably has an influence on the price of any supplies, or the rendering costs of any service, for the execution of the contract;

2.11 "functionality" means the measurement according to predetermined norms, as set out in the bid documents, of a service or commodity that is designed to be practical and useful, working or operating, taking into account, among other factors, the quality, reliability, viability and durability of a service and the technical capacity and ability of a bidder;

2.12 "non-firm prices" means all prices other than "firm" prices;

2.13 "person" includes a juristic person;

2.14 "rand value" means the total estimated value of a contract in South African currency, calculated at the time of bid invitations, and includes all applicable taxes and excise duties;

2.15 "sub-contract" means the primary contractor's assigning, leasing, making out work to, or employing, another person to support such primary contractor in the execution of part of a project in terms of the contract;

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

2.16 "total revenue" bears the same meaning assigned to this expression in the Codes of Good Practice on Black Economic Empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act and promulgated in the Government Gazette on 9 February 2007;

2.17 "trust" means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person; and

2.18 "trustee" means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.

3. ADJUDICATION USING A POINT SYSTEM

3.1 The bidder obtaining the highest number of total points will be awarded the contract.

3.2 Preference points shall be calculated after prices have been brought to a comparative basis taking into account all factors of non-firm prices and all unconditional discounts.

3.3 Points scored must be rounded off to the nearest 2 decimal places.

3.4 In the event that two or more bids have scored equal total points, the successful bid must be the one scoring the highest number of preference points for B-BBEE.

3.5 However, when functionality is part of the evaluation process and two or more bids have scored equal points including equal preference points for B-BBEE, the successful bid must be the one scoring the highest score for functionality.

3.6 Should two or more bids be equal in all respects, the award shall be decided by the drawing of lots.

4. POINTS AWARDED FOR PRICE

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

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

80/20 **or** **90/10**

$$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right) \quad \text{or} \quad Ps = 90\left(1 - \frac{Pt - P\min}{P\min}\right)$$

Where

Ps = Points scored for price of bid under consideration

Pt = Price of bid under consideration

P min = Price of lowest acceptable bid

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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

4.3 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

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

4.4 Tenderers who qualify as EMEs in terms of the B-BBEE Act must submit a certificate issued by an Accounting Officer as contemplated in the CCA or a Verification Agency accredited by SANAS or a Registered Auditor. Registered auditors do not need to meet the prerequisite for IRBA's approval for the purpose of conducting verification and issuing EMEs with B-BBEE Status Level Certificates.

4.5 Tenderers other than EMEs must submit their original and valid B-BBEE status level verification certificate or a certified copy thereof, substantiating their B-BBEE rating issued by a Registered Auditor approved by IRBA or a Verification Agency accredited by SANAS

4.6 A trust, consortium or joint venture, will qualify for points for their B-BBEE status level as a legal entity, provided that the entity submits their B-BBEE status level certificate.

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

4.8 Tertiary institutions and public entities will be required to submit their B-BBEE status level certificates in terms of the specialized scorecard contained in the B-BBEE Codes of Good Practice.

4.9 A person will not be awarded points for B-BBEE status level if it is indicated in the bid documents that such a bidder intends sub-contracting more than 25% of the value of the contract to any other enterprise that does not qualify for at least the points that such a bidder qualifies for, unless the intended sub- contractor is an EME that has the capability and ability to execute the sub-contract.

4.10 A person awarded a contract may not sub-contract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level than the person concerned, unless the contract is sub-contracted to an EME that has the capability and ability to execute the sub-contract.

5. BID DECLARATION

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

6. B-BBEE STATUS LEVEL OF CONTRIBUTION CLAIMED IN TERMS OF PARAGRAPHS 1.3.1 AND 4.5

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

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

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?
(Tick applicable box)

YES		**NO**	

7.1.1 If yes, indicate:

i) What percentage of the contract will be subcontracted _____%

ii) The name of the sub-Contractor _____

iii) The B-BBEE status level of the sub-Contractor _____

iv) Whether the sub-Contractor is an EME or QSE

(Tick applicable box)

YES		**NO**	

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

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

8. **DECLARATION WITH REGARD TO COMPANY/FIRM**

8.1 Name of Company/Firm: _____

8.2 VAT Registration Number: _____

8.3 Company Registration Number: _____

8.4 **TYPE OF COMPANY/ FIRM**

TYPE OF FIRM (*Tick Applicable Box*)

- ☐ Partnership/ Joint Venture/ Consortium
- ☐ One Person business/ sole propriety
- ☐ Close Corporation
- ☐ Company
- ☐ (Pty) Ltd
- ☐ Other: Specify _____

8.5. **DESCRIBE PRINCIPAL BUSINESS ACTIVITIES**

_____

_____

_____

_____

8.6. **COMPANY CLASSIFICATION**

[*TICK APPLICABLE BOX*]

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional Service Provider
- ☐ Other Services Providers e.g., transporter, etc

8.7. **MUNICIPAL INFORMATION**

Municipality where business is situated: _____

_____

Registered Account Number: _____

Stand Number: _____

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

8.9. I/we, the undersigned, who is / are duly authorized to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.3.1 and 4.5 of the foregoing certificates, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

8.9.1. The information furnished is true and correct;

8.9.2. The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

8.9.3. In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.3.1 and 4.5, the Contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;

8.9.4. If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –

i. disqualify the person from the bidding process;

ii. recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;

iii. cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

iv. recommend that the bidder or Contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

v. forward the matter for criminal prosecution.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

WITNESSES

1 _____ _____

Date

2 _____ **Address**

_____

_____

_____

_____

_____

_____

T2.2.22: Local Production and Content Certificate

MBD 6.2

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

Before completing this declaration, bidders must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2017, the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:2011 (Edition 1) and the Guidance on the Calculation of Local Content together with the Local Content Declaration Templates [Annex C (Local Content Declaration: Summary Schedule), D (Imported Content Declaration: Supporting Schedule to Annex C) and E (Local Content Declaration: Supporting Schedule to Annex C)].

1. **General Conditions**

1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.

1.2. Regulation 8.2 prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.

1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two-stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.

1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.

1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

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

Where

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

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

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

1.6. A bid may be disqualified if this Declaration Certificate and the Annex C (Local Content Declaration: Summary Schedule) are not submitted as part of the bid documentation;

2. **The stipulated minimum threshold(s) for local production and content (refer to Annex A of SATS 1286:2011) for this bid is/are as follows:**

Description of services, works or goods	**Stipulated minimum threshold**
_____	_____ %
_____	_____ %
_____	_____ %

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

YES		NO	

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

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

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

Currency	**Rates of exchange**
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

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

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

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

IN RESPECT OF BID NO. _____

ISSUED BY: (Procurement Authority / Name of Institution): _____

_____

NB

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

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

I, the undersigned, _____ (full names),

do hereby declare, in my capacity as _____

of _____
(name of bidder entity),

the following:

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

(b) I have satisfied myself that:

(i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and

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

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

If the bid is for more than one product, the local content percentages for each product contained in Declaration C shall be used instead of the table above.

The local content percentages for each product have been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

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

(e) I understand that the awarding of the bid is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286:2011, may result in the Procurement Authority / Institution imposing any or all of the remedies as provided for in Regulation 14 of the Preferential Procurement Regulations, 2017 promulgated under the Preferential Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

WITNESSES

Name & Surname _____ Signature _____

Name & Surname _____ Signature _____

T2.2.23: Contract Form

MBD 7.2

Contract Form – Rendering of Services

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

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

1. I hereby undertake to render services described in the attached tendering documents to (name of the institution) _____

   _____ in accordance with the requirements and task directives / proposals specifications stipulated in Tender Number _____ at the price/s quoted. My offer(s) remain(s) binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the tender.

2. The following documents shall be deemed to form and be read and construed as part of this agreement:

   (i) Tendering documents, *viz*
   - Invitation to tender;
   - Tax clearance certificate;
   - Pricing schedule(s);
   - Filled in task directive/proposal;
   - Preference claims for Broad Based Black Economic Empowerment Status Level of Contribution in terms of the Preferential Procurement Regulations 2011;
   - Declaration of interest;
   - Declaration of Tenderer's past SCM practices;
   - Certificate of Independent Tender Determination;
   - Special Conditions of Contract;

   (ii) General Conditions of Contract; and

   (iii) Other (specify)

3. I confirm that I have satisfied myself as to the correctness and validity of my tender; that the price(s) and rate(s) quoted cover all the services specified in the tendering documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfilments of this contract.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

5. I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other tender.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

WITNESSES

Name & Surname _____ Signature _____

Name & Surname _____ Signature _____

T2.2.23: Contract Form *(Continued)*

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

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

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

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

Signed at _____ on _____

Name & Surname (Print) _____

Signature _____

WITNESSES

Name & Surname _____ Signature _____

Name & Surname _____ Signature _____

Date _____

T2.2.24: Declaration of Abuse of Supply Chain Management

MBD 8

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1 This Municipal Bidding Document must form part of all bids invited.

2 It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

3 The bid of any bidder may be rejected if that bidder, or any of its directors have:

a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
b. been convicted for fraud or corruption during the past five years;
c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).

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

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

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

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) _____

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

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

Signed _____ Date _____

Position _____

Name of Tenderer _____

T2.2.25: Certificate of Independent Bid Determination

MBD 9

1. This Municipal Bidding Document (MBD) must form part of all bids[1] invited.

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

3. Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:

   a. Take all reasonable steps to prevent such abuse;

   b. Reject the bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and

   c. Cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.

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

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

[1] Includes price quotations, advertised competitive bids, limited bids and offers.

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.25: Certificate of Independent Bid Determination *(continued)*

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

_____

(Bid Number and Description)

in response to the invitation for the bid made by:

_____

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of: _____that:

(Name of Bidder)

1. I have read and I understand the contents of this Certificate;

2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and complete in every respect;

3. I am authorized by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;

4. Each person whose signature appears on the accompanying bid has been authorized by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;

5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder, who:

    (a) has been requested to submit a bid in response to this bid invitation;
    (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
    (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder.

6. The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium[3] will not be construed as collusive bidding.

7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:

   a) prices;
   b) geographical area where product or service will be rendered (market allocation)
   c) methods, factors or formulas used to calculate prices;
   d) the intention or decision to submit or not to submit, a bid;
   e) the submission of a bid which does not meet the specifications and conditions of the bid; or
   f) bidding with the intention not to win the bid.

8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.

9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

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

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.26: Declaration Form

Section 38: Declaration Form

Having examined the BID and the general conditions thereto, I/we hereby certify that the bid price in the bid schedules and the preference points claimed are correct.

I/We furthermore certify that I/we/the Company comply/complies with the issues around Section 38 of the Supply Chain Management Policy inter alia:

IF ALL IS IN PLACE IN RESPECT OF THE CONTRACTUAL ISSUES LISTED IN THE TABLE BELOW; THE ANSWER SHOULD BE YES. ATTACH SUPPORTING INFORMATION IF ANY OF THE ANSWERS IS NO.

Note that the Municipality's Procurement Section will verify the statements. I/we certify the following:

No.	CONTRACTUAL ISSUES	YES	NO
1.	In terms of **Section 38 (1) (c**) that the Bidder or any of the Directors is not listed as a person prohibited from doing business with the Public Sector		
2.	In terms of **Section 38 (1)(d) (i)** that the Bidder or any of the Directors does not owe rates and taxes or Municipal service charges to any Municipality that is in any arrears for more than three (3) months. Copies of the latest Municipal service charges statement of the Bidder and the Directors must be attached to the tender/bid document		
3.	In terms of **Section 38 (1) (d) (ii)** that the Bidder or any of the Directors has not failed to perform satisfactorily on a previous/previous contract/s with the Municipality or any organ of state.		
4.	In terms of **Section 38 (i) (9)** that the Bidder or any of the Directors has not been convicted for fraud or corruption during the past five (5) years		
5.	In terms of **Section 38 (i) (9) (iv)** that the Bidder or any of the Directors has not been listed in the Register of Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, (Act No. 12 of 2004).		

_____ _____

SIGNATURE OF BIDDER DATE

_____

FULL NAME AND SURNAME OF BIDDER IN BLOCK LETTERS

COMPANY NAME: _____

PHYSICAL ADDRESS: _____

TELEPHONE NUMBERS:_____

E-MAIL ADDRESS: _____

WITNESS 1: _____ WITNESS 2: _____

T2.2.27: Municipal Utility Account

DECLARATION BY THE TENDERER

I the undersigned _____, has been duly

authorized to sign all documents with the Tender for Contract Number _____on

behalf of _____ hereby make a
(Referred to herein as “the Bidder”)

declaration as follows:

1. I declare that the bidder and /or any of its director(s) / member(s) does not owe the municipality, or any other municipality and/or municipal entity any amount which is in arrears in respect of any municipal rates and taxes or municipal service charges.

2. I understand and accept that in the event that this declaration is proved to be false, the bid shall be rejected forthwith. All other rights of the municipality (including but not limited to the right to claim damages where applicable) shall remain reserved in full.

APPEND MUNICIPAL UTILITY ACCOUNTS IN THE RETURNABLE ATTACHMENTS - (not older than three months)

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.28: Size of Enterprise

Size of enterprise and current workload

What was your turnover in the previous financial year? _____

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

Tenderer must append to the returnable attachments a three-year audited financial statement.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.29: Programme of Works

Tenderer must append to the returnable attachments a proposed programme of works in MS Projects or Excel format.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.30: Proposed Cash Flow

Tenderer must append to the returnable attachments a preliminary cash flow MS Projects or Excel format.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.31: Certificate of Good Standing

Tenderer must append to the returnable attachments a Certificate or Letter of Good Standing with Compensation Commissioner or Federated Employers Mutual Assurance (FEMA).

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

T2.2.32: Project Structure

Notes to Tenderer:

1. The intention of this form is to demonstrate the Tenderer's project structure, as well as the lines of responsibility between members of the project team and between the project team and the overall company structure. The Tenderer must attach his own organogram to this form.

2. Tenderers which are large companies may simplify the organogram by 'rolling up' portfolios e.g., combining directors/associates into one box of the organogram. However, the individual positions of the key personnel within the structure must still be shown.

3. Joint Venture tenders will require each element of the venture to submit separate organograms that show the individual structure of each member company and the lines of responsibility of the proposed personnel involved in the project. In addition, there must also be a combined organogram that indicates how the joint venture itself will function and the proposed share of the work. Joint Venture Tenderers shall note that the share of work indicated will be used in the analysis of such a Tenderers preference proposed on returnable form D1, and that if awarded the share of work shall become a contractual obligation between the members of the joint venture.

4. State the city or town where the company's head office is located. The locality of regional or satellite office, regardless of degree of autonomy or size is not required. Only submit the number of offices other than the head office. Do not count offices outside RSA

5. Registered professional engineers, technicians or technologists means those who are involved in the built industry as well as allied fields such as environmental professionals. Registered professionals of other disciplines (e.g. mechanical) are considered as employees only.

6. **Tenderers must append to the returnable attachments the organogram as per above guidelines.**

ITEM	COMPNAY 1	COMPNAY 2
Head Office: (No)		
Other Offices: (No)		
Registered (No)		
Professionals: Total Employees: (No)		
%Share in JV Agreement		

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

T2.2.33: Declaration of Tenderer's Litigation History

Note to Tenderer:

The Tenderer shall list below details of any litigation with which the Tenderer (including its directors, shareholders or other senior members in previous companies) has been involved with any organ of state or state department within the last ten years. The details must include the year, the litigating parties, the subject matter of the dispute, the value of any award or estimated award if the litigation is current and in whose favor the award, if any, was made.

CLIENT	OTHER LITIGATING PARTY	DISPUTE	AWARD VALUE	DATE RESOLVED

Insert additional pages if more space is needed.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

C1 AGREEMENTS AND CONTRACT DATA

C1.1 Form of Offer and Acceptance

C1.2 Contract Data

C1.3 Form of Guarantee

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

C1.1 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:

Appointment of a Contractor for the Construction of Frisgewaagt Internal Roads and Stormwater Phase 1 in Ward 6

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

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

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

_____

_____

_____

Rand (in words);

R _____ (in figures).

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

Signature: _____ Date: _____

Name: _____

Capacity: _____

for the tenderer
(Name and address of organization): _____

_____

_____

Name of witness: _____ signature: _____

ACCEPTANCE

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

The terms of the contract are contained in:

Part 1 Agreements and Contract Data (which includes this Agreement)
Part 2 Pricing Data
Part 3 Scope of Work
Part 4 Site information
Part 5 Additional Documentation

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 4 above.

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

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

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

FOR THE EMPLOYER: **Tswaing Local Municipality**
Cnr General Delarey and Government Streets,
Delareyville,
2770

Signature: _____ Date: _____

Name: _____

Capacity: _____

Name of witness: _____

Signature: _____ Date: _____

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender.

2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid becomes the subject of agreements reached during the process of Offer and Acceptance; the outcome of such agreement shall be recorded here.

3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract, shall also be recorded here.

4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

a) Subject _____
Details _____

b) Subject _____
Details _____

c) Subject _____
Details _____

d) Subject _____
Details _____

e) Subject _____
Details _____

f) Subject _____
Details _____

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the Offer agreed by the Tenderer and the Employer during this process of Offer and Acceptance. It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

FOR THE TENDERER:

Signature: _____ Date: _____

Name: _____

Capacity: _____

for the tenderer
(Name and address of organization): _____

_____

_____

Name of witness: _____ signature: _____

FOR THE EMPLOYER: **Tswaing Local Municipality**
Cnr General Delarey and Government Streets,
Delareyville,
2770

Signature: _____ Date: _____

Name: _____

Capacity: _____

Name of witness: _____

Signature: _____ Date: _____

C1.2 CONTRACT DATA

PART 1: DATA PROVIDED BY THE EMPLOYER

CONDITIONS OF CONTRACT

The Conditions of Contract are the *General Conditions of Contract Third Edition (2015)* published by the South African Institution of Civil Engineering. Copies of these conditions of contract may be obtained from the South African Institute of Civil Engineering.

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

Part 1: Data Provided by the Employer

Clause	Contract Data
1.1.1.5	*Replace the contents of Clause 1.1.1.5 with the following:* The "Commencement Date" means the date on which the contactor receives a written instruction from the Employer to commence with the Works. The instruction to commence with the works will not be issued later than 28 days from the date that the Agreement made in terms of the Form of Offer and Acceptance comes into effect.
1.1.1.13	The Defects Liability Period for the Works shall be 365 days.
1.1.1.14	*Add the following to the end of this definition:* This clause shall apply *mutatis mutandis* to any portion or phase of the Works that may be described in the Scope of Works or in the Contract Data, or agreed subsequently between the Contractor and the Employer, and committed to writing. The time for achieving practical completion is Eight (08) Months.
1.1.1.15	The Employer is Tswaing Local Municipality.
1.1.1.16	The Engineer means any Director, Associate or Professional Engineer appointed generally or specifically by the management of the Employer to fulfil the functions of the Engineer in terms of the Conditions of Contract.
1.1.1.26	The pricing strategy is Re-measurement Contract.
1.2.1	*Add the following to the clause:* 1.2.1.3 Sent by facsimile, electronic or any like communication irrespective of it being during office hours or otherwise. 1.2.1.4 Posted to the Contractor's address and delivered by the postal authorities. 1.2.1.5 Delivered by a courier service and signed for by the recipient or his representative.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Clause	Contract Data
1.2.1.2	The address of the Employer is: **Tswaing Local Municipality** C/o General Delarey and Government Streets, **Delareyville**, 2770 P O Box 24, **Delareyville**, 2770 Tel: +27 (53) 948 0900 Fax: +27 (53) 948 1500
1.3.6	*Add the following new Clause:* The copyright in all documents, drawings and records (prepared by the Engineer) related in any manner to the Works shall vest in the Employer or the Engineer or both (according to the dictates of the Contract that has been entered into by the Engineer and the Employer for the Works), and the Contractor shall not furnish any information in connection with the Works to any person or organization without the prior approval of the Employer to this effect.
3.1.3	The Engineer is, in terms of his appointment by the Employer for the design and administration of the Works included in the Contract, required to obtain the specific approval of the Employer for the execution of the following duties: 3.1.3.1 The issuing of an order to suspend the progress of the Works, the extra cost resulting from which order is to be borne by the Employer in terms of Clause 5.11 or the effect of which is liable to give rise to a claim by the Contractor for an extension of time under Clause 5.12 of these conditions. 3.1.3.2 The issuing of an instruction or order to vary the nature or quantity of the Works in terms of Clause 6.3, the estimated effect of which will be to increase the Contract Price by an amount exceeding R50 000, the evaluation of all variation orders in terms of Clause 6.4 and the adjustment of the sum(s) tendered for General Items in terms of Clause 6.11. 3.1.3.3 The approval of any claim submitted by the Contractor in terms of Clause 10.1.

Clause	Contract Data
4.1.2	*Add the following to the clause:* The Contractor shall provide the following to the Engineer for retention by the Employer or his assignee in respect of all works designed by the Contractor: 4.1.2.1 a Certificate of Stability of the Works signed by a registered Professional Engineer confirming that all such works have been designed in accordance with the appropriate codes of practice. 4.1.2.2 proof of registration and of adequate and current professional indemnity insurance cover held by the designer(s). 4.1.2.3 design calculations should the Engineer request a copy thereof. 4.1.2.4 Engineering drawings and workshop details (both signed by the relevant professional Engineer), in order to allow the Engineer to compare the design with the specified requirements and to record any comments he may have with respect thereto. 4.1.2.5 "As-Built" drawings in DXF, Auto CAD 3D, and PDF electronic format after completion of the Works. The Contractor shall be responsible for the design of the Temporary Works.
4.3.3	*Add the following new clause:* The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2003 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993). Without limiting the Contractor's obligations in terms of the Contract, the Contractor shall before commencement of the Works or any part thereof, be in the possession of an approved Health and Safety Plan. The Contractor shall submit an approved Health and Safety Plan to the Engineer within 14 days from the date that the Agreement made in terms of the Form of Offer and Acceptance comes into effect.
4.3.4	*Add the following new clause:* **Contractor's liability as mandatory** Notwithstanding any actions which the Employer may take, the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2003, for which he is liable as mandatory. By entering into this Contract, it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37 (2) of the Act.

Clause	Contract Data
4.3.5	*Add the following new clause:* **Contractor to notify Employer** The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and its Regulations following any incident involving the Contractor and/or Sub-Contractor and/or their employees. The Contractor shall notify the Employer in writing of all investigations, complaints or criminal charges which may arise pursuant to work performed under this Contract in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Regulations.
4.3.6	*Add the following new clause:* **Contractor's Designer** The Contractor and his designer shall accept full responsibility and liability to comply with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2003 for the design of the Temporary Works and those part of the Permanent Works which the Contractor is responsible to design in terms of the Contract.
4.3.7	*Add the following new clause:* The Ministerial Determination 4, Expanded Public Works Programme, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice No 949 of 22 October 2010, as appended to these Contract Data as Annexure A, shall apply to works described in the Scope of Work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.
4.10.3	*Add the following new clause:* The Contractor shall use local labour in accordance with the requirements contained within the Scope of Work.
5.3.1	*Add the following:* The documentation required before commencement with Works Execution are: • Health and Safety Plan (Refer to Clause 4.3) • Initial Programme (Refer to Clause 5.6) • A detailed cash flow forecast (Refer to Clause 5.6.2.6) • Security (Refer to Clause 6.2) – 10% of the Contract Value. • Insurance (Refer to Clause 8.6) – Minimum Cover of R 5 million.
5.3.2	*Add the following:* The time to submit the documentation required (Refer to Clause 5.3.1) before commencement with Works execution is 14 days.

Clause	Contract Data
5.4.2	The access and possession of Site shall not be exclusive to the Contractor but as set out in the Scope or Works and/or Site information.
5.6.1	*Add the following to the clause:* In this regard the Contractor shall have regard for the phases and sub-phases (if applicable) for the Development, which shall also be the order in which the Permanent Works shall be constructed, unless otherwise agreed between the parties and committed to writing. If phased construction is applicable, the phases and sub-phases will be described in the Specifications and/or will be indicated on the Phasing Plan which forms part of the Drawings.
5.7.1	*Delete the last paragraph of the clause and replace with the following:* No such instruction by the Engineer to expedite progress shall be the subject of additional compensation to the Contractor unless the instruction explicitly states that the Contractor is entitled to additional compensation, and cites the amount of such compensation or the basis upon which it is to be determined.
5.8.1	The non-working days are Sundays. Special non-working days shall be all South African Statutory holidays and the official building holidays (which commences on 16 December and ends on 13 January).
5.12.3	*Delete the contents of the clause and insert the following:* If an extension of time is granted, other than an extension resulting from abnormal rainfall in terms of Clause 5.12.5, the Contractor shall be paid such additional time-related General Items as are appropriate having regard to any other compensation which may already have been granted in respect of the circumstances concerned.
5.12.5	*Add the following new clause:* **Extension of time due to Abnormal Rainfall** Extension of time for completion of the Contract shall be allowed in the event of abnormal rainfall in accordance with the following formula: $V = (N_w - N_n) + (R_w - R_n)/20$ ***Where**:* V = Extension of time in calendar days for the calendar month under consideration Nw = Actual number of days during the calendar month under consideration on which a rainfall of 10mm and more is recorded. Rw = Actual total rainfall in mm recorded during the calendar month under consideration

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Clause	Contract Data

Nn = Average number of days, derived from rainfall records, on which a rainfall of 10mm and more was recorded during the relevant calendar month as per the data tabulated hereinafter

Rn = Average total rainfall in mm for the relevant calendar month, derived from rainfall records, as tabulated hereinafter

Where the extension of time due to abnormal rainfall has to be calculated for portion of a calendar month, pro rata values shall be used. Should V be negative for any particular month, and should its absolute value exceed the corresponding value of Nn, then V shall be taken as being equal to minus Nn. The total extension of time to be granted shall be the taken as being equal to minus Nn. The total extension of time to be granted shall be the algebraic sum of all the monthly extensions, provided that if this total is negative then the time for completion shall not be reduced due to subnormal rainfall.

Rainfall records for the period of construction shall be taken on Site. The Contractor shall provide and install all the necessary equipment for accurately measuring the rainfall. The Contractor shall also provide, erect and maintain a security fence plus gate, padlock and keys at each measuring station, all at his own cost. The Engineer or his Representative shall take and record the daily rainfall readings. The Contractor shall be permitted to attend these readings, in the company of the Engineer's Representative. Access to the measuring gauge(s) shall at all times be under the Engineer's control. The rainfall records applicable to this Contract are those recorded at Weather Station Tswaing ARG 0511/5234. The following values of Nn and Rn shall apply:

Month	Rn (mm)	Nn (days)
January	130,1	4
February	94,2	3
March	75,1	2
April	60,3	2
May	9,8	0
June	5,9	0
July	1,6	0
August	7,2	0
September	18,8	0
October	57,5	2
November	89,4	3
December	105,8	3
TOTAL	**655,7**	**19**

Clause	Contract Data
	No adjustment to the total for time-related preliminary and general items will be applicable for any automatic extension of time for completion granted in terms of this clause.
5.13.	*Delete the contents of the clause and insert the following:* 5.13.1 If the Contractor fails by the Due Completion Date to complete the Works, or any specific portion thereof that is identified in the Scope of Works to the extent which entitles him in terms of Clause 5.14.2 to receive a Certificate of Practical Completion for the Works, then the Contractor shall be liable to the Employer for the sum(s) stated below as (a) penalty(ies) for every day which shall elapse between the Due Completion Date for the Works or the specific portion of the Works and the actual Date of Practical Completion of the Works or of the specific portion. **The penalty for delay shall be: R2 500-00 per calendar day.** 5.13.2 If before the issue of a Certificate of Practical Completion for the whole of the Works, or for any specific portion thereof that is identified in the Scope of Works, any further part of the Works has been: 5.13.2.1 certified as complete in terms of a Certificate of Practical Completion; or 5.13.2.2 occupied or used by the Employer, his agents, employees or other Contractors (not being employed by the Contractor); then the appropriate penalty for delay referred to in Clause 5.1.3.1 above shall be reduced by the amount which is determined by the Engineer to be appropriate under the circumstances. 5.13.3 The imposition of penalties in terms of Clause 5.13.1 shall not relieve the Contractor from his obligation to complete the Works, nor from any of his obligations and liabilities under the Contract. 5.13.4 All penalties for which the Contractor becomes liable in terms of Clause 5.13.1 shall be accumulative. The Employer may, without prejudice to any other method of recovery, deduct the amounts of all such penalties from any monies in his possession that are or may become due to the Contractor. 5.13.5 The imposition of any penalties in terms of Clause 5.13.1 shall not limit the right of the Engineer of the Employer to act in terms of Clause 9.2.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Clause	Contract Data
5.13.4	*Add the following new Clause:* If the Contractor shall, without the prior written permission of the Engineer, in respect of any portions of the Works which are prescribed in the Scope of Work to be executed using labour intensive construction methods, or for which the maximum size and capacity of mechanical plant and equipment is restricted in terms of the Contract: • fail to execute such portions of the Works, or any parts thereof, utilizing labour intensive construction methods strictly in accordance with the provisions of the Contract; or • utilize in the execution of such portions of the Works, or any parts thereof, mechanical plant or equipment which is in conflict with the terms of the Contract; or • utilize in the execution of such portions of the Work, workers drawn from sources other than those allowed in terms of the Contract. Then the Contractor shall be liable to the Employer for the percentage stated below of the value of the Works so executed in conflict with the provisions of the relevant Scope of Work, as a penalty for non-compliance. The penalty for non-compliance is: 15% of the value of Works specified. The imposition of penalties in terms of this clause shall not relieve the Contractor from his obligation to complete the Works, nor from any of his obligations and liabilities under the Contract.
5.16.3	The Latent defect period is 10 years after the issue of the Final Approval Certificate in terms of Clause 15.6.1
6.1.1	*Add the following to the clause:* Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.
6.2.1	*Add the following to this Clause:* The amount of the Surety will be 10% of the Contract Price (including Value Added Tax) at the time that the Agreement comes into effect. The guarantee shall remain valid until the issue of the Certificate or Certificates of Completion in respect of the whole of the Permanent Works. The Pro Forma Form of Guarantee bound into the General Conditions of Contract is replaced by the Form of Guarantee (Deed of Surety ship) which is included in Part C1.3 of this document. This approval or otherwise shall be based upon legal opinion to be provided by the Engineer.
6.8.2	The application of a Contract Price Adjustment factor will not apply to this Contract. “Refer to Contract Price Adjustment Schedule for details”.

Clause	Contract Data
6.8.3	Price Adjustments for variations in the cost of special materials will be allowed. "The Contractor will be required to provide full details in Part 2 of the Contract Data".
6.8.4	In line 8 delete the words "between the Employer and the Contractor".
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%.
6.10.3	The percentage retention is 10%. The Limit of Retention Money is 5% of the Contract Price at the time of the Agreement made in terms of the Form of Offer and Acceptance coming in to enforcement.
6.10.4	In line 4 delete the word "said" and insert the word "correct".
6.10.9	*Replace the first sentence of the clause with the following:* Within 14 days after the date of final approval as stated in the Final Approval Certificate, the Contractor shall deliver to the Engineer a final statement claiming final invoice of all money (ies) due to him for additional work ordered by the Engineer after the Certificate of Completion date (save in respect of matters in dispute, in terms of Clause 58, and not yet resolved) plus the remainder of retention monies (subject to Clause 49.5.1) retained by the Employer.
6.11.1.3	Delete "15 %" and replace it with "25%".
8.6.1.3	The limit of indemnity for liability insurance is R5 000 000 per event, the number of events being unlimited.
10.5.3	The number of Adjudication Board Members to be appointed is 1 (One).

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

CONTRACT PRICE ADJUSTMENT SCHEDULE	
Clause	**Contract Data**
1.1	The application of a Contract Price Adjustment factor will not apply to this Contract. The price adjustment formula provided in the General Conditions of Contract will apply, together with the following coefficients and the definition of the relevant indices indicated below; X = 0,10 a = 0.15 b = 0.20 c = 0.55 d = 0.1 *Add the following:* Contract Price Adjustment is not applicable to the contract.
1.2	Replace the definitions of the relevant indices with the following: "L" is the "Labour Index" and shall be the "Consumer Price Index" as published in the Consumer Price Index Statistical Release P0141 (Table A – Consumer Price Index and percentage change according to Tswaing of Statistics South Africa. "P" is the "Plant Index" and shall be the "Civil Engineering Plant" index as published in the Production Price Index Statistical Release P0142.1 (Table 12 – Price Index for selected materials) of Statistics South Africa. "M" is the "Materials Index" and shall be the "Civil Engineering" index as published in the Production Price Index Statistical Release P0142.1 (Table 11 – Production Price for materials used in certain industries) of Statistics South Africa. "F" is the "Fuel Index" and shall be the "Diesel fuel – Coast and Witwatersrand" index as published in the Production Price Index Statistical Release P0142.1 (Table 12 - Production Price for selected materials) of Statistics South Africa.
1.3	The base month shall be the month prior to the closing date of this tender.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

PART 1: DATA PROVIDED BY THE CONTRACTOR

The Contractor is advised to read the *General Conditions of Contract Third Edition (2015)*, published by the South African Institution of Civil Engineering, in order to understand the implications of this Data which is required to be completed.

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

<table>
<tr><th>Clause</th><th>Contract Data</th></tr>
<tr><td>1.1.1.9</td><td>The Name of the Contractor is:
_____
_____</td></tr>
<tr><td>1.2.1.2</td><td>The Address of the Contractor is:
_____
_____</td></tr>
<tr><td>6.2.1</td><td>The security to be provided by the Contractor shall be one of the following:
<table>
<tr><th>Type of Security</th><th>Contractor's choice. Indicate "Yes" or "No"</th></tr>
<tr><td>Cash deposit of 10% of the Contract Sum (Incl. VAT).</td><td></td></tr>
<tr><td>Performance guarantee of 10 % of the Contract Sum (Incl. VAT).</td><td></td></tr>
<tr><td>Retention of 10% of the value of the Works (Incl. VAT).</td><td></td></tr>
<tr><td>Cash deposit of 5% of the Contract Sum (Incl. VAT) plus retention of 5% of the value of the Works (Incl. VAT).</td><td></td></tr>
<tr><td>Performance guarantee of 5% of the Contract Sum (Incl. VAT) plus retention of 5% of the value of the Works (Incl. VAT).</td><td></td></tr>
</table></td></tr>
<tr><td>6.8.3</td><td>The variation in cost of special materials is:
<table>
<tr><th>Special Material</th><th>Method</th><th>Price for Base Month</th></tr>
<tr><td></td><td></td><td></td></tr>
</table></td></tr>
</table>

END OF SECTION

C1.3 PRO FORMA PERFORMANCE GUARANTEE

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

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

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means: _____

"Physical" address: _____

"Employer" means: _____

"Contractor" means: _____

"Engineer" means: _____

"Works" means: _____

"Site" means: _____

Pro-Forma

"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 of Completion of the Works as defined in the Contract.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.

2. The Guarantor's period of liability shall be from and including the date of issue of this performance Guarantee and up to and including the Expiry Date or the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed sum, whichever occurs first. The Engineer and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

3. The Guarantor hereby acknowledges that:

3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;

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:

4.1 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;

4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor 's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;

4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.

5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum or the Full outstanding balance upon receipts of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:

5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or

5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the performance Guarantee is called up in terms of 5; and

5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or 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 term 1.

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

7. Where the Guarantor has made payment in term 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 Employer.

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 services 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 after it has expired.

13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.

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) _____

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

WHEREAS _____
(Hereinafter referred to as "the Employer")

at _____

entered into, on the _____ Day of _____ 2022, at _____

a Contract with _____
(Hereinafter called "The Contractor")

at _____

for the construction of _____

_____

Pro-Forma

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

AND WHEREAS _____

_____
has/have at the request of the Contractor, agreed to give such security;

NOW THEREFORE WE, _____
do hereby guarantee and bind ourselves jointly and severally as Sureties and Co-principal Debtors to the Employer under renunciation of the benefits of division and excursion 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 authorised and/or contemplated by the terms of the said contract, and/or to agree to any modifications, variations, alterations, directions or extensions of the Due Completion Date 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 Due Completion Date which the Employer may make, give, concede or agree to under the said Contract.
2. The Employer shall be entitled, without reference to us, to release any securities held by it, and to give time to or compound or make any other arrangement with the Contractor.

3. 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.

4. Our total liability hereunder shall not exceed the sum of (R _____).

5. We hereby choose *domicilium citandi et executandi* for all purposes arising hereof at

_____

_____

IN WITNESS WHEREOF this guarantee has been executed by us at _____

on this _____ day of _____ 20____.

As witnesses:

1. _____ Signature _____

2. _____ Duly authorised to sign on behalf of

_____

_____

_____

Address:_____

_____

_____

_____

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

C2 PRICING DATA

C2.1 Pricing Instructions

C2.2 Bill of Quantities

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

C2.1 PRICING INSTRUCTIONS

1. Measurement and payment shall be in accordance with the relevant provisions of COLTO 1998 Edition for Road and Bridgework for State Road Authorities referred to in the Scope of Work. The Preliminary and General items shall be measured in accordance with the provisions of COLTO 1200, General Requirements and Provisions

2. The units of measurement described in the Bills of Quantities are metric units. Abbreviations used in these Bills of Quantities are as follows:

%	=	percent
h	=	hour
ha	=	hectare
kg	=	kilogram
kl	=	kilolitre
km	=	kilometre
km-pass	=	kilometre-pass
kPa	=	kilopascal
kW	=	kilowatt
l	=	litre
m	=	metre
mm	=	millimetre
m^2	=	square metre
m^2-pass	=	square metre-pass
m^3	=	cubic metre
m^3-km	=	cubic metre-kilometre
MN	=	meganewton
MN.m	=	meganewton-metre
MPa	=	megapascal
No.	=	number
Prov sum	=	Provisional sum
PC sum	=	Prime Cost sum
R/only	=	Rate only
sum	=	lump sum
t	=	ton (1000 kg)
W/day	=	Work day
Pers. Days	=	person days

3. Descriptions in the Schedule of Quantities are abbreviated. The schedule has been drawn up generally in accordance with the latest issue of "Civil Engineering Quantities". Should any requirement of the measurement and payment clause of the applicable Standardized Specification, or the Project Specification, or the Particular Specification(s) conflict with the terms of the Schedule or, when relevant "Civil Engineering Quantities", the requirement of the Standardized, Project or Particular Specification, as applicable, shall prevail.

4. The Tender Data, the Scope of Work and the Drawings are to be read in conjunction with the Schedule of Quantities.

   a. The Schedule comprises items covering the Contractor's profit and costs of general liabilities and of the construction of temporary and permanent Works.

   b. Although the Tenderer is at liberty to insert a rate of his own choosing for each item in the Schedule, his attention is drawn to the fact that the Contractor has the right, under various circumstances, to payment for additional works carried out and that the Engineer is obliged to base his assessment of the payment to be paid for such additional work on the rates inserted in the Schedule by the Contractor.

   c. Relevant Clause of each Standardized Specification and the measurement and payment clause of each Particular Specification, read together with the relevant clause of the Project Specification, set out what ancillary or associated activities are included in the rate for the operations specified.

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

6. The prices and rates in these Bills of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.

7. 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. The prices and rates shall be exclusive of Value Added Tax. 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 tender is based.

8. It will be assumed that prices included in these Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders. (Refer to www.stanza.org.za or www.iso.org for information on standards)

9. Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items.

10. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.

11. 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.

12. Reasonable compensation will be received where no pay item appears in respect of work required in the Bills of Quantities in terms of the Contract and which is not covered in any other pay item.

13. The short descriptions of the items of payment given in these Bills of Quantities are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.

14. Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the **COLTO** Standardized Specifications.

15. All prices and rates entered in the Bill of Quantities must be **excluding Value Added Tax (VAT)**. VAT will be added last on the summary page of the Bill of Quantities.

16. A price or rate is to be entered, in **BLACK INK**, against each item in the Schedule of Quantities.

17. In the event of the Tenderer failing to price any item it will be held that the Tenderer has made adequate allowance under other items for all labour, material and costs required for the execution, not only of the quantum of work covered by the unpriced item but also for any increase in the said quantum which may have to be undertaken during the course of the Contract.

Signed _____ Date _____

Name & Surname _____ Position _____

Name of Tenderer _____

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

C2.2 BILL OF QUANTITIES

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE A : GENERAL
SECTION 1200
GENERAL REQUIREMENTS AND PROVISIONS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	GENERAL REQUIREMENTS AND PROVISIONS				
B12.01	**Training:**				
	(a) Accredited Engineering and Technical skills Training	Prov Sum	1,00	100 000,00	-
	(c) Training venue	Prov Sum	1,00	15 000,00	-
	(d) Remuneration (stipent of students undergoing engineering and technical skills training)	Prov Sum	1,00	65 000,00	-
	(e) Contractor's handling costs, profit and all other charges in in respect of Subitems 12.01(a)				
	(i) Engineering & Technical skills	%	100 000,00		-
	(h) Transport and accommodation of students during training where it is not possible to undertake the training in close proximity to the site.	Prov Sum	1,00	20 000,00	-
	(i) Contractor's handling costs, profit and all other charges in respect of subitem (h)	%	20 000,00		-
B12.02	**Provision for Special Services - Accredited Professionals to be nominated and appointed by the Employer.**				
	(a) Geo-Technical Engineering and Quality Control	Prov Sum	1,00	200 000,00	-
	(b) Engineering Survey, setting out and levels control	Prov Sum	1,00	100 000,00	-
	(c) Handling cost and Profit in respect of subitem B12.02 (a) and (b)	%	300 000,00		-
B12.03	**Compliance with OHS Act and Regulations (Including the Construction Regulations 2014)**				
	(a) Fixed obligations for the duration of the contract	Lump Sum	1,00		-
	(b) Time related obligations for the duration of the contract	Month	8,00		-
B12.04	**Contractors' initial obligations in respect of Heavy Duty Personal Protective Equpment (PPE). All PPE must be SABS or any recognized authorities' approved. Colours branding and logos to be finalized with the Employer**				
	(a) Conti two piece work suit with aluminium zips on the jacket and trousers. (i). Triple stitched trousers in the back, leg and front areas with elastic waist band, two side pockets and one at the back; jacket with two side pockets and pouched breast pocket with reinforcing triple stitching.	Pair	20,00		-
	(b) Construction safety boots (frams or profit manufacturer)	Pair	20,00		-
	(c) Contruction safety helmet or hard hat	No	20,00		-
	(d) Showa blue pvc coated work gloves (mfr. part no: SH06604) or CUT5 leather gloves dotted (code:55MJAXJSI) or impact gloves (code:5ZLSTPV) or any Dromex approved gloves.	Pair	20,00		-
	(e) 3M4800 anti mist safety goggles with clear lenses (mfr. part no: 7134704) or similar approved	Pair	20,00		-
	(f) Value reflective vest with zip and id pocket from Protekta Safety gear.	Pair	20,00		-
	(g) Orange solid relective BiB with reflective cross at back and stripe on the front.	Pair	20,00		-
B12.05	**Submission of the Health and Safety File** The Contractor must submit to the Employer a health and safety plan for approval by the Safety Officer within 14 days of appointment and before commencing with any works on site.	Item	1,00		-
1200	**TOTAL CARRIED FORWARD**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

ITEM		DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		TOTAL BROUGHT FORWARD				-
B12.06		**Occupational Health and Safety Management The Contractor must maintain a full time OHS Management on site as per OHS Act and Regulations including Construction Regulations**				
	(a)	Health and Safety Officer The Health and Safety Officer must be in a possession of a minimum qualifications for construction recognized in the Built and Environment field in construction. (NOSA, SAMTRAC, etc)	Month	8,00		-
B12.07		**Compliance with COVID-19 Regulations and Specifications**				
	(a)	Fixed obligations for the duration of the contract	Lump Sum	1,00		-
	(b)	Time related obligations for the duration of the contract	Month	8,00		-
B12.08		**Contractors' initial obligations in respect of covid-19 pandemic equipments.**				
	(a)	Triple cloth face mask manufactured locally from the affected communities or in the jurisdiction of the Employer.	No	20,00		-
	(b)	Sanitization stations on site or sanitizing equipments, all sanitizers to be SABS Approved.	No	2,00		-
	(c)	Handwashing station in the site camp	No	2,00		-
	(d)	Digital temperature testing hand machine (SABS Approved)	No	2,00		-
	(e)	Records and register files for labourers, visitors and management team (Employer, Consultant and Contractor).	No	2,00		-
B12.10		**Compliance with (Eco) Environmental Management Plan**				
	(a)	Fixed obligations for the duration of the contract	Lump Sum	1,00		-
	(b)	Time related obligations for the duration of the contract	Month	8,00		-
B12.11		**Health and Safety Agent**				
	(a)	Monthly health and safety site audits to be conducted and OHS Plan reviewed by an approved Professional Service Provider and to comply with the OHS Act and Regulations (including Construction Regulations 2014) to be approved by the Employer's Agent or Safety Officer, SACPCMP registered and to be appointed by the Consultant.	Lump Sum	1,00	150 000,00	-
	(b)	Contractor's handling costs, profit and all other charges in respect of Subitem B12,11(a)	%	150 000,00		-
B12.12		**(Eco) Environmental Management Plan and Environmental Compliance Audits for Engineers**				
	(a)	Monthly Environmental Audits to be conducted by an approved Professional Service Providerand to comply with Environmental Act and to be approved by the Employer's Agent or Envirnmental Officer.	Prov sum	1,00	110 000,00	-
	(b)	Contractor's handling costs, profit and all other charges in respect of Subitem B12,12(a)	%	110 000,00		-
B12.13		**Mine Health and Safety The Contractor must obtain all permits from the DME before openning up any borrowpits. All opened borrowpits must be rehabilitated on completion of the project for community safety.**				
LI	(a)	Borrowpit fencing including double gate	m	400,00		-
LI	(b)	Provision of warning signs at the borrowpit	No	10,00		-
	(c)	Borrowpit rehabilitation.	Lump Sum	1,00		-
1200		**TOTAL CARRIED FORWARD**				-

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	TOTAL BROUGHT FORWARD				-
B12.14	**Remuneration of the Project Liaison Officer and members of the Project Liaison Committee:**				
	(a) Project Liaison Officer - CLO	Prov sum	1,00	68 000,00	-
	(b) Project Liaison Committee - Sitting allowance	Prov sum	1,00	19 200,00	-
	(d) Contractor's handling costs, profit and all other charges in respects of Subitems B12.03(a) and (b)				
	(i) Project Liaison Officer	%	68 000,00		-
	(ii) Project Liaison Committee	%	19 200,00		-
B12.15	**Protection, removal, realignment and replacement of services including boundaries**				
	(a) Utility services				
	(i) Relocation of services and payments to service owners	Prov sum	1,00	10 000,00	-
	(ii) Removal and re-erction of fences	Prov sum	1,00	15 000,00	-
	(iii) Handling cost and profit on items (i) and (ii)	%	25 000,00		-
B12.16	**Provision of survey equipment to be used by the Engineer or his Representatives on site.**				
	(i) Automatic level	No	1,00		-
	(ii) Staff	No	1,00		-
	(iii) Survey Assistant	No	1,00		-
	(iv) Measuring wheel	No	1,00		-
	(v) 30m measuring tape	No	1,00		-
B12.17	**Provision of Engineer's services to the Contractor on site**				
	(i) Survey	Prov sum	1,00	45 000,00	-
	(ii) Geotechnical and quality control	Prov sum	1,00	65 000,00	-
	(iii) Handling cost and profit on items (i) and (ii)	%	110 000,00		-
B12.18	**Construction nameboard as per attached drawings**	No	2,00		-
B12.19	**Nominated Sub-Contractors (Provisional)**				
	(i) Appointment of nominated subcontractors	item		1 000 000,00	
	(ii) Management and supervision of nominated subcontractors	%			
1200	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE A : GENERAL
SECTION 1300
CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS				
13,01	**Contractor's General Obligations:**				
	(a) Fixed obligations for the duration of contract	Lump sum	1,00		-
	(b) Value-related obligations for the duration of contract	Lump sum	1,00		-
	(c) Time-related obligations	Month	8,00		-
	NB: The combined Total Tendered Sum for subitems (a), (b) & (c) shall not exceed 15% of the Tendered Sum				
13,02	**Sub Contractors' General Obligations:**				
	(a) Fixed obligations for the duration of contract	Prov sum	-	80 000,00	
	(b) Time-related obligations	Prov sum	-	15 000,00	
	(c) Contractor's handling cost and Profit in respect of subitem 13.02 (a) and (b)	%	-		-
A1303	**Management of the works**				
	(a) The contractor to maintain full time supervision of the works for the duration of the contract.	Lump sum	1,00		-
1300	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE A : GENERAL
SECTION 1400
HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	HOUSING, OFFICES AND LABORATORIES				
14.01	**Office and laboratory accommodation:**				
	(a) Offices (interior floor space only)	m²	20,00		-
	(b) Venue for site meetings	m²	40,00		-
LI	(c) Ablution units	m²	16,00		-
LI	(d) Stores	m²	16,00		-
14.02	**Office and laboratory furniture:**				
	(a) Chairs	number	20,00		-
	(b) Delete "Draughtman's stools" and insert "chairs used during drawings review"	number	2,00		-
	(c) Delete "High chairs for laboratory" and insert "drawings rag or stand with five holding rails"	number	2,00		-
	(d) Desks, complete with drawers and locks	number	3,00		-
	(e) Drawing tables for drawings review	number	3,00		-
	(f) Conference tables	number	2,00		-
14.03	**Office and laboratory fittings, installations and equipment:**				
	(a) Items measured by number:				
	(i) 220/250 volt power points	number	2,00		-
	(ii) 400/231 volt 3-phase power points	number	1,00		-
	(iii) Double 80 watt fluorescent-light fittings complete with ballast and tubes	number	2,00		-
	(iv) Wash-hand basins complete with taps and drains	number	1,00		-
	(v) Fire extinguishers, 9,0 kg all purpose dry powder type, complete, mounted on wall with brackets	number	2,00		-
	(vi) Air-conditioning units with 2,2 kW minimum capacity, mounted and with own power connection	number	2,00		-
	(vii) Heater, space heating type, minimum capacity 1,5 kW	number	2,00		-
	(viii) General-purpose steel cupboards with shelves	number	2,00		-
	(ix) Steel filing cabinets with drawers	number	2,00		-
	(x) Refrigirators	number	1,00		-
	(b) Prime-cost items and items paid for in a lump sum:				
	(i) The provision of a direct independent telephone line/cellphone for the Engineer, including the cost of calls in connection with contract administration and telephone rental	PC sum	1,00	30 400,00	-
	(ii) Handling costs and profit in respect of subitem 14.03(b)(i) above	%	30 400,00		-
	(iii) The provision of fax or e-mail facilities as specified	PC sum	1,00	8 000,00	-
	(iv) Handling costs and profit in respect of subitem 14.03(b)(iii) above	%	8 000,00		-
1400	**TOTAL CARRIED FORWARD**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	TOTAL BROUGHT FORWARD				-
	(c) Items measured by area:				
	(i) Notice boards as specified	m²	1,00		-
14.04	**Car-ports**				
LI	(i) Car ports as specified, at offices and laboratory buildings, COLTO 1998 Edition *(strictly for the use by the Engineer and his staff together with the Employer; the Contractor shall provide his own parking at his costs"*	number	3,00		-
14.05	**Housing for labourers - Provisional**				
	(a) Allow the provisional amount for housing of labourers as specified in COLTO, 1998 Edition	Lump sum	1,00		-
	(b) Ablution unit as specified including provision of wash basins or movable wheel ablution facilities for male and female. The rate shall include maintenance and disinfection chemicals.	number	4,00		-
14,08	**Services:**				
	The provision of water, electricity, low pressure gas, sewerage, septic tanks, sewage and rubbish removal, cleaning sevices, maintenance and repairs, all as specified in COLTO, 1998 Edition clause 1404 including the construction and maintenance of the access roads, footpaths, etc.				
	(a) Services at offices and laboratories:				
	(i) Fixed costs	Lump sum	1,00		-
	(ii) Running costs	month	8,00		-
	(d) Allow the provision amount for labourers' accomodation services on site, eating areas				
	(i) Fixed costs	Lump sum	1,00		-
	(ii) Running costs	month	8,00		-
14.10	**Provision of photostat facilities**				
	Delete "*provision of photostat facilitie* s" and insert the following provisional items which shall remain the property of the Employer on project completion:				
	(a). Allow amount of R 25 000, 00 for a A3/A4 table top toner laser, HP colour printer with scan.	Prov sum	1,00	25 000,00	-
	(b). Allow amount of R 40 000. 00 for NXH98EA.001 Acer swift 7 laptop, Win 11 Pro, SF714-5ZT-77KA or HP Spectre X360, 15,6inch, 4K VHD touch i7 - 10750H.	Prov sum	1,00	40 000,00	-
	(c). Allow R 20 000, 00 for Acer swift 5 core i7 win 11 notebook	Prov sum	1,00	20 000,00	-
	(d). Handling costs and profit in respect of subitems 14.10 (a), (b, and (c) above	%	85 000,00		-
1400	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B: ROADWORKS
SECTION 1500
ACCOMMODATION OF TRAFFIC

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	ACCOMMODATION OF TRAFFIC				
15.01	**Accommodating traffic and maintaining temporary deviations**	km	3,90		-
15.02	**Earthworks for temporary deviations:**				
	(a) Shaping of temporary deviations	km	3,90		-
15,03	**Temporary traffic-control facilities:**				
	(a) Flagmen	man-day	640,00		-
	(b) Portable STOP and GO-RY signs	number	8,00		-
	(e) Road signs, R- and TR-series, 900mm	number	8,00		-
	(f) Road signs, TW-series, 900mm side	number	4,00		-
	(g) Road signs, STW-, DTG-, TGS- and TG-series (excluding delineators and barricades)	m²	20,00		-
	(i) Movable barricade/road sign combination	number	4,00		-
	(j) Traffic cones, (750mm high)	number	30,00		-
15.04	**Relocation of traffic-control facilities**	Lump sum	1,00		-
15.06	**Watering of temporary deviations**	kilolitre	2 000,00		-
15,07	**Blading by road grader of:**				
	(a) Temporary deviations	km-pass	180,00		-
	(b) Existing roads used as temporary deviations	km-pass	110,00		-
1500	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 1700
CLEARING AND GRUBBING

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	CLEARING AND GRUBBING				
	The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.				
	NOTE: Provide rates for all items below				
17,01	**Clearing and grubbing of:**				
	(a) Normal areas				
	(ii) In borrow areas	ha	1,00		-
17,02	**Removal and grubbing of large trees and tree stumps:**				
	(a) Girth exceeding 1 m up to and including 2 m	number	1,00		-
	(b) Girth exceeding 2m up to and including 3m	number	-		-
17,03	Re-clearing of surfaces (on written instruction of the Engineer Only)	ha	1,00		-
17,04	Clearing and grubbing at inlets and outlets of hydraulic structures	m^2	4,00		-
17,05	Cleaning out of Hydraulic structures				
	(a) Pipes with internal diameter up to and including 750mm	m^3	-		-
	(b) Pipes with internal diameter up to and exceeding 750mm	m^3	-		-
	(c) Box culvets up to and including 1.5m vertical dimensions	m^3	4,00		-
	(c) Box culvets up to and exceeding 1.5m vertical dimensions	m^3	-		-
1700	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 2100
DRAINS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	DRAINS *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.*				
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	890,00		-
	(b) Extra over subitem 21.01(a) for excavation in hard material, irrespective of depth	m³	60,00		-
21,02 LI	**Clearing and shaping open drains**	m³	250,00		-
2100	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 2200
PREFABRICATED CULVERTS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PREFABRICATED CULVERTS *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.* ***NOTE: Rate only items, Provide all rates***				
22.01	**Excavation:**				
	(a) Excavating soft material situated within the following depth ranges below the surface level:				
LI	(i) 0 m up to 1,5 m	m³	180,00		-
	(b) Extra over subitem 22.01(a) for excavation in hard material, irrespective of depth	m³	40,00		-
22.02	Backfilling:				
LI	(a) Using the excavated material	m³	60,00		-
LI	(c) Extra over subitems 22.02(a) for soil cement backfilling containing 3% cement*	m³	10,00		-
22.03	**Concrete pipe culverts:**				
	(a) On class A bedding:				
LI	(i) 600mm dia 75D	m	40,00		-
LI	(ii) 675mm dia 75D	m	40,00		-
22,05	Portal and rectangular culverts:				
	(a) Complete with prefabricated floor slabs				
LI	(i) 600mm X 450mm class 100s	m	100,00		-
LI	(ii) 900mm X 450mm class 100s	m	12,00		-
2200	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 2300
CONCRETE KERBING

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	CONCRETE KERBING, CONCRETE CHANNELLING, CHUTES AND DOWNPIPES, AND CONCRETE LININGS FOR OPEN DRAINS *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.*				
23,02	**Concrete kerbing-channelling combination**				
LI	(a) 300mm x 300mm 30Mpa insitu edgebeam	m	60,00		-
LI	(b) Figure 16 heavyduty edgebeam	m	-		-
LI	(c) Figure 8c heavy duty kerb mountable with castle bottom including 25Mpa haunching	m	7 800,00		-
23,07	**Trimming of excavations for concrete-lined open drains:**				
LI	(a) In soft material	m²	320,00		-
23,08	**Concrete lining for open drains:**				
LI	(a) Cast in situ class concrete 30/19 lining in V drains	m³	420,00		-
LI	(b) Class U2 surface finish to cast in situ concrete in V drains	m²	280,00		-
2300	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 3100
BORROW MATERIALS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	BORROW MATERIALS *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.*				
	NOTE: Price must include haulage				
31,01	**Excess overburden in borrow pits for obtaining crushed stone for pavement layers**				
	(a) In all depths but not exceeding 2m and types	m³	10 530,00		-
31,03	**Finishing-off borrow areas in:**				
	(a) Soft material	ha	2,11	-	-
31,04	**Compensation to Landowners**				
	(a) Prime Cost sum for compensation to landowners	PC sum	1,00	140 000,00	-
	(b) Handling cost and profit in respect of sub-item 31.04(a) above	%	140 000,00		-
3100	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 3200
MATERIAL STOCKPILE

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	SELECTION, STOCKPILING AND BREAKING-DOWN THE MATERIAL FROM BORROW PITS, CUTTINGS AND EXISTING PAVEMENT LAYERS, AND PLACING AND COMPACTING THE GRAVEL LAYERS *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.* ***NOTE: Price must include haulage***				
32,06	**Stockpiling of material**	m³	10 530,00		-
3200	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 3300
MASS EARTHWORKS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	MASS EARTHWORKS				
	The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.				
	NOTE: Price must include haulage				
33.04	**Cut to spoil, including unlimited free-haulage material obtained from:**				
	(a) Soft excavation	m^3	10 530,00		-
33.09	**Material bladed to windrow**	m^3	210,60		-
33.10	**Roadbed preparation and the compaction of material:**				
	(b) Compaction to 93% of modified AASHTO density	m^3	3 276,00		-
33,11	**Three roller passes compaction**				
	(a) Vibratory roller	m^2	23 400,00		-
33(a)	**Shallow milling (150mm)**	m^3	-		-
33(b)	**Deep milling (300mm)**	m^3	-		-
3300	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 3400
PAVEMENT LAYERS OF GRAVEL MATERIAL

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PAVEMENT LAYERS OF GRAVEL MATERIAL *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed instructed to utilize such, no payment shall be made*				
	NOTE: Price must include haulage				
34.01	**Pavement layers constructed from gravel take from cut or borrow including free-haul up to 1,0km:**				
	(a) Gravel selected layer compacted to:				
	(i) 95% of modified AASHTO density for a compacted layer thickness of 150 mm	m³	3 276,00		-
	(c) G6/G7 gravel subbase (unstabilized material) compacted to:				
	(i) 97% of modified AASHTO density for a compacted layer thickness of 150 mm	m³	3 276,00		-
	(f) G6/G7 Gravel base (C3 -stabilized material) compacted to:				
	(ii) 98% of modified AASHTO density for a compacted layer thickness of 150 mm	m³	3 276,00		-
3400	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 3500
STABILIZATION

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	STABILIZATION				
	The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.				
35.01	**Chemical stabilization extra over unstabilized compacted layers:**				
	(b) Gravel base 150 mm thick	m³	3 276,00		-
35.02	**Chemical stabilizing agent:**				
	(a) Ordinary Portland cement: **Base**	t	204,62		-
	(i) Shall comply with the requirements of SABS 471. Rapid hardening portlant cement shall not be used.				
35,04	**Provision and application of water for curing**	kl	2 600,00		-
3500	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 5100
PITCHING, STONEWORK AND PROTECTION AGAINST EROSION

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	PITCHING, STONEWORK AND PROTECTION AGAINST EROSION				
	The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.				
	NOTE: Rate only, provide rates				
51,01	**Stone pitching:**				
LI	(a) Plain pitching				
	(i) Method 1	m²	100,00		-
	(ii) Method 2	m²	100,00		-
LI	(b) Grouted stone pitching	m²	300,00		-
5100	**TOTAL CARRIED TO SUMMARY**				-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 5400
GUARDRAILS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	GUARDRAILS				
	The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.				
	NOTE: Rate only, provide rates				
54,01	**Guardrails on timber posts:**				
LI	(a) Galvanized	m	-		-
	(b) Painted	m	-		-
54,02	**End treatments:**				
LI	(a) End wings	number	-		-
LI	(b) Bull noses	number	-		-
LI	(c) End treatments in accordance with the Drawings where single guardrail sections are used	number	-		-
LI	(d) End treatments in accordance with the Drawings where double guardrail sections are used	number	-		-
54,03	**Additional guardrail posts:**				
LI	(a) Timber	number	-		-
54,04	**Reflective plates**	number	-		-
LI					
5400	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 5600
ROAD SIGNS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	ROAD SIGNS *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.*				
A56,11	**Regulatory Signs and Warning Signs**				
	NOTE: Price to include excavation in all class of material, backfill, compaction and material treatment				
LI	(a) Supply and install a complete "STOP SIGNS" with galvanized supports posts including bolds and nuts. The galvanized posts should be engraved "TLM/005/2022/23" while stop signs must reflect the manufacture date and "TLM005/2022/23" at the back. Ref: COLTO and SANS1200.	No	8,00		-
LI	(b) Supply and install a complete "YIELD SIGNS" with galvanized supports posts including bolds and nuts. The galvanized posts should be engraved "TLM/005/2022/23" while yield signs must reflect the manufacture date and "TLM/005/2022/23" at the back.	No	8,00		-
LI	(c) Supply and install complete "200mm * 800mm HAZARD PLATES" with galvanized supports posts including bolds and nuts. The galvanized posts should be engraved "TLM/005/2022/23" while hazard signs must reflect the manufacture date and "TLM/005/2022/23" at the back.	No	12,00		-
5600	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROAD MARKINGS
SECTION 5700
ROAD MARKINGS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	ROAD MARKINGS *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.*				
57,02	**Retro-reflective road-marking paint: Water based paint applied at 0.6 l/ m².** *(Paint to be approved by the Employer and the Engineer first with no additional costs or shop material sample compensation)*				
LI	(a) White lines (broken or unbroken):				
	(i) 100 mm wide	km	3,90		-
	(iii) 200 mm wide	km	3,90		-
LI	(d) White lettering and symbols	m²	12,00		-
57,06	**Setting out and premarking the lines (excluding traffic-island markings, lettering and symbols).**	km	3,90		-
57,07	**Re-establishing the painting unit at the end of the maintenance period**	lump sum	1,00		-
5700	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 5900
FINISHING THE ROAD AND ROAD RESERVE

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	FINISHING THE ROAD AND ROAD RESERVE AND TREATING OLD ROADS				
	The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.				
59,01	**Finishing the road and road reserve**				
	(b) Single carriageway road	km	7,80		-
59,02	**Treatment of old roads and temporary deviations**	km	7,80		-
5900	**TOTAL CARRIED FORWARD TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 7300
CONCRETE BLOCK PAVING FOR ROADS

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
7300	**CONCRETE BLOCK PAVING FOR ROADS (GREY)**				
	The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.				
73,01	**Concrete block paving**				
LI	(a) 200mm x 100mm x 60mm, 30Mpa grey heavy duty interlocking paving laid in a herringbone pattern	m²	23 400,00		-
LI	(c) 20mm bedding sand applied underneath bricks	m²	23 400,00		-
LI	(d) Cemented locking sand broomed evenly	m²	23 400,00		-
73,02	**Cast in-situ concrete edge and intermediate beams**				
LI	(a) 200mm wide x 300mm deep, class 30/19 concrete (measured elsewhere)	m³	9,00		-
73,03	**Provision of approved herbicides and ant poison**	litre	46 800,00		-
73,04 LI	**Construct Complete Speed Hump / Pedestrian crossing as per drawing, road markings and sign measured elsewhere**	number	9,00		-
7300	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6
SCHEDULE B : ROADWORKS
SECTION 8100
TESTING MATERIALS AND WORKMANSHIP

ITEM	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
	TESTING MATERIALS AND WORKMANSHIP *The Contractor must provide rates on all items, should the Contractor not provide a rate for some of items, and is instructed to utilize such, no payment shall be made.*				
81.02	**Other special tests requested by the Engineer:**				
	(a) Cost of testing	PC sum	1,00	100 000,00	-
	(b) Charge on provisional sum for overheads and profits	%	100 000,00		-
8100	**TOTAL CARRIED TO SUMMARY**				**-**

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6		
SUMMARY OF SCHEDULE OF QUANTITIES		
ITEM	**DESCRIPTION**	**AMOUNT**
	SUMMARY OF SCHEDULE A : GENERAL	
1200	GENERAL REQUIREMENTS AND PROVISIONS	-
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS	-
1400	HOUSING, OFFICES AND LABORATORY FOR THE ENGINEER'S SITE PERSONNEL	-
	SUB-TOTAL TO MAIN SUMMARY :	-
	SUMMARY OF SCHEDULE B : ROADWORKS	
1500	ACCOMMODATION OF TRAFFIC	-
1700	CLEARING AND GRUBBING	-
2100	DRAINS	-
2200	PREFABRICATED CULVERTS	-
2300	CONCRETE KERBING	-
3100	BORROW MATERIALS	-
3200	MATERIAL STOCKPILE	-
3300	MASS EARTHWORKS	-
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL	-
3500	STABILISATION	-
5100	PITCHING, STONEWORK AND PROTECTION AGAINST EROSION	-
5400	GUARDRAILS	-
5600	ROAD SIGNS	-
5700	ROAD MARKINGS	-
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATMENT OF OLD ROADS	-
7300	CONCRETE BLOCK PAVING FOR ROADS	-
8100	TESTING MATERIALS AND WORKMANSHIP	-
	SUB-TOTAL CARRIED FORWARD TO FINAL SUMMARY :	-

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

RECONSTRUCTION OF FRISGEWAAGT INTERNAL ROADS AND STORMWATER PHASE 1 - WARD 6

FINAL SUMMARY

DESCRIPTION		AMOUNT
SCHEDULE A: GENERAL	:	-
SCHEDULE B: ROADWORKS	:	-
SUB-TOTAL 1	:	-
ADD CONTINGENCIES @ 10%	:	-
SUB-TOTAL 2	:	-
ADD VALUE ADDED TAX (VAT) @ 15%		-
SUB-TOTAL 3	:	-
TOTAL TENDER SUM CARRIED TO THE FORM OF TENDER	:	-

TENDERER : _____

NAME & SURNAME : _____

SIGNATURE : _____ DATE : _____

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

C3 SCOPE OF WORK

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

C 3.1 DESCRIPTION OF THE WORKS

C3.1.1 Employer's Objective

Tswaing Local Municipality aims to improve the internal roads and promote easy access to facilities in residential area/s to ensure sustainable living in Frisgewaagt Ward 6. Tswaing Local Municipality's initiative is to promote and achieve the following:

- Enforcing CIDB regulatory statutes.
- Creating work for local community.
- Technical training for local community, and
- Deliver public infrastructure using labour intensive methods.

Over view of the project elements/roads:

WARD 10			
Item (No)	**Road (Number)**	**Length (m)**	**Width (m)**
1	Road 1	474,00	6,00
2	Road 2	2 579,00	6,00
3	Road 3	800,00	6,00

The project entails the following major elements:

- Construction of approximately **3.853km** length of road.
- Laying of **60mm of 30Mpa** interlocking SABS approved grey paving blocks.
- Installation of Fig.16 mountable Kerbing on both sides of the road.
- Construction of insitu concrete edge beams at joints (beginning and end).
- Construction of insitu concrete v-channels storm water.
- Installation of concrete stormwater pipes with 450mm dia. Min (where necessary and as per instruction).
- Installation of kerb inlets, manholes and Stormwater outlets (Where necessary and as per instruction).
- Signage, marking and furniture.
- All associated earthwork with any material the Engineer recommends.

NB: BORROW-PIT IS 5KM DISTANCE FROM SITE TO PROJECT AREA IN THE FARM, CONSIDER THIS IN PRICING

C3.1.3 Extent of the Works

- Site establishment.
- Compliance with EMP requirements.
- Compliance with OHS Act requirements.
- Provision of temporary workforce (ABE).
- Skill training with Accredited Service Provider (to be nominated by the Employer)
- Setting out (setting out to be done by the external surveyor).
- The protection and realignment of existing services in co-operation with the concerned authority.
- Dismantling, removal and reinstallation of existing fences in co-operation with the concerned property owners and CLO where instructed by the Engineer.
- Clearing and grubbing (work to be done labour intensive construction methods).
- Traffic control and temporary deviations.
- Opening up borrow pits where instructed by Engineer and rehabilitation.
- Mass earthworks.
- Installation of service ducts and construction of associated manhole where instructed by the Engineer.
- Reconstruction of layer works (roadbed, subbase and base; there is a provision of milling of the layer works as an alternative construction method).
- Stabilization of base layer (C3).
- Construction of insitu edge beams and Storm water Channels.
- 30Mpa 60mm grey concrete interlocking paving bricks.
- Installation of figure 16 mountable kerbing with castle bottom.
- Road markings and signs.
- Finishing the road and road reserve.
- Clearance and making good.

C3.1.3 Location of the Works

The project is located in Frisgewaagt under Tswaing Local Municipality within the Ngaka Modiri Molema District Municipality. Agisanang falls on the following coordinates: 26°31'37.23"S; 25°24'40.17"E and is approximately 20 kilometres North West of Delareyville. Refer to locality and site plan herewith.

C3.1.4 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.

C3.1.5 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	Client
Appointment of sub-contractors	Contractor
Supervision	Engineer
Preparation of as-built drawings	Contractor / Engineer

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Completion certificate	Engineer / Client / Contractor

C3.2.2 Drawings

The permanent works included in this contract has been designed by the Employer. The detail of the works is indicated on the drawings and in the specifications. The Tenderer may submit alternative offers for designs prepared by him subject to the conditions specified in the Contract Data.

Drawings (A3) are bound into this document for tendering purposes only and must not be scaled.

The Contractor shall be entitled to receive free of charge, two full size A1 and one A3 copies of each such drawings and to receive, at the cost of reproduction, such additional copies as he shall reasonably require.

One copy of all drawings shall be kept on the Site and be available for perusal by the Engineer or any person authorized by him.

The Contractor shall, in accordance with the Engineer's instructions, maintain a register on the Site of all drawings and revisions thereof in the chronological order in which they are delivered to him.

The Engineer will provide the Contractor with one full set of A1 and A0 additional 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 Practical Completion Certificate, which will not be issued until the as-built information has been received.

C3.3 PROCUREMENT

C3.3.1 Preferential Procurement Procedures

The works shall be executed in accordance with the conditions pertaining to preferences granted in accordance with the preferencing schedule.

The Tenderers notice is drawn to the fact that the awarding of this tender will be in terms of the Supply Chain Management Policy of the Tswaing Local Municipality and The Conditions of Tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (May 2010) (Available on www.cidb.co..za).

C3.2.2 Labour and Personnel

C3.2.2.1 Contractor's Personnel

The Contractor shall limit the utilization of his permanently employed personnel to that of key personnel only on the Works, as defined below, and shall execute and complete the Works utilizing a temporary workforce employed directly by the Contractor and/or by his sub-Contractors, using the assistance of the Labour Desk(s), from the various

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

communities that are established in proximity to the Works or which will be consumers from the Scheme.

Without derogating from the Contractor's obligations to complete the Works within the specified time for completion, the numbers in each category of the Contractor's key personnel, as stated by the Contractor in the Returnable Schedules, will be strictly controlled during the contract period and any increase in numbers will be subject to the prior approval of the Employer.

Key personnel mean all contracts managers, site agents, site clerks, materials and survey technicians, quantity surveyors, trainers, supervisors, foremen, skilled plant operators, brick layers, welders, shutter hands and the like, and all other personnel in the permanent employ of the Contractor or his sub-Contractors who possess special skills, and/or who play key roles within the Contractor's or his Sub-Contractor's operations.

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

a) The unavailability from local sources of sufficient numbers of temporary workers and/or sub- Contractors to execute the Works provided always that the Contractor has satisfied the Engineer that he has exercised his best endeavours and taken all reasonable actions to recruit sufficient temporary workers and sub-Contractors from local sources.

b) The unavailability within the temporary worker pool and/or from Sub-Contractor sources available to the Contractor in terms of the Contract, of sufficient skills necessary to execute the Works or specific portions thereof, in situations where the completion period allowed in the Contract is insufficient to facilitate the creation of the necessary skills through the provision of suitable training as contemplated in the Contract;

c) Any other circumstances which the Engineer may deem as constituting a warrant.

C3.2.2.2 Temporary Workforce

The Contractor shall employ labour from the local communities through the Labour Desk(s). Accordingly, the workforce that is employed on Site shall consist of local residents, except for approved key staff in the permanent employ of the Contractor, to the maximum extent that is compatible with the requirements of clause C3.2.1.

The Labour Desk(s) shall assist in identifying available local labour and, where available, semi-skilled labour as well as local sub-Contractors. The Labour Desks shall also assist and advice regarding conditions of employment, disputes and disciplinary procedures. The function of the Labour Desk(s) shall however in no way diminish the responsibilities of the Contractor or sub-Contractor. The Contractor and its sub-Contractor shall adhere to the statutory minimum wage rates, they are however at liberty to negotiate additional incentive payments based on performance. A contract of

employment or subcontract should be signed between the Contractor and each of his employees or sub-Contractors, as the case may be. Likewise, contracts of employment must be entered into between each such sub-Contractor, and each of the specific Sub-Contractor's employees. Employment and subcontract agreements shall make clear reference to at least the following conditions:

- The minimum agreed wage rate per hour in respect of labourers;
- The agreed pay rate per unit of production where applicable;
- UIF and WCA payments;
- Minimum working hours per day;
- Start and end times of a daily shift;
- Lunch break times;
- Company Policy regarding:
  - Rain time
  - Sickness and absenteeism
  - Disciplinary matters
  - Grievances
- Method and frequency of payment;
- Work clothes and safety equipment to be issued.

C3.2.2.3 Local Content and Labour-Intensive Construction

The promotion of the use of local content is required in the execution of this project. This will be achieved by the use of local labour and local sub-Contractors in the construction of works equivalent to twenty-five percent (25%) of the total cost of works are to be constructed. The following limits apply:

- Construction by Sub-Contractors may constitute a maximum of 25% of the total local content works.
- Construction using labour intensive construction methods and employing locally (within Project Area and its surrounds) labour must make up 75% the total local content works.

Labour Intensive Construction shall mean the economically efficient employment of as great a portion of labour as is technically feasible to produce a standard of construction as demanded by the Specifications with completion by the Due Completion Date, thus the effective substitution of labour for equipment.

Appropriate portions of the Works included in the Contract shall be executed using labour intensive construction methods. These portions of the Works shall be constructed and supplemented only to the extent necessary and unavoidable by the Contractors key personnel, unless otherwise instructed by the Engineer.

The portions of the Works to be executed using labour intensive construction methods are:

- Clearing and grubbing of the Site.
- Laying of interlocked block paving for road surfacing.
- Kerbing installation.
- Insitu Edgebeams and v-channels.

- Bedding sand application.
- Paving compressing.
- Locking sand and cement application and brooming.
- Installation of road signs.
- Exposing of existing services.
- Dismantling and re-erection of fences; and
- Cleaning and tidying up of the Site.

In respect of those portions of works which are not listed above, the construction methods adopted and plant utilized shall be at the discretion of the Contractor, provided always that the construction methods adopted and plant utilized by the Contractor are appropriate in respect of the nature of the Works to be executed and the standards to be achieved in terms of the Contract.

C3.4 SUB-CONTRACTING

C3.4.1 Contractor

C.3.4.1.1 The Contractor shall sub-let to sub-Contractor's appropriate portions of the works. A sub-contract agreement shall be signed between the Contractor and each of its sub-Contractors.

C3.4.1.2 The Contractor shall be responsible for all work carried out by sub-Contractors on his behalf. The Engineer will not liaise directly with any such sub-Contractor, nor will he become involved in any problems and/or disputes related to payments, programming, workmanship, etc, unless provided for in the Conditions of Contract. Such problems and/or disputes shall remain the sole concern of the Contractor and his sub-Contractors.

The Engineer may at his discretion, upon receipt of a written and fully motivated application from the Contractor, and where he deems the circumstances so warrant, and provided always that the Contractor has complied fully and in all respects with the provisions of the Contract pertaining to subletting to local sub- Contractors or has utilized his best endeavours to comply therewith, authorize in writing that the Contractor may employ local residents with the sole intent of executing on-the-job training of such local residents to suitable levels of skill.

Without limiting the generality of application of this clause, circumstances which may be considered by the Engineer to warrant such authorization include:

a) non-receipt of valid or acceptable tenders/quotations from local sub-Contractors;
b) serious default or failure of appointed local sub-Contractors;

The Engineer shall not grant such authority in cases where it may reasonably be concluded on the available evidence that the invitation of further tenders/quotations in accordance with the terms of the Contract is likely to result in the successful completion of the portions of the Works concerned by sub-Contractors.

Should the Contractor, after suitable due endeavor, be unable to identify sub-Contractors for portions of the Works as specified, then the Contractor shall be permitted to undertake the Works in question with his own workforce as provided for above.

The Engineer shall monitor progress achieved with Sub-Contractor training, and successful completion of this training shall be subject to his approval or instruction. The Contractor shall tender rates for the training of sub- Contractors and labour.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

C3.4.1.3 The Contractor shall approach the Labour Desk that is established for purposes of the Contract for assistance and advice regarding conditions of employment, minimum wages, disputes and disciplinary procedures in respect of local sub-Contractors.

C3.4.1.4 No work may be sub-contracted to another party unless approval is given by the Engineer 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

C3.4.1.5 Before the Engineer in terms of Clause 38 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 4.4 of the General Conditions of Contract Third Edition (2015), 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.

C3.4.2 Sub-Contractor

To qualify as a sub-Contractor the following requirements shall be applicable:

- Registration with the CIDB in the min class of CE registration applicable for a particular amount of work
- Submit an original valid Tax Clearance Certificate (in terms of the Preferential Procurement Regulations, 2011 published in Government Gazette No. 34350 dated 8 June 2011),
- Submit a valid VAT Registration Certificate (if VAT number is not included in tax clearance certificate),
- Submit a valid Workmen's Compensation Certificate, Act 4 of 2002,
- Submit a valid Unemployment Insurance Certificate, Act 4 of 2002,
- Submit a Certificate of Incorporation (if a Company),
- Submit a Founding Statement (if a Closed Corporation),
- Submit a Partnership Agreement (if a Partnership),
- Submit an Identity Document (if a One-man concern),
- Submit a Joint Venture Agreement (if a Joint Venture),
- Submit monthly proof of SARS PAYE in respect of all labourers
- Submit a Curriculum vitae of the person who prepares the Health and Safety Plan,
- Curriculum vitae of the Health and Safety Officer to be appointing in accordance with the Occupational Health and Safety Act (Act 85 of 1993).

- Provide all work clothes, safety equipment and tools required for the execution of the Works
- The minimum amount of liability insurance cover required will be R 1 000 00.00 per event, the number of events being unlimited.
- Payment of all amounts due to the local sub-Contractor by the Contractor shall be subject to the same retention conditions as applicable the Contractor.
- The sub-Contractor shall deliver to the Contractor a performance guarantee of an insurance company or a bank to be jointly and severally bound with the sub-Contractor for an amount equal to the same guarantee conditions as applicable to the Contractor
- Submit payments certificates to the Contractor at a frequency of once a month with payment made by the Contractor within seven days after the Employer paid the Contractor.
- The Contractor and its sub-Contractor shall enter into a SAFCEC (or similar) sub-contract agreement.

C3.5 CONSTRUCTION

C3.5.1 Work Specifications

The following applicable COLTO 1998 Standard Specifications particular for Road and Bridge Works for State Road authorities are relevant to this contract:

COLTO

	SCHEDULE A: GENERAL
1200	GENERAL REQUIREMENTS AND PROVISIONS
1300	CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS
1400	HOUSING, OFFICES AND LABORATORY FOR THE ENGINEER'S SITE PERSONNEL
	SCHEDULE B: ROADWORKS
1500	ACCOMMODATION OF TRAFFIC
1700	CLEARING AND GRUBBING
1800	DAYWORKS AND HIRE OF CONSTRUCTION PLANT
2100	DRAINS
2200	PREFABRICATED CULVERTS
2300	CONCRETE KERBING, CONCRETE, CHANNELING, OPEN CHUTES AND CONCRETE LININGS FOR OPEN DRAINES
3100	BORROW MATERIALS
3300	MASS EARTHWORKS
3400	PAVEMENT LAYERS OF GRAVEL MATERIAL
3500	STABILIZATIONS
3800	BREAKING UP EXISTING PAVEMENT LAYERS
3900	PATCHING AND REPAIRING BREAKS
5100	PITCHING, STONEWORK AND PROTECTION AGAINST EROSION
5600	ROAD SIGNS

5700	ROAD MARKINGS
5900	FINISHING THE ROAD AND ROAD RESERVE AND TREATMENT OF OLD ROADS
7300	CONCRETE BLOCK PAVING FOR ROADS
8100	TESTING MATERIAL AND WORKMANSHIP

Note 1: The Standard Specifications are not bound into the tender and contract documents, but are available at the Tenderer's/Contractor's expense from the **South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House, 1685**.

Note 2: Each of the Standard Specifications contains an appendix, which in turn lists further specifications which are not bound into the tender and contract documents.

Note 3: Both of the Standard Specifications, as well as those specifications that are listed in the appendix to the Standard Specifications, shall apply to the Contract to the same extent as if each of these specifications had been bound into the tender/contract documents.

C3.5.1.1 Portion 1: Variation and Additional Clauses to the Standard and Particular Specifications

The following variations and additions to the Standard and Particular Specifications will be applicable to this Contract.

The various documents listed in Section C3.5.1 shall be treated as mutually explanatory. However, should any requirements of Section C3.5.1 conflict with any requirement in the Standardized Specifications or with any requirement of the Particular Specifications, then the requirements of Section C3.5.2 shall prevail.

The Contractor shall make suitable arrangements for process control prior to commencement with the Works. Should he intend using site personnel for this purpose he shall ensure that suitably trained and competent personnel take charge of the necessary test work, and that the necessary equipment is at their disposal prior to commencement of the Works. Failure to comply with these requirements shall be just cause for the Engineer to order suspension of the Works without additional remuneration in terms of the Conditions of Contract (2015), or for him to recommend termination to the Employer in terms of the Clause thereof.

C3.5.1.2 PORTION 2: VARIATIONS AND ADDITIONAL CLAUSES

PS6 SITE FACILITIES AVAILABLE

PS6.1 Contractor's Camp

A site will be made available for the Contractor's camp or depot, to be located adjacent to the works. The Contractor shall be entirely responsible for ensuring that his establishment meets the requirements of the Municipal regulations or by-laws, which may be applicable and shall include therefore in his tendered rates. The Contractor shall also be responsible for ensuring that unauthorized persons do not have access to the site or any construction material stockpiles.

PS6.2 Source of Water Supply

The Contractor shall make all arrangements with the Local Authority for a water connection and include for the payment of water used for construction purposes in his tendered rates. The Contractor shall in his rates include payment for potable drinking water for the employees.

PS6.3 Source of Power Supply

The Contractor will however be entirely responsible for arranging a power connection and for payment for all electric power required for construction purposes if electric power is available on site. The costs of electric power are to be included in the Contractor's tendered rates.

PS6.4 Housing

The Contractor shall be permitted to house Key Personnel only within his camp site(s). At the commencement of the Contract, the Contractor shall inform the Engineer of his intentions regarding the housing of Key personnel on Site and he shall thereafter ensure that all such accommodation is kept neat and tidy, hygienic and properly controlled at all times. Should at any stage of the Contract the Employer and/or the Engineer be of the opinion that the housing of Key Personnel within the camp site(s) of the Contractor is causing disturbance or inconvenience to the landowner or to nearby residents, then the authority granted by this clause for the Contractor to house Key personnel on Site may be withdrawn, either partially or entirely.

The Contractor shall at all times confirm with all requirements contained in law or bylaws, as well as any other requirements set by the controlling local authority.

PS6.5 Ablution Facilities

Ablution facilities will not necessarily be available at the camp or depot site and the Contractor shall make his own arrangements in this regard. Ablution facilities shall be kept neat and tidy at all times.

PS7 SITE FACILITIES REQUIRED

PS7.1 For the Contractor

Whatever may be required for the satisfactory execution of the Contract.

PS7.2 For the Engineer

Not required.

PS7.3 Sanitary Facilities

Water borne sewerage is available in the area. Chemical or flush toilets with on-site disposals shall be provided and maintained for the use of the Contractor's personnel, the Engineer and representatives of the Employer at the camp site that the Contractor may establish for construction of the Works. In addition, the Contractor shall at all times during construction of the works provide adequate sanitary facilities with hygienically acceptable conditions.

PS8 FEATURES REQUIRING SPECIAL ATTENTION

PS8.1 Existing Services

The site of the Works is traversed by various existing services including water, sewers, and electricity cables, the exact position of which are generally unknown. Where positions of services are known these will be shown on layout plans or information in this regard will be made available by the Engineer prior to construction commencing in an area. The Contractor will be required to so schedule and programme his work that when works are disrupted due to the influence of unexpected services encountered, construction can continue in other portions to allow the situation to be remedied by re-routing of new or existing services.

PS8.2 Other Contractors

The Contractor must prepare himself to work with other Contractors in the same project location and/or on the same site simultaneously. The Contractor must make adequate provision for himself in the rates tendered to protect and clearly mark “his” works, to accommodate other Contractors and to liaise constantly and adequately with the other persons active in the same area.

It might happen that up to five different Contractors will be active on site, that routine maintenance is carried out on the existing work by another party and that the Client or his agent is active onsite with the day to day running of the works.

PS8.3 Preservation of Trees

Special care shall be taken that only designated trees are removed and that no damage is caused to other trees during construction, especially the indigenous trees.

PS8.4 Safeguarding Reference Beacons

The Contractor shall take special care to safeguard any permanent survey beacons such as erf corner pegs, reference beacons and level beacons. Should such pegs or beacons be disturbed, the Contractor shall have them replaced by a registered Land Surveyor at his own cost. The Surveyor shall submit the necessary documentation regarding the replacement of pegs and beacons to the Engineer for approval.

The Contractor’s attention is drawn to Article 35(1) of the Land Surveying Act No. 9 of 1927, (as amended) in this regard.

B: AMENDMENTS TO THE STANDARD SPECIFICATIONS

The following references from, and variations and additions to the Standard Specifications will be valid for this Contract.

The clauses and pay items in this portion of the Particular Specifications are numbered "B" followed by a number corresponding to the number of the relevant clause or pay item in the Standard Specifications. New clauses and pay items not covered by clauses or pay items in the Standard Specifications, if included here, are also designated "B" followed by a number. These numbers follow on the last clause or pay item number used in the relevant section of the Standard Specifications.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS

Add the following:

B1201 SCOPE

Add the following:

This section also covers matters, which relate to the location of existing services by the Contractor.

B1202 SERVICES

Add the following:

The location, protection and relocation of existing services form an integral part of this contract.

No guarantee as to the accuracy of the information can be given and the responsibility lies with the Contractor to determine the exact positions of all existing services.

Before any work is commenced, the Contractor shall contact all private owners or public authorities controlling services so that they may either protect, move or relocate any services as required, or confirm that all such work has been completed.

Any damage of these services as a result of acts by the Contractor, his sub-Contractors or their respective employees, shall be repaired at the Contractor's expense.

Wherever, for the proper construction of the works, any telephone or electricity line or poles, or any water supply pipes, conduits, electric cables, sewers, drains or any other services are required to be removed or relocated, or where any of these services requires to be repaired as a result of damage by the Contractor or otherwise, the Contractor shall immediately advise the Engineer thereof, who will further notify the responsible authorities concerned in order that such work as is necessary be undertaken by such authorities. The Engineer will also decide the extent of the work, if any to be undertaken by the Contractor in removing, relocating or repairing such services.

B1204 PROGRAMME OF WORK

Add the following:

The programme must show clearly full details of all activities, together with the anticipated application of plant and expected cash flow diagram. The programme must make provision for the location and survey of existing services.

The Contractor must at all times give the inhabitants of a stand, at least 2 weeks' notice before starting any work which may cause them inconvenience. Should any problems or complaints be received from the homeowners, the Contractor must liaise with the Engineer's representative.

The programme shall be updated monthly, or as instructed by the Engineer, in accordance with the progress made by the Contractor.

Failure to comply with these requirements will entitle the Engineer to use a programme based on his own assumptions for the purpose of evaluating claims for extension of time or additional payments.

Penalty Clause will apply on failure to comply with all the completion dates given above.

If the progress of the work falls behind the programme, or if the sequence of operations is altered, or if the programme is deviated from in any other way, the Contractor shall, within one week of having been notified by the Engineer, submit a revised programme. The revised programme shall indicate how he intends to regain lost time in order to ensure completion of the works within the time for completion as defined in the general conditions of contract or any granted extension of time.

B1205 WORKMANSHIP AND QUALITY CONTROL

Add the following:

No laboratory facilities are required on site but the Contractor is responsible for informing the Engineer of testing of densities, bedding, backfill and all relevant concrete tests in time. All material testing will be done by an approved laboratory and is deemed to be included in the Contractor's rates. The Contractor shall submit the test results to the Engineer and shall indicate the extent to which they meet the specified requirements. The Engineer at his discretion may undertake or order such further tests by an independent laboratory to be paid under Section 1200 of the Preliminaries and Generals (Specialized Services to the Contractor), to satisfy himself that the work is of acceptable quality conforming to the specifications. No failed tests will be paid for and is for the Contractor's expense.

B1206 THE SETTING OUT OF WORK AND PROTECTION OF BEACONS

Add the following:

The Contractor shall establish the exact positions of all existing services before he commences with permanent construction in the proximity of these services.

The exact positions of these services will be established by determining of co-ordinates and the taking of levels and offsets. This information will be submitted to the Engineer in a format to his satisfaction. The provisions of clause 1206 regarding measurement and payment shall apply.

B 1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

(See amended Clauses of the general conditions of contract)

B 1232 EMPLOYMENT OF COMMUNITY LIAISON OFFICER

The Contractor must employ a Community Liaison Officer for the duration of the contract. The community liaison officer shall be employed from within the local community in conjunction with local structures including the Ward Councilor. The Engineer will determine remuneration of the CLO after consultation with the Employer.

B 1233 COMPLIANCE WITH ACT NO 85 OF 1993

At the handing over of the site, the Contractor shall appoint a person or persons to act as responsible person(s) in terms of the Act on Machinery and Occupational Safety, Act no 85 of 1993 and the appropriate regulations.

CLAUSE TO BE ADDED TO CONTRACTS BETWEEN THE EMPLOYER AND CONTRACTORS IN TERMS OF SEC 37(2) OF THE OHS ACT

The employer and the Contractor hereby agree, in terms of the provisions of Section 37(2) of The Occupational Health and Safety act 1993 (Act 85 of 1993, hereinafter referred to as the Act), that the following arrangements and procedures shall apply between them to ensure compliance by the Contractor with the provisions of the act, namely:

(a) The Contractor undertakes to acquaint the appropriate officials and employees of the Contractor with all relevant provisions of the Act and the regulations promulgated in terms of the Act;

(b) The Contractor undertakes that all relevant duties, obligations and prohibitions imposed in terms of the Act and Regulations will be fully complied with;

(c) The Contractor hereby accepts sole liability for such due compliance with the relevant duties, obligations and prohibitions imposed by the Act and Regulations and expressly absolves the Employer from itself being obliged to comply with any of the aforesaid duties, obligations and prohibitions;

(d) The Contractor agrees that any duly authorized officials of the Employer shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the Contractor has complied with his undertakings as set out more fully in paragraphs (a) and (b) above, which steps may include, but will not be limited to, the right to inspect any appropriate site or premises occupied by Contractor, or to inspect any appropriate records held by the Contractor;

(e) The Contractor shall be obliged to report forthwith to the Employer any investigation, complaint or criminal charge which may arise as a consequence of the provisions of the Act and regulations, pursuant to work performed in terms of this Contract, and shall, on written demand, provide full details in writing of such investigation, complaint or criminal charge.

B 1234 MEASUREMENT AND PAYMENT

SECTION 1200: GENERAL REQUIREMENTS AND PROVISIONS		
B12.02	**Employment of a community liaison officer (CLO) for the duration of Contract**	**Prov Sum**
	A prime cost item has been included for the compensation of the CLO (also defined or described as “The Labour Desk Officer”). Payments will be done to the CLO on instruction of the Engineer, in writing. In addition to the abovementioned amount, provision is made in Schedule 1 for a mark-up on the payments made to the CLO. This mark-up shall be regarded as a full compensation for overheads, charges and profits as provided for Clause 6.6.2 of the Conditions of Contract.	

B12.03	**Provisional sum for payment of Health and Safety obligations for the duration of the contract**	**Per Month**
	A prime cost item has been included for the compensation for Health and Safety obligations. Payments will be done to the Health and Safety representative on instruction of the Engineer, in writing. In addition to the abovementioned amount, provision is made in Schedule 1 for a mark-up on the payments made to the Health and Safety representative. This mark-up shall be regarded as a full compensation for overheads, charges and profits as provided for Clause 6.6.2 of the Conditions of Contract.	
B12.04	**Provisional sum for payment for training for the duration of the contract.**	**Prov Sum**
	A Prime Cost Item has been included for payments to be made to specialists for the training of unskilled or semi-skilled persons in industry accredited management and generic skills. Payment to the Contractor will be based on invoices certified by the Engineer and issued by training specialists to the Contractor for work undertaken in terms of this item. In addition to the above amounts, provision is made for a mark-up on any payments made by the Contractor in this regard. The mark-up shall be regarded as full compensation for overheads, charges and profits as provided for in Clause 6.6.2 of the Conditions of Contract.	
B12.04	**Percentage for charges and profit on the provisional sums for Contractor's cost and profit**	**Unit Percentage**
	The percentage tendered for charges and profit on provisional sums ordered by the Engineer shall include full compensation for all cost, profit, charges, handling and transport related to the service.	
SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS		
B13.01	**Provisional sum for payment for Contractual requirements.**	**Prov Sum**
(a)(i)	A Prime Cost Item has been included for payments to be made to cover the Contractor's initial costs of providing sureties, insurance for the work and plant, public liability insurance and unemployment insurance to cover his compliance with the requirements of the Workmen's Compensation Act, 1941 (Act No. 30 of 1941).	
B13.01	**Provisional sum for payment for Contractor to provide survey assistant.**	**Prov Sum**
(a)(ii)	A Prime Cost Item has been included for payments to be made for - One full-time competent assistant shall be provided at all times to assist the Engineer's Representative in his duties for the duration of the Contract. When required the Contractor shall provide a second survey labourer to assist the Engineer's Representative.	
B13.01	**Prime Cost Amount for payment for Contractual Requirements.**	**Unit**
(b)(i)	A Prime Cost Item has been included for payments to be made to cover the Contractor's time-related costs of providing sureties, insurance for the work and plant, public liability insurance and unemployment insurance to cover his compliance with the requirements of the Workmen's Compensation Act, 1941 (Act No. 30 of 1941).	PC Amount

Contractor	*Witness 1*	*Witness 2*	*Employer*	*Witness 1*	*Witness 2*

B13.02	**CAMPS, CONSTRUCTURAL PLANT AND TESTING FACILITIES**	
	Add the following: A suitable site for the establishment of the Contractor's construction camp will be made available in the town. The camp shall be fenced off to ensure that no unauthorized persons enter the campsite, and shall always be kept in a neat and tidy condition. The Contractor should also provide own security personnel to enforce the above-mentioned.	
SECTION 1400: HOUSING, OFFICES AND LABORA-TORIES FOR THE ENGINEER'S SITE PERSONNEL		
B14.09	**Facilities for the Engineer**	
(b)	Time related obligations The payment will be made in four equal instalments when the value of all permanent work done, excluding escalation, reaches 25%, 50% and 75% of the Tender Price. The final 25% to achieve 100% payment will be payable when the completion certificate has been issued	Sum
SECTION 1600: OVERHAUL		
1600	**Over Haul and Free Haul**	
	Add the following: No overhaul will be payable. This is applicable for the entire contract and the Contractor needs to accommodate this within the respective tendered rates.	
SECTION 1700: CLEARING AND GRUBBING		
17.04	**Measurement and Payment**	
	Add the following: **DEMOLISH AND SPOIL MATERIAL OFF SITE** Demolish and spoil material for structures, buildings, etc. at a spoil site established by the Contractor. Demolish and spoil material for structures, buildings, etc. at a spoil site established by the Contractor. The unit of measurement shall be for the Removal and complete disposal of each item. The tendered rate shall include full compensation for removing, uplifting, transporting, and the disposal of material to a dumpsite to the satisfaction of the Employers Agent.	No m^2 m^3

SECTION 2100: DRAINS		
2100	**Drains**	**Unit**
	Add the following: **Spoil Material** The Contractor shall make his own arrangements for the provision of a suitable place off the site for the disposal of material obtained from excavations, demolition, clearing and grubbing the demolition of boundary walls, brick work, foundation excavations, etc. The rates in the schedule of quantities shall include all costs or fees payable to cover the disposal at the dumping site. The rates must allow for haul as no haul will be payable.	m^3
B21.20	**Drainage Core**	
	Supply, install and test Kaytech drainage core complete as per manufacturers recommendation, (Bidum measured elsewhere), or similar approved product. Tendered rate should be full compensation for the complete task.	m^2
SECTION 2200: PREFABRICATED CULVERTS		
2200	**Prefabricated Culverts**	**Unit**
	Add the following: No overhaul will be payable, this applies to the whole contract. The Contractor needs to accommodate this within the tendered rates.	m^3-km
SECTION 3300: MASS EARTHWORKS		
	Add the following new clause: Any clause relating to haulage shall be superseded by the clause stating that "haulage shall not be paid for separately".	
33.03	**CLASSIFICATION OF CUT AND BORROW EXCAVATION**	**Unit**
	Add the following: Clause 3303 (a) (ii) shall not be applicable. In clause 3303 (a) (iii), replace the words "equivalent to that specified in 3303(a)(ii) above" with the words "of mass approximately 35T, fitted with a single-tine ripper suitable for heavy ripping and of fly wheel power approximately 220 kW." In the last sentence of clause 3303 (a) (iv), replace the words "intermediate excavation" with the words "soft excavation." In the last sentence of clause 3303 (a) (v), replace the words "or intermediate excavation, according to the nature of the material" with the word "excavation."	
	Add the following: All details relating to clause 33.01 shall be applicable, but with the exception of haulage. Haulage shall be incorporated in the rate and not paid for separately.	m^3-km
33.04	***Add the following:*** Haulage shall be incorporated in the rate and not paid for separately. Rates shall include for all cost relating to royalties for dumping.	
	Soft excavation: All material that is not classified as hard rock excavation, boulder excavation class A or boulder excavation class B in terms of the applicable clauses shall be classified as soft excavation" and the definition of intermediate material shall not be utilized	

	Add the following: B33.04(a).01 Soft excavation, and B33.04(c).01 Hard excavation: All other excess material (excavation measured elsewhere) from Stormwater, Culverts, Ducts and Subsoils.	
SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIAL		
B34.14	Extra over item 34.01 for commercial material supplied by the Contractor	m³
	The extra over rate shall be for full compensation for obtaining the material and transporting it to the point of use including for all activities at the source/origin areas such as removal and replacement of overburden, finishing off source/origin areas and for the payment of royalties and other charges.	

GENERIC LABOUR-INTENSIVE SPECIFICATION

Scope

This specification establishes general requirements for activities which are to be executed by hand involving the following:

a) trenches having a depth of less than 1.5 metres;
b) stormwater drainage;
c) low-volume roads and sidewalks

Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this Contract, the requirements of this specification shall prevail.

- Hand excavatable material; and
- Hand pickable material.

a) granular materials:

- whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dens, or dense; or
- where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b) cohesive materials:

- whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
- where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

Note

1) A boulder, a cobble and gravel are material with a particle size greater than 200mm, between 60 and 200mm.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

2) A dynamic cone penetrometer is an instrument used to measure the insitu shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60˚ with respect to the horizontal) into the material being used.

Table 107. 1: Consistency of Materials when Profiled

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

Trench Excavation

All hand excavatable material in trenches having a depth of less than 1.5 meters shall be excavated by hand.

Compaction of backfilling to trenches (areas not subject to traffic) must be done using hand compaction with labour intensive construction methods.

Backfilling to trenches shall be placed in layers of thickness (before compaction) not exceeding 100mm. Each layer shall be compacted using hand stampers.

a) to 90% Proctor density.
b) such that in excess of 5 blows of a dynamic come penetrometer (DCP) is required to penetrate 100mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

Excavation
All hand excavatable material including topsoil classified as hand excavatable shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand. The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

Clearing and grubbing
Grass and small bushes shall be cleared by hand.

Shaping
All shaping shall be undertaken by hand.

Loading
All loading shall be done by hand, regardless of the method of haulage.

Haul
Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Offloading
All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilized for haulage.

Spreading
All material shall be spread by hand.

Compaction
Small areas may be compacted by hand provided that the specified compaction is achieved.

Grassing
All grassing shall be undertaking by sprigging, sodding, or seeding by hand.

Stone pitching and rubble concrete masonry
All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand. Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m. Grout shall be mixed and placed by hand.

Manufactured Elements
Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry unit and edge beams shall not individually, have a mass of more than 320kg. In addition, the items shall be large enough so that eight workers can conveniently and simultaneously acquire a proper hand hold on them."

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**
  The Contractor will be responsible for the arrangement of potable drinking water on site and construction water. The Contractor must in his pricing allow for the costs associated with these services including paying connection and bill fees.
- **Sources of Power Supply**
  The Contractor will be responsible for the arrangement of power on site for the duration of the construction period. The Contractor must in his pricing allow for the costs associated with these services including paying connection and bill fees to either Eskom or the Municipality.

- **Location of Camp and Depot**
  The Employer will in communication with the local stakeholders allocate a portion of land to the contractor for his site camp and depot. The Contractor must include in his pricing fees associated with this and all services.
- **Temporary Offices**
  The Contractor is responsible for his arrangement of offices for the Engineer and his staff. The costs associated with this must be included in the pricing in the preliminaries and general.
- **Laboratory Facilities**
  A provisional amount has been allowed in the bill of quantities for these services. No laboratory services will be necessary on site. The Client will nominate accredited laboratory to provide these services, hence the Contractor must in his pricing include his own allowance for tests he might deem necessary for his satisfaction.
- **Sanitary Facilities**
  The Contractor is responsible for arranging sanitary facilities and maintenance for the duration of the project. The facilities must be kept hygienic for the duration of the project.
- **Name Boards**
  Contract name boards must be erected at the points to be pointed by the Employer in communication with the local involved stakeholders. The number of contract name boards will be determined by the Employer and the community stakeholders.
- **Survey Equipment**
  The Contractor must provide the survey equipment's to the Engineer's Representative on site as and when instructed to do so.
- **Survey Assistant**
  the Contractor must avail survey assistant at all times as and when required to the Engineer on site.

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.

  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.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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 for 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;
     iii. arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
     iv. 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;
     v. 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;
     vi. are equipped with an electrically operated acoustic signalling device and a reversing alarm; and
     vii. 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.
     viii. 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;
     ix. 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;
     x. the traffic routes are suitable for the persons using them, sufficient in number, in suitable positions and of sufficient size;

xi. every traffic route is, where necessary indicated by suitable signs for reasons of health or safety;
xii. 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;
xiii. whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
xiv. when workers are working on or adjacent to public roads, reflective indicators are provided and worn by the workers.

C3.6 MANAGEMENT

C3.6.1 Management of the Works

C3.6.1.1 Applicable Specifications

Series COLTO Standard Specification for Roads and Bridge Works for State Road Authorities, including the variations and additions thereto included in section C3.4.2 of this document shall be applicable to this contract.

C3.6.1.3 Construction Programme

The Contractor shall supply within the period stated in the Contract Data a suitable and realistic construction programme that is based on the construction drawings issued by the Engineer, for consideration by the Engineer. This programme shall show the proposed scheduling and methods of execution of the Works, as well as the resources that will be allocated to each item or phase of the Works. Quantities proposed for execution during each month must be shown. In addition, the anticipated cash flow for the Contract, based upon these quantities, shall be shown following the prescribed format.

The Contractor will be expected to progress with the Works in accordance with the approved programme and shall not deviate from the order of execution shown in the programme without the prior approval of the Engineer or his Representative. Should such approval be given, an adjusted programme shall be produced within seven (7) days and submitted to the Engineer for evaluation. Progress in advance of the programme on certain portions or phases of the Works shall not be considered adequate reason for poor progress on another portion or phase.

C3.6.1.4 Drawings, Operation and Maintenance Manuals

All information in the possession of the Contractor that is required by the Engineer's Representative in order to complete the As-Built drawings and to prepare a completion report for the Employer must be submitted to the Engineer's Representative before a Certificate of Practical Completion will be issued for the Works. Similarly, the Contractor will be required to submit full details of all pipes, valves, meters and specials in a suitable loose bound format, including any special operational and maintenance procedures related thereto, for incorporation in the overall operation and maintenance manual for the Scheme prior to the issue of a Certificate of Completion for the Works. Only figured dimensions on the Drawings may be used in the interpretation thereof, and the Drawings shall not be scaled unless the Contractor is so instructed by the Engineer in writing. The Engineer will upon written request provide any dimensions that may have been omitted from the drawings.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

C3.6.1.5 Site Administration

An index to the Engineer's standard site administration forms as well as examples of some of the administration forms is appended as in Part C4.6. Acceptance control, record keeping, and payment certificates shall be done in accordance with the Engineer's standard system except if the Engineer approves that the Contractor's standard system may be used.

C3.6.1.6 Daily Site Diary

The daily site diary in accordance with the pro forma appended in Annexure A shall be kept up to date by the Contractor's Representative and will be signed on a daily basis by the Engineer's Representative.

C3.6.1.7 Information in Respect of Plant

Information relating to plant on Site shall be recorded in the daily site diary. In addition, the Contractor shall deliver to the Engineer, on a monthly basis, a detailed summary of construction plant kept on the Site, full particulars given for each day of the month. Distinction shall be made between plant in working order and plant out-of-order. Such inventory shall be submitted by the first day of the month following the month to be reported.

C3.6.1.8 Information in Respect of Employees

Information relating to labour and management on Site shall be recorded in the daily site diary in addition, the Contractor shall deliver to the Engineer, on a monthly basis, a detailed summary of supervisory staff, labour employed (own and local labour) by category, and sub-Contractors (both local and imported) for each day of the month. Such return shall be submitted by the first day of the month following the month to be reported.

C3.6.1.9 Rainfall Records

Rainfall records for the period of construction shall be taken on Site and recorded in the daily site diary. The Contractor shall provide and install all the necessary equipment for accurately measuring the rainfall. The Contractor shall also provide, erect and maintain a security fence plus gate, padlock and keys at each measuring station, all at his own cost. The Engineer or his Representative shall take and record the daily rainfall readings. The Contractor shall be permitted to attend these readings, in the company of the Engineer's Representative. Access to the measuring gauge(s) shall at all times be under the Engineer's control.

C3.6.1.10 Site Instructions

Site instructions by the Engineer, addressed to the Contractor at his office on the Site, will be numbered consecutively and will be deemed to have been received by the Contractor's representative unless a break in the sequence of numbers is brought to the notice of the Engineer in writing immediately.

C3.6.1.11 Site Meetings

The Contractor and his authorized representative shall attend all meetings held on the Site with the Employer and the professional team at dates and times to be determined by the Engineer. Such meetings will be held to evaluate the progress of the Contract, and to discuss matters pertaining to the Contract which any of the parties represented may wish to raise. It is not the intention to discuss day- to-day technical matters at such meetings.

C3.6.1.12 Payment Certificates

Monthly Progress Payment Certificates shall be submitted to the Engineer's representative on site not later than the 15th of each month (or as agreed between the Contractor and the Engineer).

All quality and quantity calculations and certificates submitted by the Contractor for checking shall be in accordance with the standard forms that are appended as annexure to the Scope of Works.

C3.6.1.13 Environmental Management Plan

The Contractor shall comply with all the conditions of the Record of Decision and the Environmental Management Plan appended in this document (if any).

C3.6.1.14 Community Liaison and Community Relations

In all dealings with communities through which the Works are to be executed, and in all dealings with workers employed from within such communities, the Contractor shall take due cognizance of the character, culture and circumstances of the specific community, and shall at all times use his best endeavors to avoid the development of disputes and rather to foster a spirit of co-operation and harmony towards the project.

The Contractor shall at all times, keep the Engineer fully informed regarding all matters affecting or negotiated between the Contractor and the community, and he shall attend all liaison meetings as may be arranged by the Engineer and/or the Employer. All matters concerning the community shall be discussed and where possible, resolved at such meetings.

Where any resolution during such negotiations or at such meetings shall be contrary to the terms and provisions of the Contract, the Contractor shall not give effect thereto without a prior written instruction from the Engineer. Where the Contractor is of the opinion that any instruction of the Engineer issued in terms of this clause will result in the incurring of additional costs which were not provided for in his tendered rates and prices and/or that a delay in the progress of the Works will result, he shall be entitled to submit a claim in terms of Clause 48 of the Contract Data, provided always that the period of twenty-eight (28) days referred to in Clause 48 shall be reduced to three (3) normal working days in respect of all claims submitted in terms of this clause.

C3.6.1.15 Workmanship and Quality Control

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and of the Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality-control system and provide experienced Engineers, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the quality of the Works at all stages of the Contract.

The cost of the Contractor's supervision and process control, including all testing carried out by the Contractor, will be deemed to be included in the rates tendered for the various items of work. The Contractor's attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of process control testing that is to be executed. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control of the quality of the Works at all times. Upon completion and submission of each portion of the Works to the Engineer for examination, the Contractor shall furnish the Engineer with the results of relevant tests, measurements and levels, thereby indicating compliance with the Specifications. The Engineer will not examine or inspect any portion of work submitted for approval unless the request for inspection and approval is accompanied by relevant tests, measurements and levels indicating compliance.

C3.6.1.16 Features Requiring Special Attention

C3.6.1.16.1 Built-up Areas

The Contractor's attention is drawn to the fact that the Works will be constructed inside built-up areas. The Contractor shall exercise all necessary precautions and take all necessary steps to ensure the safety and convenience of the public. In addition, the Contractor shall provide access for traffic over and through the works, and for residents to their places of abode, all as described in the Scope of Work. Allowance must be made by the Contractor in his programming for delays resulting from the aforesaid. The Contractor shall give residents a minimum of 72 hours written notice of his intent to close access to residential stands. The Contractor shall acquire written confirmation from all owners that they are aware of any intended closures of access. No traffic access to a residential stand shall be closed for longer than 48 hours.

C3.6.1.16.4 Control of Water

The Contractor shall at all times and in all respects be responsible for the handling of storm water from higher-laying areas above the Works, and for the handling of any sub-surface water that may affect the Works.

C3.6.1.16.5 Survey and Setting Out

The Engineer has established survey beacons on site from which the Contractor can set out the Works. The position and co-ordinates of the permanent survey beacons have been shown on the drawings. The Contractor shall be responsible for the protection of all these survey beacons and reference points from handing over of the beacons to the Contractor to completion of the Works. Property beacons and trigonometrically survey beacons that are disturbed or destroyed during the course of the contract shall be replaced at the Contractor’s cost by a registered land surveyor who shall verify such replacement The Contractor's attention is drawn to the requirements of SABS 1200 A (General), Clause 5.1, in this respect.

The Contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works from the beacons established above and for the provision of all necessary instruments, appliances and labour in connection therewith. Such setting out shall be executed by a registered surveyor. No separate payment shall be made in respect of setting out, such work being deemed as included in the rates tendered for construction of the Works.

The checking of any setting-out or of any line or level by the Engineer shall not relieve the Contractor of his responsibility for the correctness thereof.

If at any time during the progress of the Works, any error shall appear or arise in the position, levels, dimensions or alignment of any part of the Works, the Contractor, on being required to do so by the Engineer, shall at his own expense rectify such error to the satisfaction of the Engineer, but if such error is based on incorrect data supplied in writing by the Engineer shall, in respect of cost of such rectification, be entitled to make a claim in accordance with Clause 48 of the Contract Data.

C3.6.1.17 Notices, Signs, Barricades and Advertisements

Notices, signs and barricades (required in terms of Clause 34 of the Conditions of Contract) as well as advertisements may only be erected where approved by the Engineer. The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Engineer shall have the right to have any sign, notice or advertisement moved to another location, or to have it removed from the Site of the Works, should it in any way prove to be unsatisfactory, inconvenient or dangerous to the general public.

C3.6.1.18 Unauthorized persons

The Contractor shall keep unauthorized persons from the works at all times under no circumstances may any person except guards be allowed to sleep on the building site.

C3.7 HEALTH AND SAFETY

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

- ✓ 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 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 of injury of 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 any such occurrence and the Contractor shall make available to the Engineer the necessary facilities for carrying out such enquiries.

C3.8 PROJECT SPECIFICATIONS

SECTION 1200 : GENERAL REQUIREMENTS AND PROVISIONS

B1202 SERVICES

Add the following to the fifth paragraph:

"Provision is made in the bill of quantities for payment for searching and exposing of known or unknown services as well as the relocation and/or protection of existing services. Any moving of existing services which may be required within the proclaimed road reserve will be undertaken by the relevant service authorities or by a selected subcontractor if so, ordered by the engineer."

B1204 PROGRAMME OF WORK

(a) General requirements

Amend the word "network" in the fourth line of the first paragraph to read as "bar (Gantt) chart".

Add the following after the third paragraph:

"The bar-chart programme to be provided by the contractor shall show the various activities in such detail as may be required by the engineer. Progress in terms of the programme shall be updated monthly by the contractor in accordance with the progress made by the contractor.

In compiling the programme of work, the contractor shall indicate and make due allowance for the following, as specified elsewhere in the contract documents:

- The requirements regarding the accommodation of traffic and areas that may be occupied at any time for construction purposes (as indicated on the drawings and specified in Section 1500 of the specifications)
- Requirements regarding the training of labourers and Emerging Contractors (EC's).
- The requirements for work to be undertaken by labourers and work to be undertaken by EC's.

(b) Programme of work for rehabilitation work

Amend the word "network" in the fourth line of the second paragraph to read as "bar (Gantt) chart".

B1205 WORKMANSHIP AND QUALITY CONTROL

Add the following to the third paragraph:

“The engineer shall, however, undertake acceptance control tests for the judgement of workmanship and quality, without accepting any obligations vested with the contractor in terms of the contract with specific reference to quality of materials and workmanship. Such acceptance control test done by the engineer shall not relieve the contractor of his obligations to maintaining his own quality control system.”

Add the following at the end of this clause:

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

B1206 THE SETTING-OUT OF THE WORK AND PROTECTION OF BEACONS

Add the following:

“The contractor shall be responsible for the true and proper setting out of the Works and for the correctness of the position, levels, dimensions and alignment of all parts of the Works and for the provision of all necessary instruments, appliances and labour in connection therewith.”

The Contractor shall take care that property beacons, trigonometrical survey beacons or setting out beacons are not displaced or destroyed without the consent of the Engineer. Property beacons and trigonometrical survey beacons that have been displaced or destroyed shall be replaced by a registered land surveyor, who shall certify such replacement.

The cost of replacing all beacons displaced or destroyed during the course of the Contract without the consent of the Engineer shall be borne by the Contractor.”

B1209 PAYMENT

(b) Rates to be inclusive

Add the following:

“VAT shall be excluded from the rates and provided for as a lump sum in the Summary of Bill of Quantities”.

(e) Materials on the site

Add the following:

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

(a) The site selected for this purpose is approved by the engineer.

(b) Such land is physically separated from any production plant or operation.

(c) Only materials for use under this contract is stockpiled on such land.

(d) The contractor has provided proof of an agreement with the owner of such land that the owner has no claim whatsoever on any materials stockpiled on such land.

(e) Materials obtained by the contractor for or on behalf of emerging subcontractors (SMME's) shall remain the responsibility of the contractor after payment has been made in respect of materials on site."

B1215 EXTENSION OF TIME RESULTING FROM ABNORMAL RAINFALL

Add the following after the first paragraph of this clause:

"For the purposes of this contract, extension of time resulting from abnormal rainfall or other forms of inclement weather shall be determined according to the requirements of Method ii (critical-path method)."

Method (ii) (Critical path method)

Delete "(based on a five-day working week)" in the fifth and sixth lines of the second paragraph of the description of this method.

Delete the last sentence of the second paragraph of the description of this method and replace with the following:

"The value of "n" shall be taken as five (05) working days per calendar month.

If normal rainy or inclement weather, resulting in delays, occurs for less than five (05) working days in any calendar month, the difference between the five (05) working days and the actual number of working days on which normal rainy or inclement weather occurred, shall be ignored and not accumulated for the duration of the contract period for the purposes of determining an extension of time due to normal rainy weather, nor due to any other reason.

Items of work on the critical path of the programme of work which are subject to climatic limitations shall also be considered for extension of time if such items of work are delayed by e.g. cold weather, high winds or other inclement weather conditions.

In this regard, reference shall be made to weather limitations specified for the application of various bituminous products. However, for months during which seal-work cannot be undertaken in terms of the specifications, no extension of time shall be claimed for.

B1217 PROTECTION OF THE WORKS AND REQUIREMENTS TO BE MET BEFORE CONSTRUCTION OF NEW WORK ON TOP OF COMPLETED WORK IS COMMENCED

Add the following subclause:

"(h) No concrete kerbing or concrete drains directly adjoining the bituminous surfacing shall be constructed prior to the completion of the bituminous surfacing."

B1222 USE OF EXPLOSIVES

Add the following subclause:

“(h) Where blasting operations are undertaken in close proximity of temporary deviations, the contractor shall implement all such safeguarding measures as may be required and instructed by the engineer.”

B1224 THE HANDING-OVER OF THE ROAD RESERVE

Add the following:

"The total length of the road reserve between the specified limits of construction will be handed over to the contractor on the commencement date. Reference shall, however, be made to the requirements of section 1500 of these specifications where limitations in respect of work-areas are specified. In the event of the non-adherence by the contractor in terms of the mentioned specifications, the engineer shall withdraw such sections of the road reserve as may be justified to ensure suitable progress of the works or safe passage of traffic."

B1229 SABS CEMENT SPECIFICATIONS

Replace the last paragraph of this clause with the following:

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

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

Part 1: Common cements.

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

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

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

Add the following new clauses:

"B1230: IN-SERVICE AND STRUCTURED TRAINING

The contractor shall in addition to the structured (accredited) training as provided for in Part C of this document implement an in-service training programme, from the commencement of the contract, in which the various skills required for the execution and completion of the works are imparted to the labourers engaged thereon, in a programmed and progressive manner.

Labourers shall be trained progressively throughout the duration of the contract, in the various stages of a particular type of work.

(a) Details of in-service and structured training

(i) The contractor shall attach to form RDP 1(E) basic details of his proposed in-service training programme, which details shall inter alia include the following:

- the details of training to be provided.
- the manner in which the training is to be delivered.
- the number and details of trainers to be utilised.

(ii) The in-service training programme shall be submitted with the initial works programme. The progress in relation to this programme will be recorded monthly and attached to the site meeting minutes and payment certificate.

(iii) The contractor shall provide on site, sufficient skilled and competent trainers to train all labourers engaged on the contract, in the various skills required for the execution and completion of the works.

(iv) All labourers shall be remunerated in respect of all time spent undergoing training.

(v) Every worker engaged on the contract shall on the termination of his participation on the contract, be entitled to receive from the contractor, a certificate of service in which the following information shall be recorded:

- the name of the contractor.
- the name of the employee.
- the name of the project/contract.
- the nature of the work satisfactorily executed by the worker and the time spent thereon.
- the nature and extent of training provided to the worker.
- the dates of service.

The cost of the above obligations shall be deemed to be covered by the sums and rates tendered for items B13.01(a), (b) and (c) in the bill of quantities. The performance of the contractor in providing in-service training, shall be taken into consideration should the contractor fail to reach his CPG at the completion of the project.

(b) Lead time for training

The training of labour as specified shall, as far as possible, take place before commencement of each activity and the contractor shall take into account in his programme the lead-time he requires for such training. All training herein specified shall be deemed to be a construction activity and a non-negotiable condition of the contract".

B1231 COMMUNITY LIAISON OFFICER (CLO)

The contractor or his appointed agent will appoint a Community Liaison Officer (CLO) after consultation with the local communities, the engineer and the employer. The contractor shall direct all his liaison efforts with the local communities through the appointed officer. The contractor shall, however, accept the appointed as part of his management personnel.

(a) Duties of the Community Liaison Officer

The Community Liaison Officer's duties will be:

(i) To be available on site daily between the hours of 07:00 and 17:00 and at other times as the need arises. His normal working day will extend from 07:00 in the morning until 16:00 in the afternoon.

(ii) To determine, in consultation with the contractor, the needs of the temporary labour for relevant skills training. He will be responsible for the identification of suitable trainees and will attend one of each of the training sessions.

(iii) To communicate daily with the contractor and the engineer to determine the labour requirements with regard to numbers and skill, to facilitate in labour disputes and to assist in their resolution.

(iv) To assist in and facilitate in the recruitment of suitable temporary labour and the establishment of a "labour desk".

(v) To attend all meetings in which the community and/or labour are present or are required to be represented.

(vi) To assist in the identification, and screening of labourers from the community in accordance with the contractor's requirements.

(vii) To inform temporary labour of their conditions of temporary employment and to inform temporary labourers as early as possible when their period of employment will be terminated.

(viii) To attend disciplinary proceedings to ensure that hearings are fair and reasonable.

(ix) To keep a daily written record of his interviews and community liaison.

(x) To attend monthly site meetings to report on labour and RDP matters.

(xi) All such other duties as agreed upon between all parties concerned.

(xii) To submit monthly returns regarding community liaison as illustrated in Part C5.1 of this document (form RDP 12(E)).

(b) Payment for the community liaison officer

A special pay item is incorporated in section 1200 of the bill of quantities relating to payment of the liaison officer on a prime cost sum basis. This payment shall only be made for the period for which the duties of the liaison officer are required. The remuneration of the CLO shall be determined by the Employer in terms of the Sectorial determination 2: Civil Engineering Sector (Task grade 3).

(c) Period of employment of the community liaison officer

The period of employment of the community liaison officer shall be as decided upon jointly by the contractor, engineer and employer at a maximum period of a eight months basis, but with the option of renewal.

B1232 SUBCONTRACTORS

Over and above the stipulations of clause 4.4 of the General Conditions of Contract 2010, regarding subletting of part of the works, it is a condition of the contract that an approved subcontractor shall not sublet part of his work, covered in his appointment by the main contractor, to another subcontractor without the consent and approval of the engineer. Subletting shall in all cases be critically considered by the engineer.

In addition to the provisions of clause 4.4 of the general conditions of contract regarding subcontracting of the works, it is a requirement of this contract that an approved subcontractor shall not further subcontract work subcontracted to him by the main contractor, to another subcontractor without the consent and approval of the engineer. Subcontracting shall in all cases be critically considered by the engineer. The engineer reserves the right to limit the extent or the volume of work subcontracted by the contractor, should he deem it necessary in terms of progress or quality of workmanship.

B1233 WORKMEN'S COMPENSATION ACT

All labour employed on the site shall be covered by the Compensation for Occupational

Injuries and Diseases Act (COIDA). The contractor shall pay in full, including the payment of the necessary levies, such amounts, as are due in terms of the Act. The contractor at the commencement of the contract shall resolve the manner in which Workmen’s Compensation will be handled. Amounts paid by the contractor shall not be included in the wage rates but shall be covered by the Contractor to be deemed as included in his General Obligations rates in Section 1300 of the Bill of Quantities.

Add the following clause:

B1234 MINE HEALTH AND SAFETY ACT 1996, ACT 29 OF 1996

(a) Introduction

The main objective of this Act is to protect the health and safety of persons at mines. This specification is therefore aimed at promoting health and safety specifically at borrow pits. Borrow pits are classified as mines.

(b) General Provisions

The contractor shall be responsible for controlling his operations at every borrow pit where material is being excavated to ensure compliance with all the requirements of the Mine Health and Safety Act, 1996. The contractor shall also ensure that the works, shaping and finishing off of the borrow pit are done in accordance with the provisions as specified in section 3100 of the COLTO Standard Specifications and this Act. The contractor shall also comply to the requirements as set out in C3.4.3.2 Environmental Management Plan.

The minimum requirements for operations at borrow pits are:

- Borrow pits are worked in such a way that the health and safety of employees and the public will not be endangered.
- A monthly report shall be submitted to the engineer on health and safety aspects at the borrow pits.
- The contractor shall appoint a manager to manage the borrow pits in accordance with the Mine Health and Safety Act.
- The contractor shall take the necessary steps to ensure that the work area of the borrow pits are safe at all times. This shall include items such as the provision of fencing and security guards.

(c) Duties of the Manager

The minimum duties of the manager supervising the activities at borrow pits shall be:

- Maintain a healthy and safe borrow pit environment.
- Identify hazards and related risks to which persons and employees are exposed.
- Establish a health and safety policy that:
  - Describes the organisation of work.
  - Contains aspects concerning the protection of the employees and other persons' health and safety.
  - Contains a risk analysis.
- Supply and erect the necessary safety and warning signs.

B12.35 MEASUREMENT AND PAYMENT

Add the following items:

"ITEM		UNIT
B12.01:	**Locating Existing Services**	Provisional Sum
B12.02	**Hand Excavation to determine the positions of existing services to determine the positions of existing services**	cubic metre (m^3)
	Measurement and payment shall be as specified for item 22.01 in the standard specifications.	
B12.03	**Quality Control Test Ordered by the Engineer**	
	Quality Control Test Ordered by the Engineer	Prime Cost Sum
B12.04	**Provision for a Community Liaison Officer**	
	Provisional sum for the payment of the Community Liaison Officer	Provisional Sum
	Expenditure of the above item shall be made in accordance with the general conditions of contract.	
B12.05	Provisional sum for protection and/or relocation of existing services as ordered by the engineer	provisional sum
B12.06	Provisional sum for payment of contract notice board as instructed by the engineer	provisional sum
B12.07	Handling costs and profit in respect of subitems B12.01, B12.03 to B12.06 above	percentage (%)

Measurement and payment shall be in accordance with the general conditions of contract."

The tendered percentage is a percentage of the amount actually spent under the sub-items B12.01, B12.03 to B12.06, which shall include full compensation for the handling costs of the contractor, and the profit.

The prime cost sums shall be paid in accordance with the provisions of the General Conditions of Contract. The tendered percentage is a percentage of the amount actually spent under the prime cost items, which shall include full compensation for the profit in connection with providing the specified service.

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

B1302 GENERAL REQUIREMENTS

(a) Camps, constructional plant and testing facilities

Add the following:

"The contractor shall, at each area where work is being undertaken, provide on a daily basis at least one (1) portable chemical latrine unit per thirty (30) workers for use by construction workers employed on the project. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the satisfaction of the engineer. No separate payment shall be made for this requirement and shall be deemed to be included in the rates tendered for the contractor's time-related obligations."

B1303 PAYMENT

ITEM		UNIT
B13.01	**The contractor's general obligations**	(As specified)

Add the following after the fifth paragraph:

"The combined total tendered for sub-items (a), (b) and (c) shall not exceed 15% of the tender sum, excluding VAT.

Should the contractor be of the opinion that 15% is inadequate to cover his costs in terms of section 1300, he shall indicate separately with his tender where such costs have been allowed for in his tender. If no such indication is given, the contractor shall not at any stage during the contract for any reason whatsoever claim additional compensation under this item."

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

B1402 OFFICES AND LABORATORIES

(a) General

Add the following:

"The facilities to be provided for the engineer in terms of these specifications shall be fenced off by a two-metre-high veranda type security fence with diamond mesh on the vertical portion and barbed wire on the overhang. A security gate shall be provided in the fence which shall be guarded at all times by an acceptable watchman provided by the contractor.

The engineer's establishment may be incorporated within the contractor's establishment provided that the preceding requirements are met to the satisfaction of the engineer.

Separate payment shall be made for the provision and erecting of the security fence and gate as indicated on the drawings, but the cost in respect of the provision of a watchman at all times by the contractor shall be deemed to be included in the contractor's tendered rate for item B13.01(c)."

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

(b) Offices

Add the following new sub-sub-clause:

"(xviii) The engineer's site supervisory staff shall be provided with cellular telephones by the contractor for site communication purposes. Provision is made in the bill of quantities for separate payment of the supply and operating costs of such cellular phones."

B1406 MEASUREMENT AND PAYMENT

Add the following sub-item:

ITEM		UNIT
B14.11	**Provision of cellular telephone to the Engineer:**	
	(a) Cost of cellular phone, calls and other charges	Provisional Sum (P Sum)
	(b) Handling cost and profits in respect of item B14.11(a)	Percentage (%)

The unit of measurement for item B14.11 shall include full compensation for the monthly cellular phone costs for the Engineer's site personnel.

Measurement and payment in respect of the provisional sum item shall be made in accordance with the provisions of the general conditions of contract.

ITEM		UNIT
B14.12	**Provision and erection of security fencing (Including gate)**	metre (m)

The unit of measurement shall be the metre of security fence supplied and erected as indicated on the drawings and/or ordered by the engineer. The tendered rate shall include full compensation for procuring and furnishing of all material, including one vehicle gate, labour and equipment required to erect the specified security fence and maintain it for the duration of the contract."

General: Method of payment

Add the following:

"The tendered rates under this section of the bill of quantities shall also include full compensation for the dismantling and removal from site of all offices, laboratories and other facilities provided for the engineer's supervisory staff at the completion of the contract."

SECTION 1500 : ACCOMMODATION OF TRAFFIC

B1502 GENERAL REQUIREMENTS

(e) Access to properties

Add the following:

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

(i) Traffic safety officer

Add the following after subclause (viii):

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

(vi) arrange for the removal of broken-down vehicles that obstruct the normal traffic flow.

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

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

Add the following new subclauses:

"(j) Handing over the site

The total extent of the site between the limits of construction as described in this document and indicated on the drawings will be handed over to the contractor at the commencement of the contract period. The engineer however reserves the right to adjust this arrangement should progress or safe passage of traffic warrant such a change.

(k) Use of explosives in close proximity of temporary deviations

The contractor shall arrange all necessary traffic control and other requirements to safeguard the traffic on temporary deviations during blasting operations.

(l) Land taken up for deviations

Negotiations with landowners to obtain the land taken up by temporary deviations will be undertaken by the employer. A prime cost sum is allowed in the bill of quantities for payment of compensation to affected landowners. All other negotiations regarding temporary access to properties, land-use, fencing requirements etc. shall be dealt with by the contractor in conjunction with the engineer and be confirmed in writing and be kept on record by the contractor.

"(m) Maximum lengths of construction areas

A temporary deviation, where the proposed road follows the existing route shall be constructed along the length of existing road. Traffic shall generally be accommodated as follows:

On a two-way two-lane gravel deviation (Class 1) constructed partially outside or adjacent to the existing road reserve boundaries of road.

(i) On one-way single lane gravel deviation (Class 2) constructed inside the existing road reserve boundaries and on either side of road. In this instance special cognisance shall be taken to accommodate traffic to private properties.

A maximum length of one section of approximately 5,0km or two sections of 3,0km each of deviation (Class 1 or 2) shall be operational at a time and no relieve of this limitation shall be considered by the engineer except where the programme necessitates such at the construction of bridges."

B1503 TEMPORARY TRAFFIC CONTROL FACILITIES

Add the following after the first paragraph:

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

(b) Road signs and barricades

Add the following:

"All the temporary road signs are to be mounted on posts as specified in section 5600 of the specifications. Provision shall be made for the supply and erection of the signs and the maintenance of the signs during the construction period. Provisions shall also be made for the removal of the temporary road signs on completion of the construction work when such signs are no longer required.

Temporary road signs and channelization devices shall be manufactured in accordance with the latest edition of the South African Road Traffic Signs Manual (June 1999) and placed as shown on the drawings and in Road Signs Note 13. Delineators shall be manufactured from a non-metal material and shall be mounted on a base section also manufactured of non-metal material. Single as well as back-to-back mounted delineators are required.

The obligation to arrange safe passage of traffic shall always be vested with the contractor regardless what is indicated on the drawings of the engineer."

(c) Channelization devices and barricades

Add the following:

"Drums shall not be used as channelization devices.

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

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

ii) The blade shall be retro-reflectorised, with class 1 yellow sheeting on the side facing oncoming traffic.

iii) It shall nominally be 1000mm high x 250mm wide and the bottom edge of the delineator shall not be more than 200mm above the road surface.

iv) It shall be subject to the approval of the Engineer.

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

(e) Warning devices

Add the following:

"It is a requirement of this contract that all construction vehicles and plant used on the works will be equipped with rotating amber flashing lights and warning boards as specified in the standard specifications. Construction vehicles travelling outside the limits of construction areas shall however, not operate the warning lights.

The warning lights shall have a base diameter of at least 170mm and the amber bulb cover a height of a least 150mm high. It shall be a requirement that the contractor also provides the engineer's site personnel with warning lights for their vehicles (a maximum of two lights are required) without any payment applicable.

B1514 TEMPORARY FENCING AND GATES

Replace the contents of this clause with the following:

"Where temporary fencing is ordered by the engineer, it shall be paid for under item 55.06 of the standard specifications. The temporary fencing shall be new fencing material, which shall subsequently be dismantled and removed and erected at an alternative position as directed by the engineer. When ordered by the engineer, temporary fences and gates shall be moved to new locations or either left in place or when no longer required be dismantled and removed from site if so directed. Allowance is made in the bill of quantities for moving existing fences and gates."

Add the following clause:

B1517 RETRO-REFLECTIVE MATERIAL

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

B1518 MEASUREMENT AND PAYMENT

Renumber item 15.01 as B15.01 and add the following:

"The tendered rate shall also include for all measures necessary to safeguard traffic on temporary deviations during blasting operations as well as all temporary traffic-control facilities for temporary deviations."

Delete all references to half width construction under payment item 15.01. Half width construction will be measured under payment item 15.10.

Renumber item 15.03 as B15.03 and Add the following

"This section provides only for additional traffic-control facilities as and when required on instruction by the Engineer and does not provide for facilities already included under payment item B15.01"

Add the following sub-item:

"ITEM **UNIT**

B15.02 Temporary traffic control facilities

(p) Provision of high visibility safety jackets and safety hats number (No)

The unit of measurement shall be the number of safety jackets supplied to the supervisory staff.

The tendered rate shall include full compensation for providing and maintaining hats and the jackets equipped with high visibility retro-reflective and/or fluorescent panels in red, yellow and white for the duration of the contract".

SECTION 1700 : CLEARING AND GRUBBING

B1702 DESCRIPTION OF WORK

a) Clearing

Add the following:

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

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

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

Payment for gabion boxes and mattresses which have to be removed and the material sorted and stacked shall be made under section 5200"

B1703 EXECUTION OF WORK

(a) Areas to be cleared and grubbed

Add the following:

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

B1704 MEASUREMENT AND PAYMENT

Change item 17.01 to read as follows:

ITEM		UNIT
B17.01	**Clearing and grubbing of:**	
	Clearing and grubbing	hectare (ha)

Measurement and payment for item B17.01 shall be as specified for item 17.01 of the standard specifications.

SECTION 1800 : DAYWORK SCHEDULE

Note: This is a new section added to the Standard Specifications.

Add the following:

B1801 SCOPE

This section covers the listing of daywork items for use in determining payment for work which cannot be quantified in specific pay item "units" in the bill of quantities or work ordered by the engineer during the construction period which was not foreseen at tender stage for which no applicable rate exists in the schedule or for work of a special or different character warranting special payment as decided by the engineer.

B1802 ORDERING OF DAYWORK

No daywork shall be undertaken unless specific written authorisation is obtained from the engineer.

B1803 MEASUREMENT AND PAYMENT

The engineer may order the following daywork items:

ITEM	DESCRIPTION	UNIT
B18.01	(a) Normal hours of duty of:	
	(i) Unskilled	Hour (h)
		Hour (h)
	(ii) Semi-skilled	Hour (h)
		Hour (h)
	(iii) Skilled	
B18.02	(iv) Foreman	Hour (h)
	Hire of construction equipment	Hour (h)
	(a) Excavator 22 –30 ton	Hour (h)
	(b) TL Backactor	Hour (h)
	(c) Front end loader	Hour (h)
	(d) Platform truck	Hour (h)
	(e) Tip truck	
	(f) Grader (CAT 140G or similar)	Hour (h)
	(g) Walk behind roller *(Bomag BW90 or similar)*	Hour (h)
		Hour (h)
	(h) Mechanical Broom	Hour (h)
	(i) D6 Dozer	Hour (h)
	(j) Compressor	
	(k) Submersible dewatering pump	

The unit of measurement shall be the actual number of hours worked by labourers or foremen or an item of plant.

The tendered rates shall include full compensation for all cost items including overheads, head-office expenses and profits as described in subclause 6.5 of the general conditions of contract and shall be subject to contract price adjustment as provided for in the contract.

The mark-ups on daywork items in accordance with the Appendix to the Tender shall not be applicable on daywork items listed in the bill of quantities in terms of the above specifications. In the event of new daywork rates being requested for items not appearing in the bill of quantities, then the provisions of the general conditions of contract and the Appendix to the Tender shall apply.

Prior to the commencement of any work by the labourers described under item B18.01, the contractor must obtain written consent from the engineer regarding the classification and composition of all labourers in terms of “unskilled” and “skilled” labourers required for the work as ordered by the engineer.”

SECTION 2100 : DRAINS

B2103 BANKS AND DYKES

Add the following:

"Mitre banks at culvert inlets should be considered at such a skew angle that it guides the water into the inlet with a minimum loss of velocity (energy)."

B2104 SUBSOIL DRAINAGE

(a) Materials

(i) Pipes

Delete the last sentence of the fifth paragraph and substitute it with the following:

"Perforation for 100mm pipes shall be spaced in two rows, one on each side of the vertical centre line of the pipe, and at one third of the circumference. The perforation for the 150mm pipes shall be spaced in four rows, two as described for 100mm pipes, and the other two rows at two thirds of the circumference."

(ii) Synthetic-fibre filter fabric

Add the following:

"All filter fabric shall be a non-woven needle punched type material and must be approved by the engineer. Filter fabrics shall have a minimum co-efficient of permeability of 3 x 10-3m per second."

B2107 MEASUREMENT AND PAYMENT

Add the following new items:

"ITEM		UNIT
B21.20	**Galvanised wire mesh 250 x 250mm, at the outlets of subsoil drainage systems. Mesh 10mm x 2,5mm wire diameter** The unit of measurement shall be the number of 250mm x 200mm pieces of wire mesh, with a 10mm x 10mm mesh and 2,5mm wire diameter built into the subsurface drain outlet structure as shown on the drawings. The tendered rate shall include for procuring, furnishing and installing the material, cutting, waste and keeping the mesh in the pipe opening clean during installation.	Number (No)
B21.21	**Subsoil Drainage Markers** Measurement and payment shall be as specified for item 22.24 in the standard specifications."	Number (No)

SECTION 2200 : PREFABRICATED CULVERTS

B2201 SCOPE

Add the following:

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

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

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

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

B2203 MATERIALS

(f) Skewed Ends

Delete the second and third paragraphs and substitute with the following:

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

B2204 CONSTRUCTION METHODS

Add the following:

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

(c) Excavation by Hand

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

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

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

B2205 EXCAVATION FOR CONSTRUCTION BY TRENCH METHOD

Add the following subclauses:

"(c) Excavation by hand

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

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

(d) Drainage of excavations

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

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

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

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

B2210 LAYING AND BEDDING OF PREFABRICATED CULVERTS

B2210(b)(i) Cast in situ invert slabs

Replace with the following:

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

All culverts (precast as well as in situ) shall be constructed with an in situ reinforced concrete floor laid on a 75mm concrete screed".

Delete subclause B.2210(b)(ii) : "Prefabricated floor slabs."

B2211 BACKFILLING OF PREFABRICATED CULVERTS

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

B2212 INLET AND OUTLET STRUCTURES, CATCHPITS AND MANHOLES

(b) Concrete work

Add the following:

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

(h) Prefabricated inlet and outlet structures

Add the following:

“The use of precast concrete inlets and outlets as described in clause 2212(h), shall not be allowed under any circumstances. Cast in situ concrete wingwall type inlets and outlets shall be constructed as indicated on the drawings and shall be in accordance with section 6000 of the Standard Specifications. Allowance for measurement and payment for wingwall type inlets and outlets is made in the schedule in this section.”

B2218 MEASUREMENTS AND PAYMENT

Add the following to pay item 22.05:

"In addition to the requirements for measuring concrete backfill to rectangular culverts as specified for item 22.08, the following shall apply:

Concrete backfill shall be measured to the actual dimensions of the precast units, i.e. actual volumes between ribs and haunches shall be taken into account. For the purpose of calculating concrete backfill quantities, the horizontal dimensions of the concrete backfill on the outside of the culvert(s) (closest to excavated face), shall be taken as 100mm maximum irrespective of what type or make of precast portal is used or the actual width of the excavation.

The width of the concrete backfill between portals in the case of multiple culverts, shall be taken as 80mm for precast units with a leg height of 1500mm and 100mm for precast units with a leg height exceeding 1500mm. The vertical dimensions, in both cases, shall be equal to the height of the portal".

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

B2301 SCOPE

Add the following:

"The position and length of the following types of concrete kerbs and channels are indicated on the geometric layout plans, typical drawings and on the drainage plans.

Type A : In situ concrete channel, 0,8m wide on fills

Type B : Precast concrete kerbing, semi-mountable (SABS 927-1969)

Type C : In situ concrete kerbing at intersections

Edge beam : In situ concrete kerbing at farm access and bus stops

Type E, F1 & F2 : In situ concrete "V"-shaped channels in side drains and open drains."

B2302 MATERIAL

Add the following new subclauses:

(e) Metal pipes

"Metal pipes down side slopes shall comply with the requirements of clause 2203 of the standard specifications."

B2304 CONSTRUCTION

(d) Slip form kerbing

Add the following:

"Slip-form kerbing shall under no circumstances be allowed."

(e) Cast in situ kerbs and channels

Add the following:

"Forming and templates used to form joints between alternate sections shall be of steel plate of which the thickness shall not be less than 5mm."

Add the following new subclauses:

(i) Construction sequence

Replace paragraphs (i), (ii) and (iii) with the following:

"In all cases where kerbing and/or channelling adjoin the bituminous surface of the road, the kerbing and/or channelling may only be constructed after the bituminous surface has been completed.

Before commencing with the kerbing and/or channelling, the surfacing and the base, shall be accurately cut to line with a mechanical saw to a minimum depth of 75mm. After excavation the concrete shall then be cast against the cut surface without formwork. All material outside the cut line must be carefully removed to the required thickness of concrete without damaging the edge before commencing with the casting of the concrete.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

No payment shall be made for repair work as instructed by the engineer to damage caused by the cutting/excavating process of surfacing and base layers. Any concrete spilt onto the surfacing shall immediately be removed and cleaned. Where so required by the engineer, the contractor shall, without any additional compensation, paint emulsion over the stained surface.

Add the following subclause:

(k) Formwork and finish

"Formwork and finish of concrete kerbs shall comply with the requirements of section 6200. All visible edges on the sides or at joints of cast in situ concrete kerbs or channels shall be rounded with a rounding tool."

SECTION 3100 : BORROW MATERIALS

B3102 NEGOTIATIONS WITH OWNERS AND AUTHORITIES

Add the following to sub-clause 3102(a):

"Arrangements regarding to access to borrow pits and the alignment of haul roads shall be made between the contractor and the owners of the land on which borrow pits are situated. The engineer's representative on site shall be present at all such negotiations, which shall be confirmed in writing by the contractor. All costs involved with such negotiations as well as the requirements contained in clause 3102 and clause 1225 of the specifications shall be borne entirely by the contractor."

B3103 OBTAINING BORROW MATERIALS

(a) General

Add the following:

"The expropriation and compensation for land from which borrow materials is obtained shall be negotiated and paid for by the employer."

(b) Use of borrow materials

Add the following to the second paragraph of this subclause:

"Compensation to owners and arrangements with owners for taking material from alternative borrow pits proposed by the contractor shall be the contractor's responsibility and entirely at his own expenses."

B3104 OPENING AND WORKING BORROW PITS AND HAUL ROADS

(c) Excess overburden

Add the following:

"All excess overburden removed at borrow pits shall be replaced over the entire area of the borrow pit after initial shaping has been undertaken in an even layer. Payment for this requirement shall be deemed to be included in pay item 31.01.

(f) Protecting borrow pits

Add the following:

"It is a requirement of the contract that each borrow pit or pits shall be provided with fencing around the perimeters, including access gate, of the borrow areas, including the supply of danger warning signage fixed to the fencing, visible at all sides approaching the borrow pit area. The fencing shall be erected prior to entering the land for borrowing purposes and shall on final finishing of the borrow areas as specified by the employer, be dismantled and removed or left in-place as instructed by the employer. Payment for fencing around borrow pits shall be made in accordance with the stipulations of section 5500 in these specifications." In addition to fencing, Security Guards shall be supply on a 24 hour, 7 days a week basis, with full time communication to the Site Manager or site camp for the duration of the contract and activities at the borrow pits."

"(h) Haul roads

Add the following new subclause:

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

B3105 FINISHING-OFF BORROW AREAS AND HAUL ROADS

Add the following to this clause:

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

SECTION 3300 : MASS EARTHWORKS

B3305 TREATING THE ROADBED

(a) Removing unsuitable material

Add the following to the third paragraph:

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

(c) Preparing and compacting the roadbed

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

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

B3307 FILLS

(c) Constructing a pioneer layer

Add the following to the first paragraph:

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

(d) Benching

Add the following:

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

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

B3308 FINISHING THE SLOPES

(d) General

Add the following:

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

SECTION 3400 : PAVEMENT LAYERS OF GRAVEL MATERIAL

B3402 MATERIALS

(a) General

Add the following:

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

B3405 CONSTRUCTION TOLERANCES

(e) Cross-section

Delete the second paragraph and replace with the following:

"The normal crossfall of the road wearing course where the road is in a straight horizontal alignment, is specified as 3% as shown on the drawings.

At any cross-section the measured crossfall between any two points shall at least be 2,8% and not more than 3,5%. At any cross-section the actual level at any point shall not be higher than 10mm above the computed level from the cross-section as specified and the actual level, if lower than the computed level, shall not be lower by more than that derived from the specifications for longitudinal grade and crossfall deviations."

(f) Surface regularity

Add the following:

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

B3406 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following:

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

SECTION 3500 : STABILISATION

B3503 CHEMICAL STABILISATION

(a) Preparing the layer

Add the following:

Breaking-down and removal of oversize material and addition of material to make to required thickness shall be completed before stabilising agent shall be added."

(h) Curing the stabilised work

Add the following:

"It is the intention of this contract that curing of chemically stabilised layers shall be undertaken in accordance to protection method (ii) as specified. Any other method of curing shall only be allowed in special circumstances as decided upon by the engineer, but no additional payment whatsoever over and above that allowed for in item 35.05 will be made."

(i) Construction limitations

In table 3503/1, replace "8 hours" with "6 hours."

B3506 TOLERANCES

(b) Uniformity of mix (chemical stabilisation)

Add the following:

"All pavement layers, especially layers which are to be chemically stabilised, shall, apart from the application of other mixing equipment, include at least two motor grader blade mixing operations to the full depth of the layer.

The in-place mixing of chemical stabilising agents with gravel materials shall be executed in such a manner that the coefficient of variation in the uniformity of the mix shall not exceed 30% when the stabilised layer is subjected to the chemical titration test, TMH1 method A15d. For plant-mixed stabilised materials the coefficient of variation shall not exceed 20%.

The coefficient of variation, C_v, is calculated by the formula:

$C_v = \frac{S_n}{X_n} \times 100$ where,

S_n = standard deviation of n determinations of stabilising agent content

X_n = mean percentage of n determinations of stabilising agent content with n = 4 minimum."

B3509 QUALITY OF MATERIALS AND WORKMANSHIP

Add the following:

"The preparation of chemically stabilised material for the determination of the modified AASHTO density of the material shall be executed in accordance with TMH1 test method A16T and compaction thereof in accordance with TMH1 test method A7."

SECTION 5600 : ROAD SIGNS

B5601 SCOPE

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

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road signboards

Add the following:

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

(a) (ii) Steel profile road signboards

Add the following:

"Where the letter or legends cross the horizontal joints of the sign panels, the letter shall be cut on the joint and both ends folded around the radius. Retro-reflective material to adjoining Chromadek panels on a sign shall be practical visual match of the specified colour."

B5604 ROAD SIGN FACES AND PAINTING

Add the following new subclause:

"(e) Application of retro-reflective material

All sign faces shall be faced with diamond grade retro-reflective material. Painted front sign faces shall not be used. Where applied to Chromadek sections, retro-reflective material shall be applied as specified for aluminium section in Clause 5603(d) of the Standard Specification, and of Clause B5603(a)(ii) of this project Specification."

B5605 STORAGE AND HANDLING

Add the following:

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

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

B5606 ERECTING ROAD SIGNS

(c) Erection

Add the following:

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

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

B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

Add the following:

"Existing overhead and ground mounted road signs that are being replaced by new signs shall be dismantled and disposed of by the Contractor. Where possible the dismantling of the signs shall not be before the replacement sign is erected and displayed. Where dismantling of the sign is required before erection of the replacement sign, the dismantling shall not take place until immediately before work is to commence on the replacement, and the replacement shall be completed and the new sign displayed as soon as possible thereafter (within 72 hours). Dismantling shall include sign panels and ground mounted sign supports. Ground mounted sign supports shall be cut off just below ground level. Material excavated for removal of buried poles shall be replaced, and any depression made good using excess material from excavation for new signs.

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

B5609 MEASUREMENT AND PAYMENT

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

Amend the last two lines of the second paragraph to read:
"Completion, delivery, installation of the road sign board complete as specified, and the removal and disposal of all vegetation obstructing the motorists' view of the new or replaced sign board. Add the following pay items:

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

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

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

5700 : ROAD MARKINGS

B5706 SETTING OUT THE ROAD MARKINGS

Add the following:

"Where road markings are to be replaced after milling/overlay seal, it is essential that all existing barrier lines and other road marking lines be accurately referenced before commencement of milling or other operations which will obliterate the existing road markings. The position of barrier lines shall be re-assessed on site by the Engineer before the Contractor commences with the road marking."

B5707 APPLYING THE PAINT

Add the following:

"The Contractor's establishment on site and general obligation shall be deemed to fully include the establishment of the road-marking team, irrespective of the number of times the road-marking team is required to be onsite or is required to move within the site."

B5711 GENERAL

Insert the following into the last sentence of the last paragraph between “black paint” and “or chemical paint remover”:

“, bituminous emulsion, slurry”

Add the following to the last paragraph:

“Where black paint is used, it shall be matt.”

Add the following new clause:

“B5715 REMOVAL OF EXISTING ROAD STUDS

The existing road studs shall be removed from the road surface prior to milling.”

B5714 MEASUREMENT AND PAYMENT

ITEM		**UNIT**
B57.06	Setting out and pre-marking the lines (excluding traffic island markings, lettering and symbols)	

Add the following:

“Referencing of existing barrier lines and other road marking lines prior to milling and other operations, shall be included in the tendered rate for setting out and pre-marking.”

Add the following item:

"Item		**Unit**
B57.07	Establishment of painting unit during the construction	Lump sum

The unit of measurement shall be the lump sum to compensate the contractor for the establishment and removal of the painting unit after the retention period.

The tendered lump sum shall include full compensation for the establishment on site and for the removal of all equipment, personnel, etc. as may be required for the application of the road marking.

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

B5902 FINISHING THE ROAD AND ROAD RESERVE

Add the following to the first paragraph:

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

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

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

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

C4 SITE INFORMATION

C4.1: Location of the Site

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

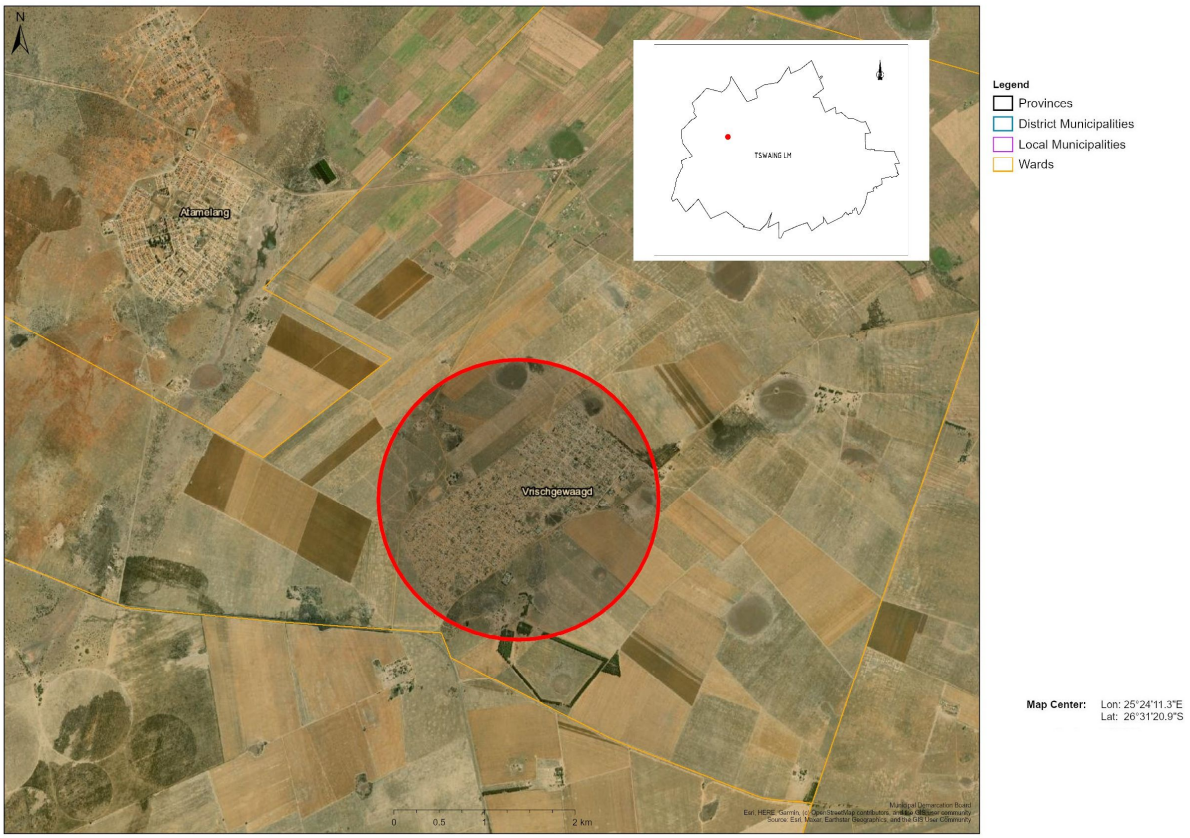
Documents included in this section should describe the site as at the time of tender to enable the Tenderer to price his tender and to decide upon his method of working and programming.

Normally only actual information about physical conditions of the site and its surroundings is included in the site information and interpretation is a matter for the Tenderer.

C4.1 Location of the Works

AREA	LATITUDE	LONGITUDE
Frisgewaagt Ward 6	26°31'37.23"S	25°24'40.17"E

Figure 0-1 Location of Project Site



Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

LOCALITY MAP
SCALE 1:50 000

Geology

It is preliminarily concluded that the bearing capacities of the existing soils on the gravel roads are of moderate to adequate satisfactory road performance, therefore importation of suitable enough material has been allowed before installing the new paving blocks.

Topography and Drainage

The site topography indicates that the area is flat. The site slope is generally gentle undulating.

Bench Marks

All benchmark information will be supplied during construction.

Contractor	Witness 1	Witness 2	Employer	Witness 1	Witness 2

TSWAING LOCAL MUNICIPALITY

PROJECT NO: SCM 005/2022/23

PROJECT DESCRIPTION: FRISGEWAAGT INTERNAL ROADS AND STORMWATER, PHASE 1

C5 RELEVANT DOCUMENTATION

The following documents forms part of the Contract:

1. Preferential Procurement Regulations 2017
2. Tswaing Local Municipality Supply Chain Management Policy (Can be downloaded from the Municipality website)
3. Tswaing Local Municipality Health and Safety Specification.
4. EPWP Guideline

NATIONAL TREASURY

NO. R. 32 **20 JANUARY 2017**

PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000: PREFERENTIAL PROCUREMENT REGULATIONS, 2017

The Minister of Finance has, in terms of section 5 of the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000), made the regulations set out in the Schedule.

SCHEDULE

Preferential Procurement Regulations, 2017

Contents

1. Definitions

2. Application

3. Identification of preference point system, designated sector, pre-qualification criteria, objective criteria and subcontracting

4. Prequalification criteria for preferential procurement

5. Tenders to be evaluated on functionality

6. 80/20 preference point system for acquisition of goods or services for Rand value equal to or above R30 000 and up to R50 million

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8. Local production and content

9. Subcontracting as condition of tender

10. Criteria for breaking deadlock in scoring

11. Award of contracts to Tenderers not scoring highest points

12. Subcontracting after award of tender

13. Cancellation of tender

14. Remedies

15. Circulars and guidelines

16. Repeal of Regulations and saving

17. Short title and commencement

Definitions

1. In these Regulations, unless the context indicates otherwise, any word or expression to which a meaning has been assigned in the Act must bear the meaning so assigned-

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

"B-BBEE status level of contributor" means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

"Black designated groups" has the meaning assigned to it in the codes of good practice issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

"Black people" has the meaning assigned to it in section 1 of the Broad-Based Black Economic Empowerment Act;

"Broad-Based Black Economic Empowerment Act" means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

"Co-operative" means a co-operative registered in terms of section 7 of the Co-operatives Act, 2005 (Act No. 14 of 2005);

"Designated group" means-

(a) black designated groups;
(b) black people;
(c) women;
(d) people with disabilities; or
(e) small enterprises, as defined in section 1 of the National Small Enterprise Act, 1996 (Act No. 102 of 1996);

"Designated sector" means a sector, sub-sector or industry or product designated in terms of regulation 8(1)(a);

"EME" means an exempted micro enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

"Functionality" means the ability of a Tenderer to provide goods or services in accordance with specifications as set out in the tender documents;

"Military veteran" has the meaning assigned to it in section 1 of the Military Veterans Act, 2011 (Act No. 18 of 2011);

"National Treasury" has the meaning assigned to it in section 1 of the Public Finance Management Act, 1999 (Act No. 1 of 1999);

"People with disabilities" has the meaning assigned to it in section 1 of the Employment Equity Act, 1998 (Act No. 55 of 1998);

"Price" includes all applicable taxes less all unconditional discounts;

"Proof of B-BBEE status level of contributor" means-

(a) the B-BBEE status level certificate issued by an authorised body or person;
(b) a sworn affidavit as prescribed by the B-BBEE Codes of Good Practice; or
(c) any other requirement prescribed in terms of the Broad-Based Black Economic Empowerment Act;

"QSE" means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;

"Rand value" means the total estimated value of a contract in Rand, calculated at the time of the tender invitation;

"Rural area" means-

(a) a sparsely populated area in which people farm or depend on natural resources, including villages and small towns that are dispersed through the area; or

(b) an area including a large settlement which depends on migratory labour and remittances and government social grants for survival, and may have a traditional land tenure system;

"Stipulated minimum threshold" means the minimum threshold stipulated in terms of regulation 8(1)(b);

"The Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000);

"Township" means an urban living area that any time from the late 19th century until 27 April 1994, was reserved for black people, including areas developed for historically disadvantaged individuals post 27 April 1994;

"Treasury" has the meaning assigned to it in section 1 of the Public Finance Management Act, 1999 (Act No. 1 of 1999); and

"Youth" has the meaning assigned to it in section 1 of the National Youth Development Agency Act, 2008 (Act No. 54 of 2008).

Application

2. These Regulations apply to organs of state as envisaged in the definition of organ of state in section 1 of the Act.[1]

Identification of preference point system, designated sector, pre-qualification criteria, objective criteria and subcontracting.

3. An organ of state must-

(a) determine and stipulate in the tender documents-

(i) the preference point system applicable to the tender as envisaged in regulation 6 or 7; or

[1] The definition of "organ of state" in section 1 of the Act in paragraph (a) to (e) includes-
- a national or provincial department as defined in the Public Finance Management Act, 1999;
- a municipality as contemplated in the Constitution;
- a constitutional institution as defined in the Public Finance Management Act;
- Parliament;
- a provincial legislature.

Paragraph (f) of the definition of organ of state in section 1 of the Act includes any other institution or category of institutions included in the definition of "organ of state" in section 239 of the Constitution and recognised by the Minister by notice in the *Government Gazette as* an institution or category of institutions to which the Act applies. Government Notice R. 501 of 8 June 2011 recognises, with effect from 7 December 2011, all public entities listed in Schedules 2 and 3 to the Public Finance Management Act, 1999, as institutions to which the Act applies. Note should be taken of notices issued from time to time in terms of paragraph (f) of this definition. The application of these Regulations is also subject to applicable exemptions approved in terms of section 3 of the Act.

(ii) if it is unclear which preference point system will be applicable, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system;

(b) determine whether pre-qualification criteria are applicable to the tender as envisaged in regulation 4;

(c) determine whether the goods or services for which a tender is to be invited, are in a designated sector for local production and content as envisaged in regulation 8;

(d) determine whether compulsory subcontracting is applicable to the tender as envisaged in regulation 9; and

(e) determine whether objective criteria are applicable to the tender as envisaged in regulation 11.

Pre-qualification criteria for preferential procurement

4.(1) If an organ of state decides to apply pre-qualifying criteria to advance certain designated groups, that organ of state must advertise the tender with a specific tendering condition that only one or more of the following Tenderers may respond-

(a) a Tenderer having a stipulated minimum B-BBEE status level of contributor;

(b) an EME or QSE;

(c) a Tenderer subcontracting a minimum of 30% to-

(i) an EME or QSE which is at least 51% owned by black people;

(ii) an EME or QSE which is at least 51% owned by black people who are youth;

(iii) an EME or QSE which is at least 51% owned by black people who are women;

(iv) an EME or QSE which is at least 51% owned by black people with disabilities;

(v) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;

(vi) a cooperative which is at least 51% owned by black people;

(vii) an EME or QSE which is at least 51% owned by black people who are military veterans;

(viii) an EME or QSE.

(2) A tender that fails to meet any pre-qualifying criteria stipulated in the tender documents is an unacceptable tender.

Tenders to be evaluated on functionality

5.(1) An organ of state must state in the tender documents if the tender will be evaluated on functionality.

(2) The evaluation criteria for measuring functionality must be objective.

(3) The tender documents must specify-

(a) the evaluation criteria for measuring functionality;

(b) the points for each criterion and, if any, each sub-criterion; and

(c) the minimum qualifying score for functionality.

(4) The minimum qualifying score for functionality for a tender to be considered further-

(a) must be determined separately for each tender; and

(b) may not be so-

(i) low that it may jeopardise the quality of the required goods or services; or

(ii) high that it is unreasonably restrictive.

(5) Points scored for functionality must be rounded off to the nearest two decimal places.

(6) A tender that fails to obtain the minimum qualifying score for functionality as indicated in the tender documents is not an acceptable tender.

(7) Each tender that obtained the minimum qualifying score for functionality must be evaluated further in terms of price and the preference point system and any objective criteria envisaged in regulation 11.

80/20 preference point system for acquisition of goods or services for Rand value equal to or above R30 000 and up to R50 million

6.(1) The following formula must be used to calculate the points out of 80 for price in respect of a tender with a Rand value equal to or above R30 000 and up to a Rand value of R50 million, inclusive of all applicable taxes:

$$Ps = 80\left(1 - \frac{Pt - P\,min}{P\,min}\right)$$

Where :

Ps = Points scored for price of tender under consideration;

Pt = Price of tender under consideration; and

Pmin = Price of lowest acceptable tender.

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

B-BBEE Status Level of Contributor	Number of Points
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant	0

(3) A Tenderer must submit proof of its B-BBEE status level of contributor.

(4) A Tenderer failing to submit proof of B-BBEE status level of contributor or is a non-compliant contributor to B-BBEE may not be disqualified, but-

(a) may only score points out of 80 for price; and

(b) scores 0 points out of 20 for B-BBEE.

(5) A Tenderer may not be awarded points for B-BBEE status level of contributor if the tender documents indicate that the Tenderer intends subcontracting more than 25% of the value of the contract to any other person not qualifying for at least the points that the Tenderer qualifies for, unless the intended subcontractor is an EME that has the capability to execute the subcontract.

(6) The points scored by a Tenderer for B-BBEE in terms of sub-regulation (2) must be added to the points scored for price under sub-regulation (1).

(7) The points scored must be rounded off to the nearest two decimal places.

(8) Subject to sub-regulation (9) and regulation 11, the contract must be awarded to the Tenderer scoring the highest points.

(9) (a) If the price offered by a Tenderer scoring the highest points is not market-related, the organ of state may not award the contract to that Tenderer.

(b) The organs of state may-

(i) negotiate a market-related price with the Tenderer scoring the highest points or cancel the tender;

(ii) if the Tenderer does not agree to a market-related price, negotiate a market-related price with the Tenderer scoring the second highest points or cancel the tender;

(iii) if the Tenderer scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the Tenderer scoring the third highest points or cancel the tender.

(c) If a market-related price is not agreed as envisaged in paragraph (b)(iii), the organ of state must cancel the tender.

90/10 preference point system for acquisition of goods or services with Rand value above R50 million

7.(1) The following formula must be used to calculate the points out of 90 for price in respect of a tender with a Rand value above R50 million, inclusive of all applicable taxes:

$$Ps = 90\left(1 - \frac{Pt - P\,min}{P\,min}\right)$$

Where:

Ps = Points scored for price of tender under consideration;
Pt = Price of tender under consideration; and
Pmin = Price of lowest acceptable tender.

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

B-BBEE Status Level of	Number of Points
1	10
2	9
3	6
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

(3) A Tenderer must submit proof of its B-BBEE status level of contributor.

(4) A Tenderer failing to submit proof of B-BBEE status level of contribution or is a non-compliant contributor to B-BBEE may not be disqualified, but-

(a) may only score points out of 90 for price; and

(b) scores 0 points out of 10 for B-BBEE.

(5) A Tenderer may not be awarded points for B-BBEE status level of contributor if the tender documents indicate that the Tenderer intends subcontracting more than 25% of the value of the contract to any other person not qualifying for at least the points that the Tenderer qualifies for, unless the intended subcontractor is an EME that has the capability to execute the subcontract.

(6) The points scored by a Tenderer for B-BBEE contribution in terms of sub-regulation (2) must be added to the points scored for price under sub-regulation (1).

(7) The points scored must be rounded off to the nearest two decimal places.

(8) Subject to sub-regulation (9) and regulation 11, the contract must be awarded to the Tenderer scoring the highest points.

(9)(a) If the price offered by a Tenderer scoring the highest points is not market-related, the organ of state may not award the contract to that Tenderer.

(b) The organs of state may-

(i) negotiate a market-related price with the Tenderer scoring the highest points or cancel the tender;

(ii) if the Tenderer does not agree to a market-related price, negotiate a market-related rice with the Tenderer scoring the second highest points or cancel the tender;

(iii) if the Tenderer scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the Tenderer scoring the third highest points or cancel the tender.

(c) If a market-related price is not agreed as envisaged in paragraph (b)(iii), the organ of state must cancel the tender.

Local production and content

8.(1) The Department of Trade and Industry may, in consultation with the National Treasury-

(a) designate a sector, sub-sector or industry or product in accordance with national development and industrial policies for local production and content, where only locally produced services or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content, taking into account economic and other relevant factors; and

(b) stipulate a minimum threshold for local production and content.

(2) An organ of state must, in the case of a designated sector, advertise the invitation to tender with a specific condition that only locally produced goods or locally manufactured goods, meeting the stipulated minimum threshold for local production and content, will be considered.

(3) The National Treasury must inform organs of state of any designation made in terms of regulation 8(1) through a circular.

(4)(a) If there is no designated sector, an organ of state may include, as a specific condition of the tender, that only locally produced services or goods or locally manufactured goods with a stipulated minimum threshold for local production and content, will be considered.

(b) The threshold referred to in paragraph (a) must be in accordance with the standards determined by the Department of Trade and Industry in consultation with the National Treasury.

(5) A tender that fails to meet the minimum stipulated threshold for local production and content is an unacceptable tender.

Subcontracting as condition of tender

9.(1) If feasible to subcontract for a contract above R30 million, an organ of state must apply subcontracting to advance designated groups.

(2) If an organ of state applies subcontracting as contemplated in sub-regulation (1), the organ of state must advertise the tender with a specific tendering condition that the successful Tenderer must subcontract a minimum of 30% of the value of the contract to-

(a) an EME or QSE;

(b) an EME or QSE which is at least 51% owned by black people;

(c) an EME or QSE which is at least 51% owned by black people who are youth;

(d) an EME or QSE which is at least 51% owned by black people who are women;

(e) an EME or QSE which is at least 51% owned by black people with disabilities;

(f) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;

(g) a cooperative which is at least 51% owned by black people;

(h) an EME or QSE which is at least 51% owned by black people who are military veterans; or

(i) more than one of the categories referred to in paragraphs (a) to (h).

(3) The organ of state must make available the list of all suppliers registered on a database approved by the National Treasury to provide the required goods or services in respect of the applicable designated groups mentioned in sub-regulation (2) from which the Tenderer must select a supplier.

Criteria for breaking deadlock in scoring

10.(1) 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 B-BBEE.

(2) If functionality is part of the evaluation process and two or more Tenderers score equal total points and equal preference points for B-BBEE, the contract must be awarded to the Tenderer that scored the highest points for functionality.

(3) If two or more Tenderers score equal total points in all respects, the award must be decided by the drawing of lots.

Award of contracts to Tenderers not scoring highest points

11.(1) A contract may be awarded to a Tenderer that did not score the highest points only in accordance with section 2(1)(f) of the Act.

(2) If an organ of state intends to apply objective criteria in terms of section 2(1)(f) of the Act, the organ of state must stipulate the objective criteria in the tender documents.

Subcontracting after award of tender

12.(1) A person awarded a contract may only enter into a subcontracting arrangement with the approval of the organ of state.

(2) A person awarded a contract in relation to a designated sector, may not subcontract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.

(3) A person awarded a contract may not subcontract more than 25% of the value of the contract to any other enterprise that does not have an equal or higher B-BBEE status level of contributor than the person concerned, unless the contract is subcontracted to an EME that has the capability and ability to execute the subcontract.

Cancellation of tender

13. (1) An organ of state may, before the award of a tender, cancel a tender invitation 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.

(2) The decision to cancel a tender invitation in terms of sub-regulation (1) must be published in the same manner in which the original tender invitation was advertised.

(3) An organ of state may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

Remedies

14.(1) Upon detecting that a Tenderer submitted false information regarding its B- BBEE status level of contributor, local production and content, or any other matter required in terms of these Regulations which will affect or has affected the evaluation of a tender, or where a Tenderer has failed to declare any subcontracting arrangements, the organ of state must-

(a) inform the Tenderer accordingly;

(b) give the Tenderer an opportunity to make representations within 14 days as to why-

(i) the tender submitted should not be disqualified or, if the tender has already
been awarded to the Tenderer, the contract should not be terminated in whole or in part;

(ii) if the successful Tenderer subcontracted a portion of the tender to another person without disclosing it, the Tenderer should not be penalised up to 10 percent of the value of the contract; and

(iii) the Tenderer should not be restricted by the National Treasury from conducting any business for a period not exceeding 10 years with any organ of state; and

(c) if it concludes, after considering the representations referred to in sub-regulation (1)(b), that-

(i) such false information was submitted by the Tenderer-

(aa) disqualify the Tenderer or terminate the contract in whole or in part; and

(bb) if applicable, claim damages from the Tenderer; or

(ii) the successful Tenderer subcontracted a portion of the tender to another person without disclosing, penalise the Tenderer up to 10 percent of the value of the contract.

(2) (a) An organ of state must-

(i) inform the National Treasury, in writing, of any actions taken in terms of sub-regulation (1);

(ii) provide written submissions as to whether the Tenderer should be restricted from conducting business with any organ of state; and

(iii) submit written representations from the Tenderer as to why that Tenderer should not be restricted from conducting business with any organ of state.

(b) The National Treasury may request an organ of state to submit further information pertaining to sub-regulation (1) within a specified period.

(3) The National Treasury must-

(a) after considering the representations of the Tenderer and any other relevant information, decide whether to restrict the Tenderer from doing business with any organ of state for a period not exceeding 10 years; and

(b) maintain and publish on its official website a list of restricted suppliers.

Circulars and guidelines

15. The National Treasury may issue-

(a) a circular to inform organs of state of any matter pertaining to these Regulations; or

(b) a guideline to assist organs of state with the implementation of any provision of these Regulations.

Repeal of Regulations and saving

16.(1) Subject to this regulation, the Preferential Procurement Regulations, 2011, published in Government Notice No R. 502 of 8 June 2011 (herein called "the 2011 Regulations), are hereby repealed with effect from the date referred to in regulation 17.

(2) Any sector designated and minimum threshold determined for local production and content for purposes of regulation 9 of the 2011 Regulations and in force immediately before the repeal of the 2011 Regulations, are regarded as having been done under regulation 8(1) of these Regulations.

(3) Any tender advertised before the date referred to in regulation 17 must be dealt with in terms of the 2011 Regulations.

Short title and commencement

17. These Regulations are called the Preferential Procurement Regulations, 2017 and take effect on 1 April 2017.

EPWP GUIDELINES

1. Introduction

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on an Extended Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of an SPWP.

1.2 In this document –

(a) "department" means any department of the State, implementing agent or contractor;
(b) "employer" means any department, implementing agency or contractor that hires workers to work in elementary occupations on a SPWP;
(c) "worker" means any person working in an elementary occupation on a SPWP;
(d) "elementary occupation" means any occupation involving unskilled or semi-skilled work;
(e) "management" means any person employed by a department or implementing agency to administer or execute an SPWP;
(f) "task" means a fixed quantity of work;
(g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
(h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
(i) "time-rated worker" means a worker paid on the basis of the length of time worked.

2. Terms of Work

2.1 Workers on a SPWP are employed on a temporary basis.
2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.
2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

3. Normal Hours of Work

3.1 An employer may not set tasks or hours of work that require a worker to work–
(a) more than forty hours in any week
(b) on more than five days in any week; and
(c) for more than eight hours on any day.

3.2 An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.

3.3 A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

4. Meal Breaks

4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.

4.2 An employer and worker may agree on longer meal breaks.

4.3 A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.

4.4 A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

5. Special Conditions for Security Guards

5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.

5.2 A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

6. Daily Rest Period

Every worker is entitled to a daily rest period of at least eight consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

7. Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

8. Work on Sundays and Public Holidays

8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.

8.2 Work on Sundays is paid at the ordinary rate of pay.

8.3 A task-rated worker who works on a public holiday must be paid –

(a) the worker's daily task rate, if the worker works for less than four hours;
(b) double the worker's daily task rate, if the worker works for more than four hours.

8.4 A time-rated worker who works on a public holiday must be paid –

(a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;

(b) double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

9. Sick Leave

9.1 Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.

9.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.

9.3 A worker may accumulate a maximum of twelve days' sick leave in a year.

9.4 Accumulated sick-leave may not be transferred from one contract to another contract.

9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.

9.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.

9.7 An employer must pay a worker sick pay on the worker's usual payday.

9.8 Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –

(a) absent from work for more than two consecutive days; or
(b) absent from work on more than two occasions in any eight-week period.

9.9 A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.

9.10 A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

10. Maternity Leave

10.1 A worker may take up to four consecutive months' unpaid maternity leave.

10.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.

10.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.

10.4 A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.

10.5 A worker may begin maternity leave –

(a) four weeks before the expected date of birth; or
(b) on an earlier date –
    (i) if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
    (ii) if agreed to between employer and worker; or
(c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.

10.6 A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.

10.7 A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.

11. Family responsibility leave

11.1 Workers, who work for at least four days per week, are entitled to three days paid family responsibility leaves each year in the following circumstances -

(a) when the employee's child is born;
(b) when the employee's child is sick;
(c) in the event of a death of –
    (i) the employee's spouse or life partner;
    (ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

12. Statement of Conditions

12.1 An employer must give a worker a statement containing the following details at the start of employment –

(a) the employer's name and address and the name of the SPWP;
(b) the tasks or job that the worker is to perform; and
(c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
(d) the worker's rate of pay and how this is to be calculated;
(e) the training that the worker will receive during the SPWP.

12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

12.3 An employer must supply each worker with a copy of these conditions of employment.

13. Keeping Records

13.1 Every employer must keep a written record of at least the following –

(a) the worker's name and position;
(b) in the case of a task-rated worker, the number of tasks completed by the worker;
(c) in the case of a time-rated worker, the time worked by the worker;
(d) payments made to each worker.

13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.

14. Payment

14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.

14.2 A task-rated worker will only be paid for tasks that have been completed.

14.3 An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.

14.4 A time-rated worker will be paid at the end of each month.

14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

14.6 Payment in cash or by cheque must take place –

(a) at the workplace or at a place agreed to by the worker;
(b) during the worker's working hours or within fifteen minutes of the start or finish of work;
(c) in a sealed envelope which becomes the property of the worker.

14.7 An employer must give a worker the following information in writing –

(a) the period for which payment is made;
(b) the numbers of tasks completed or hours worked;
(c) the worker's earnings;
(d) any money deducted from the payment;
(e) the actual amount paid to the worker.

14.8 If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

14.9 If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

15. Deductions

15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

15.3 An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

15.4 An employer may not require or allow a worker to –

(a) repay any payment except an overpayment previously made by the employer by mistake;
(b) state that the worker received a greater amount of money than the employer actually paid to the worker; or
(c) pay the employer or any other person for having been employed.

16 . Health and Safety

16.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

16.2 A worker must –

(a) work in a way that does not endanger his/her health and safety or that of any other person;
(b) obey any health and safety instruction;
(c) obey all health and safety rules of the SPWP;
(d) use any personal protective equipment or clothing issued by the employer;
(e) report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

17. Compensation for Injuries and Diseases

17.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

17.2 A worker must report any work-related injury or occupational disease to their employer or manager.

17.3 The employer must report the accident or disease to the Compensation Commissioner.

17.4 An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

18. Termination

18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.

18.2 A worker will not receive severance pay on termination.

18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.

18.4 A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

18.5 A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

19. Certificate of Service

19.1 On termination of employment, a worker is entitled to a certificate stating –

(a) the worker's full name;
(b) the name and address of the employer;
(c) the SPWP on which the worker worked;
(d) the work performed by the worker;
(e) any training received by the worker as part of the SPWP;
(f) the period for which the worker worked on the SPWP;
(g) any other information agreed on by the employer and worker.

TSWAING LOCAL MUNICIPALITY

HEALTH AND SAFETY SPECIFICATION

Municipal Manager
TSWAING LOCAL MUNICIPALITY
DELAREYVILLE

TSWAING LOCAL MUNICIPALITY
HEALTH AND SAFETY SPECIFICATION

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SECTION 1

HEALTH AND SAFETY SPECIFICATION
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TSWAING LOCAL MUNICIPALITY

HEALTH AND SAFETY SPECIFICATION
THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993
CONSTRUCTION REGULATIONS 2014

SECTION 1

1. INRODUCTION

This document was construed in order to comply with the provisions of the
THE OCCUPATIONAL HEALTH AND SAFETY ACT N0 85 OF 1993.

Definitions of words are those described in the Act and the Construction Regulations of 2014.

This document formulates the specifications of the Tswaing Local Municipality in terms of the above act and forms part of the constitution of the organisation.

This document forms part of the employment contract of all employees and is as such accepted in writing by each employee. It also forms part of the agreement between the Tswaing Local Municipality and all service providers.

No clause in this document shall be amended in any contract document construed by agents, designers or anyone else except so ordered or sanctioned by the Tswaing Local Municipality in writing.

TSWAING LOCAL MUCIPALITY

HEALTH AND SAFETY SPECIFICATION
THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993
CONSTRUCTION REGULATIONS 2014

SECTION 2: DESIGNERS

1. All wording shall have the meaning as defined by the H&S Regulations 2014.

2. This specification is in terms of the H&S act 1993 and the regulations of 2014.

3. All work performed and procedures followed by the designers shall be done according to the H&S regulations of 2014.

4. The client is aware of the fact that the appointment of the designer does not implicate that the designer becomes the agent of the client for the particular project. The appointment of an agent is done separately in writing and should be accepted by the designer as such.

5. The client is ultimately responsible for all the safety issues regarding the project for which the designer is appointed and cannot contract out of his obligations in terms of the law.

6. The client shall not employ a designer should he have reasonable doubts that the designer is not able to execute work in a safe manner.

7. All designers shall have adequate insurance cover indemnity the client for their act and omissions in terms of
   - Professional conduct
   - The H&S act in particular to indemnity the client against penalties imposed for acts or omissions

The client is aware of the fact that additional insurance over and above PI insurance is necessary to have himself indemnified by the designers for acts and omissions in the terms of the H&S regulations.

The professional indemnity insurance has a “negligent acts and omissions” wording only and there additional is necessary to cover the client against penalties imposed for acts or omissions.

8. Designers shall not accept work from the client if they are not capable of executing such work professionally and if such work cannot be executed in a safe manner, according to the provisions of the H&S regulations.

9. Designers shall execute all designs in terms of the relevant SABS and other acceptable codes and procedures and shall place great emphasis on safety issues including the maintenance procedures after inaugurations of such systems or projects.

10. Ergonomic parameters shall have high priority in all designs.

TSWAING LOCAL MUNICIPALITY

HEALTH AND SAFETY SPECIFICATION
THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993
CONSTRUCTION REGULATIONS 2014

SECTION 3: PRINCIPAL CONSTRACTORS (PC)

1. The definitions of the regulations 2014 are applicable to this section. All work by the P C shall be done in compliance with the provisions of the H&S regulations.

2. The Employer recognises the right of each employee to work safely in a healthy environment under decent human conditions. Each employee has the right to return home safely and healthy and family after each day's work.

3. Work shall not be done at the expense of human safety and health.

4. Work shall be executed under humane conditions, especially with reference to hours and H&S issues in mind.

5. The P C shall appoint a fulltime H&S Manager should he have more than 50 employees on site.

6. The P C shall conduct monthly safety meetings on site. All foremen, gang leaders, and other shall participate and all incidents with relation to unsafe practices shall be discussed. Minutes of such meetings shall be kept in the H&S file.

7. Foremen and gang leaders shall, under the supervision of the H&S Manager, conduct meetings with all staff and people under their direct supervision on a frequent basis. Minutes of such meeting shall be kept in the H&S file.

8. New personnel (temporary or fulltime employees) shall attend safety inductions courses under the supervision of the H&S Manager.

9. The P C shall install and maintain a box in which proposals shall be considered, recorded and placed in the H&S file.

10. An adequate first aid facility shall be placed maintained on site and shall be adequately indicated by means of signs. All personnel shall be made aware of its existence and only trained first aid assistants shall be authorized to treat injuries.

11. The P C shall see that work is only executed by people trained for that particular task.

12. All safety equipment shall be SABS approved and under no circumstance shall any safety equipment be non-certified homemade equipment. Specifications and order details shall be kept in the H & S file.

13. Workers and personnel shall be attending safety courses on a regular basis and all information regarding such training shall be kept in the H & S file.

14. All employees shall be trained in safe working procedures and shall be trained o safety consciousness in particular. Employees in position of leadership shall be training through accredited training processes in H & S matters.

15. The contractor shall prepare and maintain a safety plan for the particular project and shall train his personnel to work according to such plan.

16. Personnel and workers will be made aware of any natural hazards existing on site. They will also be made aware of items defined by the designers in his risk assessment.

17. No horseplay between employees will be tolerated on site. Neither will aggressive or threatening behaviour by anybody be allowed.

18. Workers shall wear appropriate protective clothing for the applicable task which shall include special safety equipment like protective eyewear, gloves, boots, ear protecting, etc. workers shall be issued with these items and copy of such issuing shall be kept in the H&S file.

19. Workers shall not be allowed to wear loose clothes and footwear.

20. Workers shall have opportunity and right to prescribed rest, eating and toilet breaks.

21. Workers on nightshift shall be protected against inclement weather and shall have access to adequate food and drinks.

22. In cases where work is executed in remote or in security restricted areas, the P C will make provision for food to be supplied to his employees.

23. Potable water shall be made available free of charge to all workers on site.

24. Adequate toilet and washing facilities shall be made available to workers.

25. In the event of chemicals being present or used on site, the P C will allow for adequate shower facilities on site. All chemicals shall be stored according to specification and shall be clearly identified and marked in prescribed containers.

26. Workers under instruction to execute inherently unsafe procedures shall report such incidences to the H&S manager, designers to client immediately.

27. Unauthorised or unlawful instructions from foremen, gang leaders or colleagues shall be reported by the H&S manager immediately.

28. The P C shall stop his contractors if they work unsafely.

29. All specialist work shall be executed by registered artisans only.

30. Workers shall not be required to lift equipment or material heavier than 25kg or carry a load of more than 50kg for more than 10 metres.

31. Workers shall not be exposed to conditions of heat where the temperature is above 40° Celsius and the humidity more than 75%. Likewise, will personnel not be exposed to temperatures lower than - 5° Celsius. Should the designer and the P C decided that the work is urgent, workers will be issued with proper protective clothing.

32. All workers shall have access to a shaded eating and resting place on site.

33. Workers executing tasks in rivers, trenches and other natural or artificial water ways shall be made aware of the hazard of flash floods and special precautions shall be made by the P C to implement an effective flood warning system.

34. Workers executing tasks in manholes for sewer or stormwater systems, shall be made aware of the existence of hazardous gasses in closed areas and shall be issued with gas masks in any event, even after tests conducted by the H&S manager has proven that no gasses are existent. Only specialists shall work in gas filled chamber.

35. Personnel executing work during rainy weather or under other wet conditions shall be equipped with proper gumboots and proper rain suits.

36. No personnel will be allowed to work in water unless gumboots are worn. Should the water be deeper than 300mm watertight suits shall be worn.

37. All ladders shall be fixed against scaffolding or other permanent structures.

38. Welding on site shall only be done by trained personnel behind adequate eye protecting shields and all welders shall wear proper protective gear.

39. Personnel operating grinders, saws or any other hand tools of similar description. Shall be equipped with the necessary eyewear and ear protection.

40. All personnel working under potentially dusty conditions shall wear nose and mouth filters.

41. Workers operating rock drilling equipment shall wear ear, nose and eye protection.

42. All scaffolding will comply with the H&S regulations.

43. Blasting will be done by specialists under the regulations of the explosives Act.

44. Workers shall wear protective clothing when exposed to chemicals like cement, lime, detergents, tar, fumes, etc. should work be executed in the presence of such material, adequate protective clothing and equipment shall be issued after permission is granted by the H & S manager.

45. Workers will not be allowed to made open fires on any part of the site unless it is made in designated areas approved by the H & S manager.

46. Fuel storage will only be allowed on certified areas on site.

47. Workers and other personnel will be trained for fire procedures and will practise such fire drill on a regular basis.

48. Assembly areas for emergency evacuations will be indicated by adequate signage.

49. The P C will have an attendance register for the purposes of identifying people before, during and after potential hazardous situations.

50. All transport supplied by the PC shall be on roadworthiness vehicles only and all transport shall be conducted in terms of the transport act.

51. Drivers of vehicles shall be responsible for the roadworthiness of vehicles and will report any dysfunctional vehicles to the PC.

52. All drivers will be responsible to handle vehicles in such a way to comply with the transport.

53. Passengers of vehicles shall report any unsafe conduct to the P C immediately. Such report shall be forwarded to the H & S manager and shall be investigated. Copy of such procedure shall be entered into the H & S file.

54. Only trained personnel shall be permitted and required to operate constructions machinery. All such machinery shall be maintained in a safe working condition.

55. All vehicles operating on site shall have audible warning signals if driven backwards

56. No vehicles shall be kept on site if it is leaking oil or other substances.

57. No vehicle or equipment shall be operated on site if its produces noise above 90 decibels measured within a distance of 10,0 m from the unit.

58. Equipment producing serious dusty conditions shall only be operated under the supervision of the P C and the H & S manager with the necessary protection to workers.

59. All excavations on site shall be adequately protected and not only indicated.

60. Exploratory excavation to reveal services shall be done in a specific way.

All areas to be explored shall first be inspected by the landowner or local authority.
Position of services identified shall then be verified by opening by hand, not by machine.
Particular care shall be taken not to damage these services.
Electrical services are inherently dangerous and shall be opened by skilled people only.
These excavations shall not be left open without supervision. If necessary, the excavation shall be backfilled temporarily with approved material until the specified modifications to the services can be made.

61. Access to excavations shall only be by means of ladders or stairs with handrails.
62. All refuse, unsafe material, potential hazardous material and rubbish shall be placed in designated areas to be removed on a regular basis.
63. Rainwater shall be contained in trenches or pipes in such a way that it will not cause contamination of material in this refuse areas.
64. All electrical sources or cables or overhead power lines should be regarded as live at all times and all workers on site shall be made aware of its existence during H & S meetings and as many times as necessary.
65. Adequate signage shall be used on site to indicated

- Non-smoking areas on site
- Safety exists/emergency exits from buildings under construction
- Stairs (temporary and permanent works)
- Toilets
- Fire-fighting equipment
- Workmen busy with equipment overhead
- Fire assembly points
- Fire escapes
- Areas where members of the public are not allowed
- First aid room

66. All visitors to the site shall be granted permission to the site only upon application through a predetermined procedure and records of these visitors shall be kept in the H & S file. Visitors shall attend safety induction training before entering the site.

Areas out of bounds to all visitors shall be indicated clearly by means of adequate signs.

67. Work performed in public servitudes like the construction of streets or roads shall be done according to the specifications of the local or national authority and adequate signage shall be implemented.

68. People complaining about their health or people displaying systems of illness or disease, shall be allowed to go to the first aid facility or to visit a doctor or a clinic. Permission shall not be withheld unreasonably. In remote areas the P C is required to have reasonable ways of transporting people to a doctor or clinic whether the person is ill or injured on site.

69. Personnel must be informed about the location of the nearest doctor or clinic for casualty purposes and the P C shall provide such transport for injured workers and injured members of the public (within the limits of the site0 free of charge.

SECTION II

HEALTH AND SAFETY ACT 1993
GUIDELINES FOR CONTRACT ADMINISTRATION
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THE CONSTRUCTION REGULATIONS 2014

SECTION 11

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TSWAING LOCAL MUNICIPALITY

GUIDELINES FOR CONTRACT ADMINISTRATION IN TERMS OF THE CONSTRUCTION REGULATIONS 2014 HEALTH & SAFETY ACT 1993

SECTION 1 AND 2

1. PURPOSE OF THIS DOCUMENT

This document describes the procedures to be followed in the execution of Engineering Projects for Tswaing Local Municipality.

The role of all parties to the development project is described.

The document is in terms of the construction Regulation 2014 of the Health and Safety Act 1993.

2. BACKGROUND

The Minister of Labour has on 18 July 2014 under section 43 of the Occupational Health and Safety Act 199 (Act No. 85 of 1993) published new regulations in the Government Gazette 7721, Vol 456. They have immediate effect and are implacable to the Construction Environment.

These regulations inter alia identify the different role players and their responsibilities, particularly the role of the client, the contractor and that of the designer.

The Construction Regulations endeavour to ensure that:

i) Hazards or potential hazards to a healthy working environment are identified.

ii) These hazards or potential hazards are removed or minimised.

iii) Employers and workers are made aware of the value of safe working procedure and train themselves to work safely in potential hazardous environments or under potentially unsafe conditions.

TSWAING LOCAL MUNICIPALITY

GUIDELINES FOR CONTRACT ADMINISTRATION

IN TERMS OF THE CONSTRUCTION REGULATIONS 2014
HEALTH AND SAFETY ACT 1993

SECTION 3

3. THE CLIENT

In terms of the law of client is ultimately responsible for all acts and omissions as far as health and safety is concerned on site. It should be noted that the client will be held legally responsible for every trespass of the regulations, not the designer or the contractor. The law makes provision for fines to be levied and unless the client has been indemnified by the designer of the contractor, such fines will have to be paid by the client.

Clients cannot contract out of their statutory obligations except where the law allows for it. Therefore, any liability imposed upon them for statutory non-compliance, cannot be passed on to designers (consultants) or contractors.

In particular the client's responsibilities are defined as follows

1.	To prepare a health and safety (H&S) specification for the work. This should cover the spectrum of activities handled by the client as part of his normal duties	Clause 4(1)(a)
2.	To provide a risk assessment to the principal contractor.	Clause 4(1)(b)
3.	To appoint the principal contractor in writing.	Clause 4(1)(c)
4.	To ensure that the H&S plan is implemented	Clause 4(1)(d)
5.	To stop any contractor executing work in an unsafe manner	Clause 4(1)(e)
6.	To provide additional H&S information to the contractor should change be made to the work	Clause 4(1)(f)
7.	To ensure that the principal contractor is registered and in good standing with the workmen's compensation fund	Clause 4(1)(h)

8.	To make sure Tenderers have made provision in their offers for H&S measures	Clause 4(1)(h)
9.	To discuss and approve the H&S plan with the principal contractor.	Clause 4(2)
10.	To keep a copy of the H&S plan of the principal contractor.	Clause 4(3)
11.	To not employ a contractor unless the client is reasonably satisfied that the principal contractor who is earmarked for an appointment has the necessary skills, competencies and resources to carry out the work safely.	Clause 4(4)
12.	The client can appoint an agent to handle his duties. The client can obviously also delegate some of his duties but this does not make the person responsible for such particular responsibilities as agent. The client should make sure whether such responsibilities are not already part of the designer in terms of the regulations clause 992.	Clause 4(5)
13.	The client shall only appoint someone as his agent if he is reasonably satisfied that such person can handle such responsibilities.	Clause 4(6)

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SECTION 4

4. THE DESIGNER

The regulations do not use names like Engineer, Architect, et. Instead, the term Designer has been introduced. The responsibilities of the Designer are given in a sub-paragraph under the obligations of the Principal Contractor.

4.1 The regulations have a comprehensive definition of the designer and this includes: — Definitions "designer"

Definitions "structure"

a) A person preparing a design

b) A person checking a design

c) A firm preparing a design

d) An architect or engineer contribution to or having responsibility for a design.

e) A building services engineer designing details of fixed plan (scaffolding or cranes).

f) A surveyor specifying articles or drawing up specification (Quantity Surveyor)

g) A contractor in design and build contract

h) A contractor designing temporary work

i) A interior designer, shop fitter and landscape architect.

The regulations also talk of "an Engineer Designing a Structure". "Structure" is a wide concept and is given in paragraph 3.2.5.1 9a) underneath.

4.2 The designer does not automatically through an appointment become the agent of the client in terms of the regulations unless he is appointed in writing to the effect and he accepts such appointment in writing. — Clause 4(5)

4.3 The SAACE model agreement between the client and Engineer has a different meaning of the word "agent".

According to the model agreement of SAACE the Engineer acts as the "Agent" of the client in a conventional contractual context. "Agent" in terms of the Health and Safety regulations has a totally different meaning.

4.4 It can be derived from the regulations that the client can appoint a designer to perform certain tasks of the client on his behalf. This still does not mean that these designers become his agent in terms of clause 4(5) — Clause 4(5)

4.5 The regulations are fairly quiet regarding the functions and responsibilities of the designer except when designing of a structure. It is again assumed that the client will identify certain functions to be done by the designer on his behalf

4.5.1 "Structure" in terms of the regulations means: — Definitions

a) * Any building

- Steel or reinforced concrete structure
- Railway line
- Railway siding
- Bridge
- Waterworks
- Reservoir
- Pipe or pipeline
- Cable
- Sewer
- Sewerage works
- Fixed vessels
- Road
- Drainage works
- Earthworks
- Dam
- Wall
- Mast
- Tower
- Tower crane
- Batching plants
- Pylon
- Surface and underground tanks
- Earth retaining structure

Or any structure designed to preserve or alter any natural feature and any other similar structure.

b)	Any formwork, falsework, scaffold or other structure designed or used to provide support of access during construction (structural engineering sector).	
c)	Fixed plant to prevent people from falling 2 meters or more.	
4.5.2	The designer is in fact regarded as a person delivering designs only and unless his role is defined by the client, his role is quite limited	Clause 9(2)
4.5.3	The designer should inform the client and the principal contractor about anticipated dangers relating to the construction work. This is in fact a Risk Assessment.	Clause 9(2)(b)
4.5.4	the designer (in the structural engineering context) shall further furnish to the contractor in writing.	Clause 9(2)
i)	A geo-technical report.	
ii)	The loading of the structure	
iii)	The method and sequence of the construction process	
iv)	He should exclude inherently dangerous methods of construction in his design	
v)	The maintenance of the structure shall be through safe procedures	Clause 10(c)
vi)	He should carry out inspections	
vii)	And stop the contractor from executing work dangerously	
viii)	A final inspection is necessary to ensure safety of the structure.	
ix)	Great emphasis should be given to the ergonomic design of the structure.	
x)	The engineer should also give input in the design of temporary work e.g. scaffolding.	

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HEALTH AND SAFETY ACT 1993

SECTION 5

5. THE PRINCIPAL CONTRACTOR (P C) AND CONTRACTOR

The responsibilities of these parties are comprehensively stipulated in the regulations

5.1 In general, it can be seen that the responsibilities of the PC (Principal Contractor) towards his contractors is Mutatis Mutandis to the responsibilities of the Client towards the PC	
5.2 The PC is responsible for the collecting of these contractors' safety plans and to hold them to it.	Clause 5(1) and 5(2)
i) He should also stop his contractors should they work unsafely.	Clause 5(3)(d)
ii) He should appoint safety officers should the size of the work warrant it.	Clause 6(6)
iii) He should cause a risk assessment to be executed by a competent person.	Clause 7(1)
iv) Visitors to his site should undergo induction pertaining to H&S issues.	Clause 7(8)
v) He shall see to his employee's induction and H&S training.	Clause 7(7)
vi) the employees of the PC and his contractors shall wear visible proof of their induction training.	Clause 7(9)(a)
5.3 The regulations also covers the details of	
▪ Fall protection	Clause 8
▪ Structures (under this heading the responsibilities of the designer of a structure is found)	Clause 9
▪ Formwork and support work	Clause 10
▪ Excavation work	Clause 11

▪ Demolition work	Clause 12
▪ Tunnelling	Clause 13
▪ Scaffolding	Clause 14
▪ Suspended platforms	Clause 15
▪ Boatswain's chairs	Clause 16
▪ Material Hoists	Clause 17
▪ Batch plants	Clause 18
▪ Explosive powered tools	Clause 19
▪ Cranes	Clause 20
▪ Construction vehicles and mobile plant	Clause 21
▪ Electrical installation and machinery on construction sites	Clause 22
▪ Use and storage of flammable liquids on construction sites	Clause 23
▪ Water environment	Clause 24
▪ Housekeeping on construction sites	Clause 25
▪ Stacking and storage on construction sites	Clause 26
▪ Fire precautions on construction sites	Clause 27
▪ Construction welfare facilities	Clause 28

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IN TERMS OF THE CONSTRUCTION REGULATIONS 2014
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SECTION 6

6. APPOINTMENT OF THE DESIGNER

6.1 The client appoints the consultant or designer as agent only for the particular project and also for the duration of the project.

6.2 It is further important to distinguish between "agent" in terms of the SAACE model agreement between client and engineer and "agent" in terms of the H&S regulations

6.3 The responsibilities and duties of a designer in the H&S context are those that is dictated y law and/or those respectively given to him by the client, except when he is a structural engineer and designs a "structure" in which case clause 9(2) applies automatically.

6.4 The client should only add to the responsibilities of the designer those which is not automatically in his hand in terms of clause 9(1) of the regulations

6.5 The following duties are not regarded as normal work of the designer of a "structure" and will therefore require an additional appointment.

1. To ensure the H&S plan of the PC is implemented on site.	Clause 4(1)(d)
2. To ensure that changes to the design are also incorporated in the H&S plan.	Clause 4(1)(e)
3. To ensure that the principal contractor is registered and in good standing with the workmans' compensation fund.	Clause 4(1)(f)
4. To see that the contract registers the site as a construction site at the Department of labour.	Clause 4(1)(g)

5. To discuss with the contractor the h & S plan and then recommend to the client the approval thereof.	Clause 4(2)
6. To keep a copy of the H&S plan of the contractor in his possession and see that a copy is forwarded to the client.	Clause 4(4)
7. Control the following on site	
a) To see that the principal contractor keeps the H& S file up to date and the it is given to the client upon completion of the contract.	Clause 5(7)
b) To see that the principal contractor keeps a data base of all contractors involved with the project.	Clause 5(9)
c) To see that the principal contractor appoints one or more construction supervisors.	
d) To see that this person is dedicated to the particular project only.	Clause 6(4)
e) To receive from the contractor his risk assessment and keep a copy of that for his and the client's records.	Clause 7(1)

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SECTION 7

7. THE ROLE OF THE CLIENT

7.1	The client shall still prepare the H&S specification in terms of clause 4(1)(a) for its global activities. The H&S specification for the particular project is assigned to the designer.	Clause 4(1)(a)
7.2	The client shall approve of the H&S plan of the contractor, but on the recommendation of the consultant/designer.	Clause 4(2)
7.3	The client employs the principal contractor.	Clause 4(1)(c)
7.4	The client can appoint an agent in which case all the responsibilities of the agent in the regulations are transferred to the agent.	Clause 4(5)
7.5	The client should only appoint an agent should he have made reasonably sure that the agent can handle the responsibility.	Clause 4(6)
7.6	The client shall not appoint a contractor if he is not reasonably sure that the contractor can execute such work in a safe manner.	Clause 4(4)

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SECTION 8

8. THE ROLE OF THE PRINCIPAL CONTRACTOR

The principal contractor should execute the following duties:

1.	Provide a health and safety plan	5(1)
2.	See that his contractors comply with the regulations	5(2)
3.	He should discuss the particular H&S plan	5(5)
4.	He should have his H&S plan available	5(6)
5.	He should have an H&S file available on site and hand it over to the client upon completion	5(7)
6.	He should not employ contractors who are not capable	5(10)
7.	He should have full time supervision on site	6(1) to 6(8)
8.	He should produce a risk assessment of the work	7(1)
9.	He should train his employees	7(4)
10.	He should introduce induction training on site	7(7)/7(8)
11.	All physical aspects of the regulations as in terms of the regulations	

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SECTION 9

9. THE PROCEDURE RECOMMENDED

9.1	The client decides to execute work and appoints a designer to administer the work.	Clause 4(1)(a)
9.2	The scope of works and the exact duties of the designer are identified and given to him in writing.	
	The designer should affect insurance by which the client is indemnified (by the designer) for acts and omissions of the designer. This type of insurance does not form part of the normal IP insurance provided by the designer.	
	The designer prepares a contract document and ensures that this document states clearly the following:	
1.	A risk assessment of the project and the H & S specification of the client.	
2.	All relevant information to enable the pricing of the contract.	9(2)(a)
3.	Items in the bill to enable the Tenderer to price for the risk including insurance indemnifying the client. The document should state whether a full time safety office is required on site.	9(2)(b)
4. i)	Geotechnical information	9(2)(c)(i) to (iii)
ii)	Loading of the structure – in other words all relevant technical data taking the definition of "structure" into account.	
iii)	the method and sequence of the process. This should identify the priorities of the client	
5.	Inherently dangerous procedures should be avoided in the design.	9(2)(d)

6. The maintenance of the structure should be considered also so that this aspect would be safe and ergonomic too 9(2)(3)

9.3 The Tenderers then respond by each giving an H&S plan based on the risk assessment of the designer.

9.4 The client then chooses the contractor according to his procurement policy (taking into account his ability to do the work safety) and appoints him in writing via the designer

9.5 The chosen principal contractor then affects a detailed risk assessment and a risk management plan, based on the H&S specification

Once on site the principal contract should register the site by means of the prescribed form and have it approved by the client/designer.

He should open and then maintain his H&S file through the duration of the contract

He should then further adhere to the provisions of the H&S regulations

9.6 He should hand over the H&S file (recommend to do that with the designer's as-built drawings).

9.7 The designer should stop the work if he has reason to belief that the contractor is executing work in an unsafe manner.

9.8 Likewise should the principal contractor stop the work of his contractor(s) should he have reason to belief that such contractor is not working safely

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SECTION 10

10. CONTRACT DOCUMENTATION

The contract documentation needs to emphasize the following points in order to comply with the Health and Safety Act 1993 and the Construction Regulations 2014.

A. In the Specification section

1. Health and Safety Specification

The Client shall issue the Designer with his Health and Safety specification and it shall be included as such in the document.

Should the Designer be of the opinion that variations and additions be made to the specification, due to the nature of the particular project, he shall forward the proposed variation of addition to the NDM who will authorise this in writing.

2. Risk Assessment

This can form part of the contract specifications

It is necessary to identify to the contractor

i) The situation on site as it is with all the potential hazards and dangers involved

ii) The nature of the work and situations that the average contractor would encounter during the execution of the work. The nature of the work and expected risks should be described in particular as well as the method and the sequence of the work

iii) The basic safety precautions that he should take

iv) The Safety and Health specification of the client

v) To allow sufficient items in the bill of quantities for the tendered to price for the specified H&S precautions

3. Insurance

The contractor shall affect insurance indemnifying the client against penalties levied upon the client due to the acts or omissions of the contractor in failing to comply with the provisions of the H&S regulations 2014.

The contractor shall prove to the Engineer that such insurance has been affected and maintained during the construction.

B. The Tender Rules

The tender rules shall contain a clause requiring the contractor to submit a H&S plan based on the risk assessment given in the contract document. It should also state that the client is bound by law not to appoint a contractor should he be reasonably sure that the contractor would not be able to execute the work safely should he be appointed.

The following example is recommended

Tenderers are required to study the published risk assessment and provide Annexure Y his Health and Safety Plan. Generic document will be disregarded. Such H&S plan should give details regarding the Tenderers intention of dealing with the risks. Failure to submit such H&S plan will result in disqualification of the tender. Tenderers are informed that the client is bound by law not to accept a tender should he be reasonable sure that the Tenderer will not be able to execute the work safely.

SECTION 11

11. CONCLUSION

The Construction Regulations 2014 was long overdue in the South African Civil Engineering Construction Industry. Role players will now be forced to implement them and an awareness of safe working environments will be cultivated.

Clients might initially detect a contemptuous attitude particularly from contractors and even designers or consultants. This should not deter clients since acts and omission from these parties will bring clients in confrontation with the law.

Contract cost will certainly escalate due to the additional specifications but this should be weighed against the value of human lives improved and saved.

The construction industry, particularly the Civil Engineering Sector, will have to accept and embrace these regulations and then seriously look at its productivity to kerb the cost of the implementation process

TSWAING LOCAL MUNICIPALITY

TSWAING LOCAL MUNICIPALITY INTERNAL ROADS AND STORMWATER 2022/23

C6 TENDER DRAWINGS

TSWAING LOCAL MUNICIPALITY

TECHNICAL SERVICES DEPARTMENT

CONTRACT NO. SCM005/2022/23
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

TENDER DRAWINGS

PREPARED FOR:

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TSWAING LOCAL MUNICIPALITY
CONTRACT NO: SCM005/2022/23
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

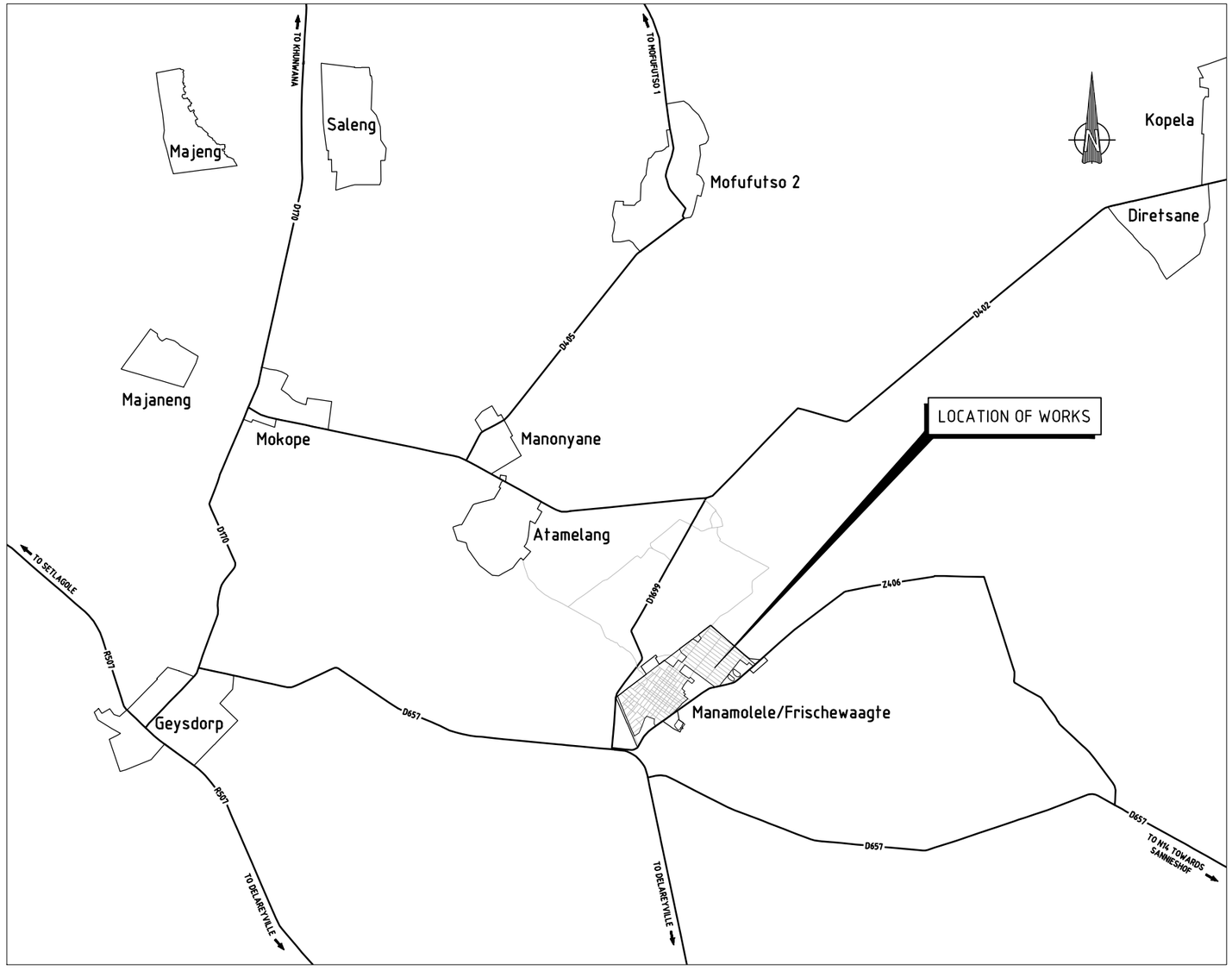
SCHEDULE OF ASSOCIATED DRAWINGS

PROJECT DRAWINGS

DRAWING No.	TITLE	SHEET No.	REVISION No.	DATE
LP/TLM/2022/23-001	LOCALITY MAP & DRAWING LIST	1 OF 1	0	17/06/2022
LP/TLM/2022/23-002	KEY PLAN	1 OF 6	0	17/06/2022
LP/TLM/2022/23-002	GENERAL LAYOUT PLAN	2 OF 6	0	17/06/2022
LP/TLM/2022/23-002	GENERAL LAYOUT PLAN	3 OF 6	0	17/06/2022
LP/TLM/2022/23-002	GENERAL LAYOUT PLAN	4 OF 6	0	17/06/2022
LP/TLM/2022/23-002	GENERAL LAYOUT PLAN	5 OF 6	0	17/06/2022
LP/TLM/2022/23-002	GENERAL LAYOUT PLAN	6 OF 6	0	17/06/2022
LP/TLM/2022/23-003	ROAD 1: LONGITUDINAL SECTION	1 OF 3	0	17/06/2022
LP/TLM/2022/23-003	ROAD 1: CROSS-SECTIONS	2 OF 3	0	17/06/2022
LP/TLM/2022/23-003	ROAD 1: CROSS-SECTIONS	3 OF 3	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: LONGITUDINAL SECTION	1 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: LONGITUDINAL SECTION	2 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: LONGITUDINAL SECTION	3 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: LONGITUDINAL SECTION	4 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: LONGITUDINAL & CROSS-SECTIONS	5 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: CROSS-SECTIONS	6 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: CROSS-SECTIONS	7 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: CROSS-SECTIONS	8 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: CROSS-SECTIONS	9 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: CROSS-SECTIONS	10 OF 11	0	17/06/2022
LP/TLM/2022/23-004	ROAD 2: CROSS-SECTIONS	11 OF 11	0	17/06/2022
LP/TLM/2022/23-005	ROAD 3: LONGITUDINAL SECTION	1 OF 4	0	17/06/2022
LP/TLM/2022/23-005	ROAD 3: LONGITUDINAL SECTION	2 OF 4	0	17/06/2022
LP/TLM/2022/23-005	ROAD 3: CROSS-SECTIONS	3 OF 4	0	17/06/2022
LP/TLM/2022/23-005	ROAD 3: CROSS-SECTIONS	4 OF 4	0	17/06/2022

STANDARD DRAWINGS

DRAWING No.	TITLE	SHEET No.	REVISION No.	DATE
LP/TLM/2022/23-006	ROAD CROSS-SECTION DETAILS	1 OF 1	0	17/06/2022
LP/TLM/2022/23-007	INTERSECTION & KERBING DETAILS	1 OF 1	0	17/06/2022
LP/TLM/2022/23-008	TYPICAL TRAFFIC ACCOMMODATION PLAN	1 OF 1	0	17/06/2022
LP/TLM/2022/23-009	ROAD SIGNS & MARKING DETAILS	1 OF 2	0	17/06/2022
LP/TLM/2022/23-010	ROAD SIGNS & MARKING DETAILS	2 OF 2	0	17/06/2022
LP/TLM/2022/23-011	TRAFFIC CALMING MEASURES: TYPICAL SPEED HUMP DETAIL	1 OF 1	0	17/06/2022



LOCALITY MAP
SCALE 1:50 000

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

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DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM: SIGNATURE: DATE:

LOCATION OF PROJECT: FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT: REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

LOCALITY MAP & DRAWING LIST

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS: ○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

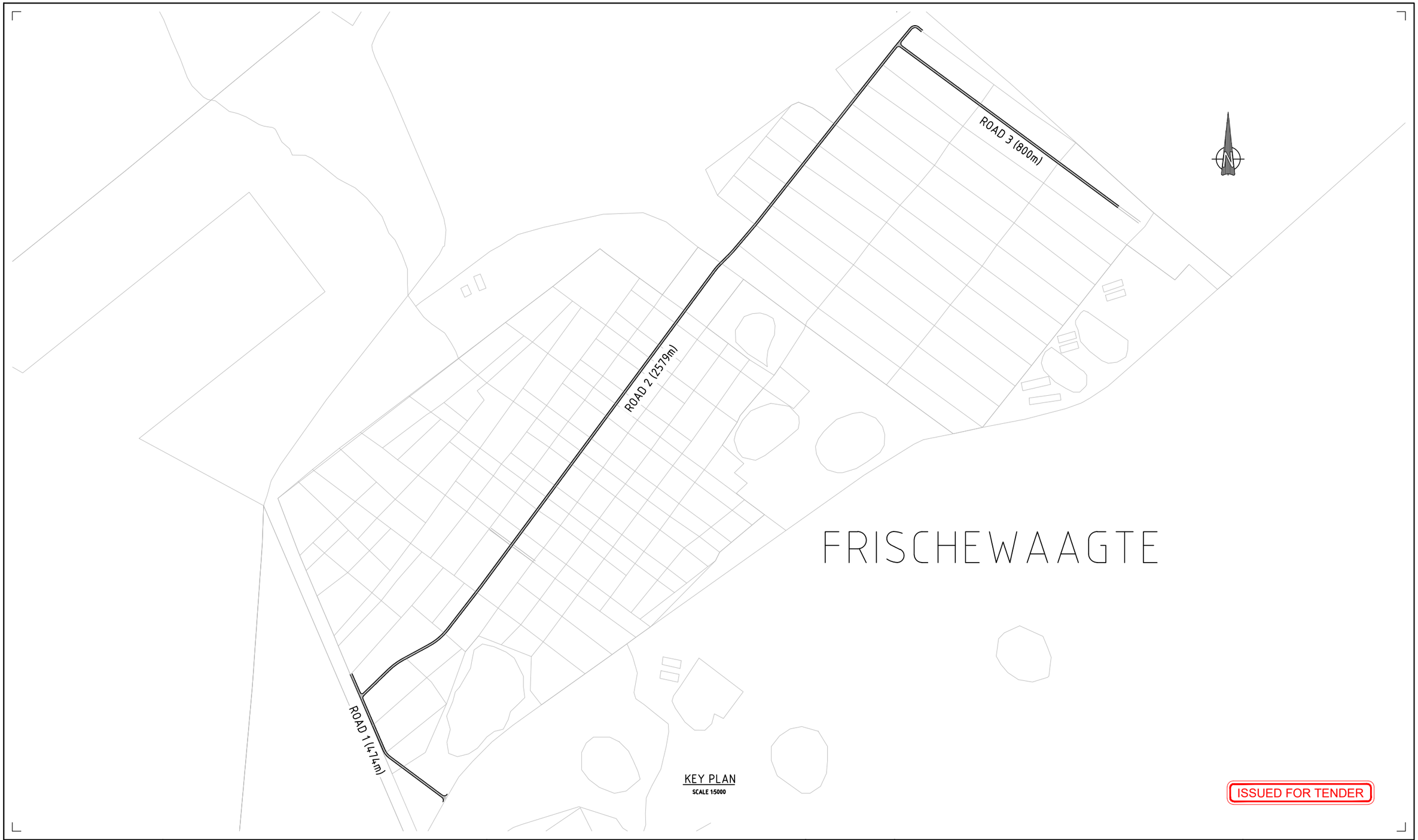
PROJECT ENGINEER: INITIALS AND SURNAME / SIGNATURE & PR NUMBER / DATE

INSPECTOR OF WORKS: SIGNATURE / DATE

REMARKS:

ORIGINAL PAPER SIZE: A1

DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-001	1 OF 1	0



KEY PLAN
SCALE 1:5000

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT: FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT: REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

ROADS KEY PLAN

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS-BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE

INSPECTOR OF WORKS:
SIGNATURE | DATE

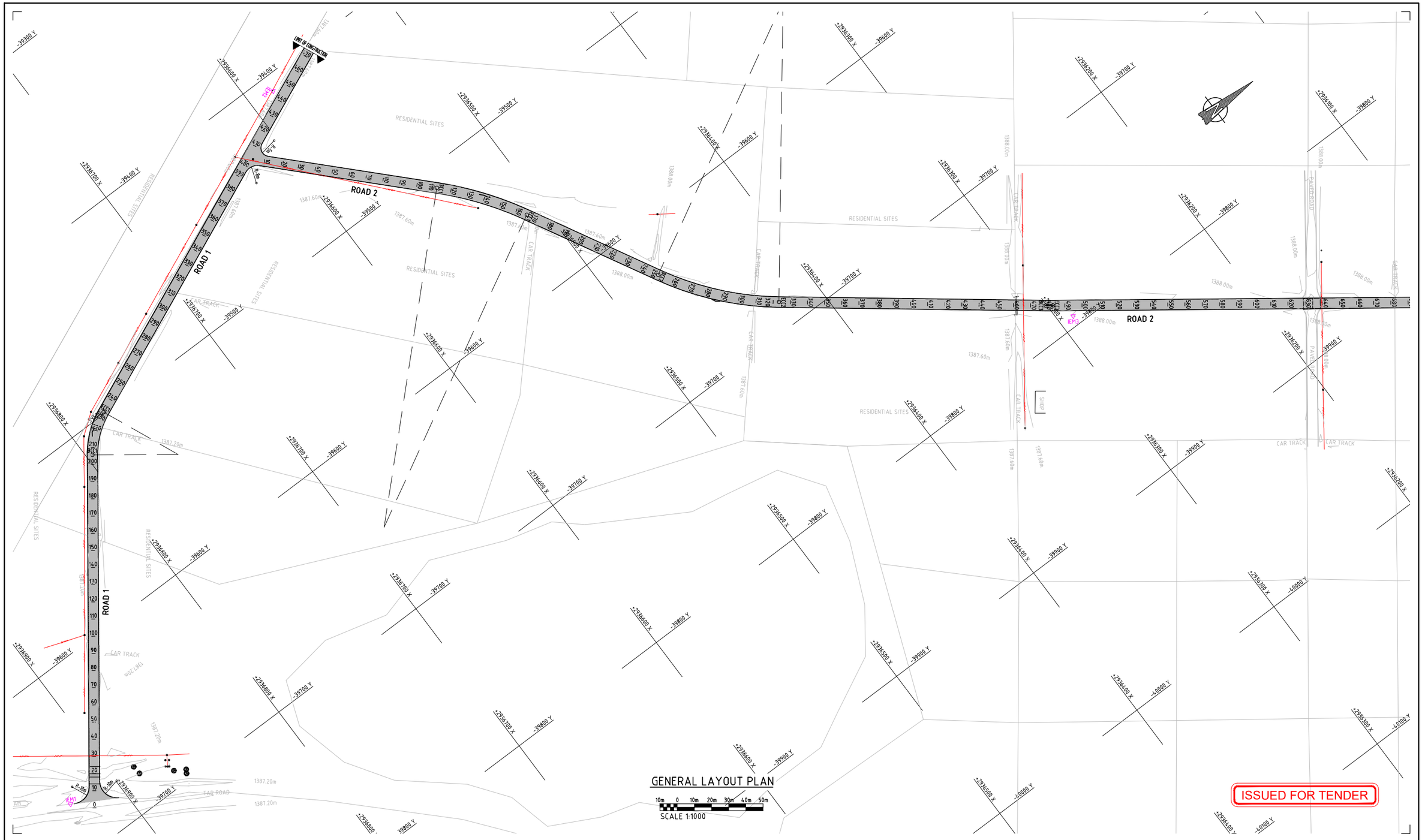
REMARKS:

ORIGINAL PAPER SIZE: A1

DRAWING NO.: LP/TLM/2022/23-002

SHEET NO.: 1 OF 6

REVISION: 0



AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

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SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

GENERAL LAYOUT PLAN

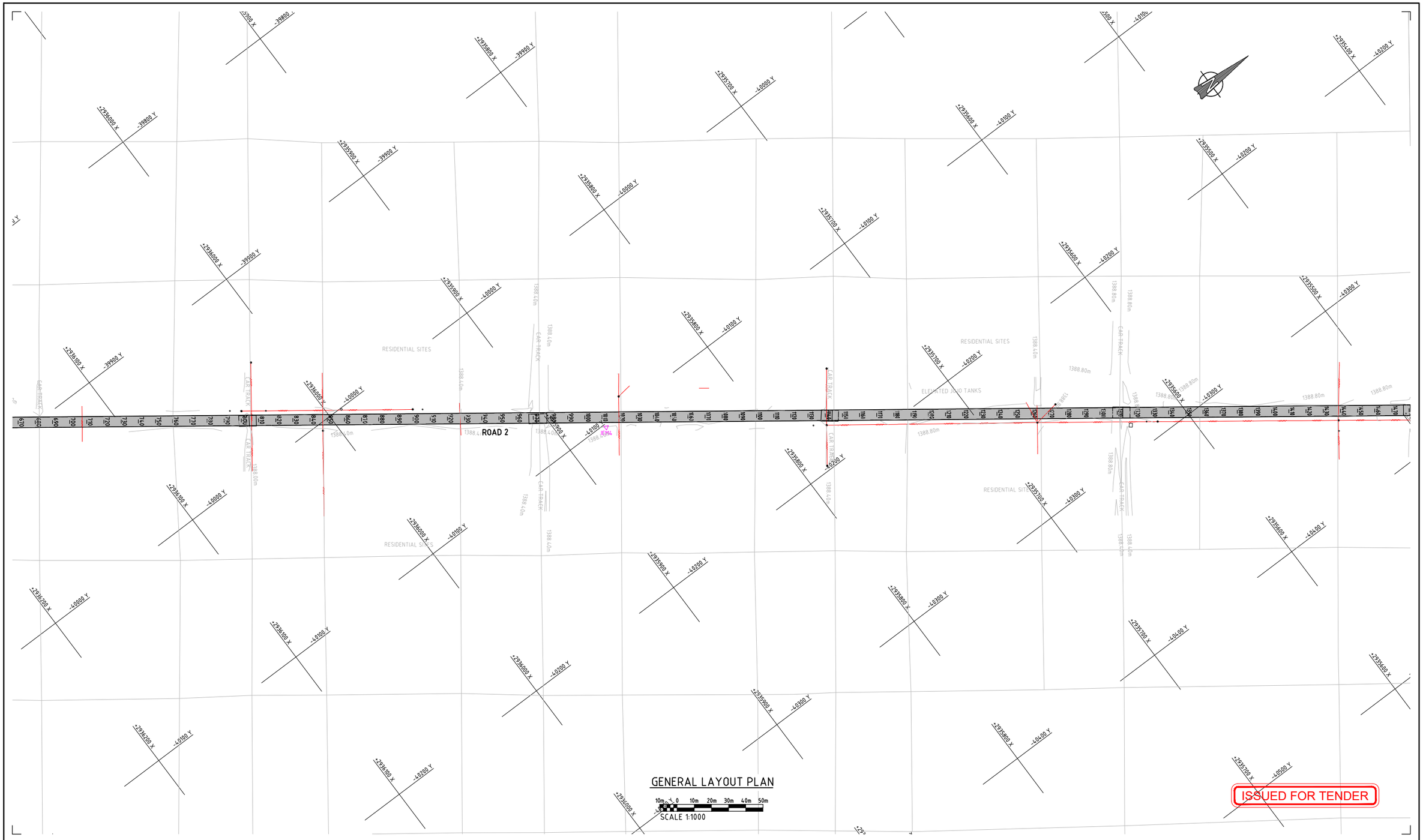
CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-002	2 OF 6	1



AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

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DRAWING APPROVED BY TLM	SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

GENERAL LAYOUT PLAN

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE

INSPECTOR OF WORKS:
SIGNATURE | DATE

REMARKS:

ORIGINAL PAPER SIZE: A1

DRAWING NO.: LP/TLM/2022/23-002

SHEET NO.: 3 OF 6

REVISION: 0

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

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DRAWING CHECKED BY	M.H.
DRAWN	T.R.
APPROVED	L.M.
DRAWING APPROVED BY TLM	SIGNATURE: ..... DATE: .....

LOCATION OF PROJECT:

FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT

REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

GENERAL LAYOUT PLAN

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:

INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE

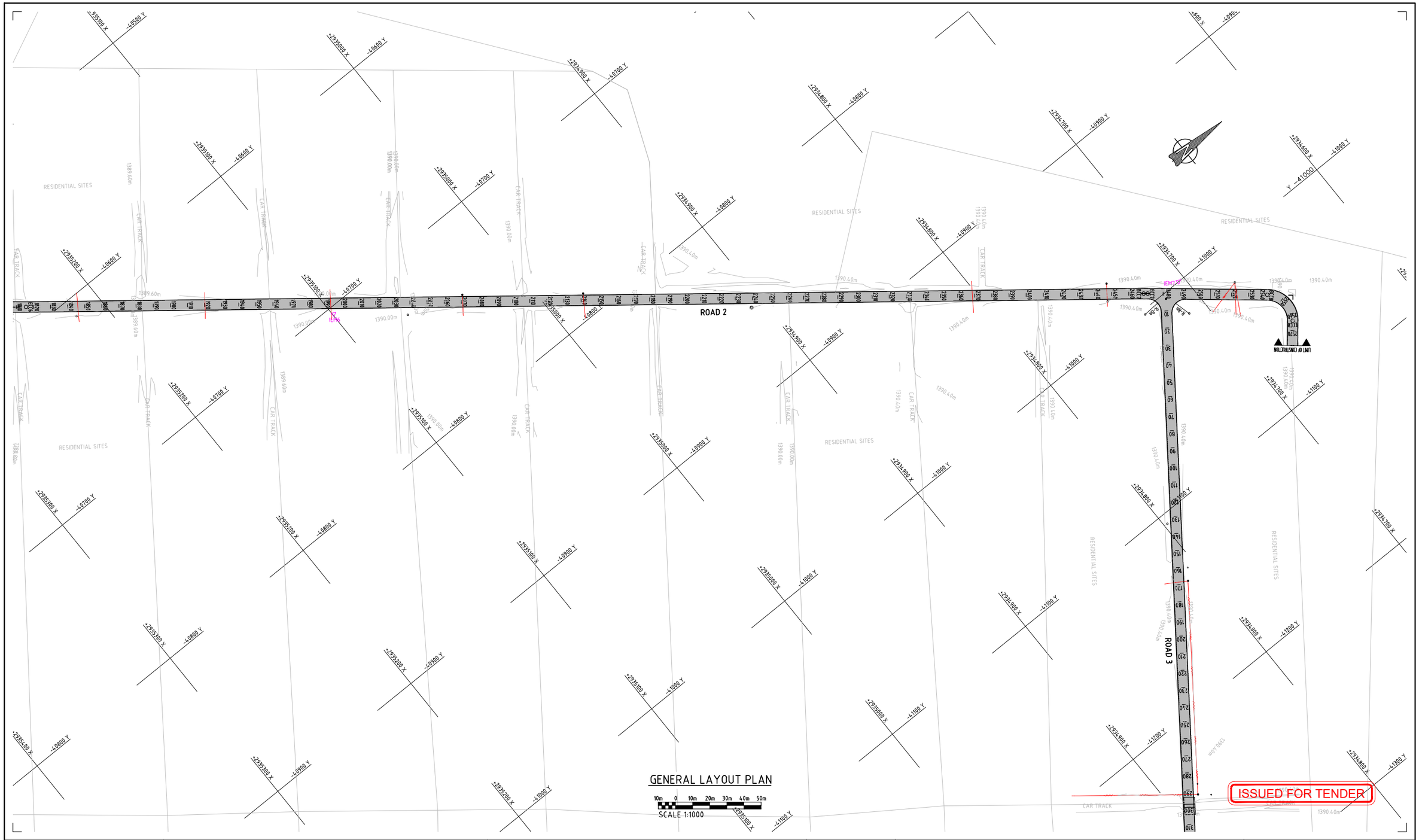
INSPECTOR OF WORKS:

SIGNATURE | DATE

REMARKS:

ORIGINAL PAPER SIZE: A1

DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-002	4 OF 6	0



GENERAL LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m

SCALE 1:1000

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

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DRAWING APPROVED BY TLM

SIGNATURE: DATE:

LOCATION OF PROJECT:

FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT

REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

GENERAL LAYOUT PLAN

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:

INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE

INSPECTOR OF WORKS:

SIGNATURE | DATE

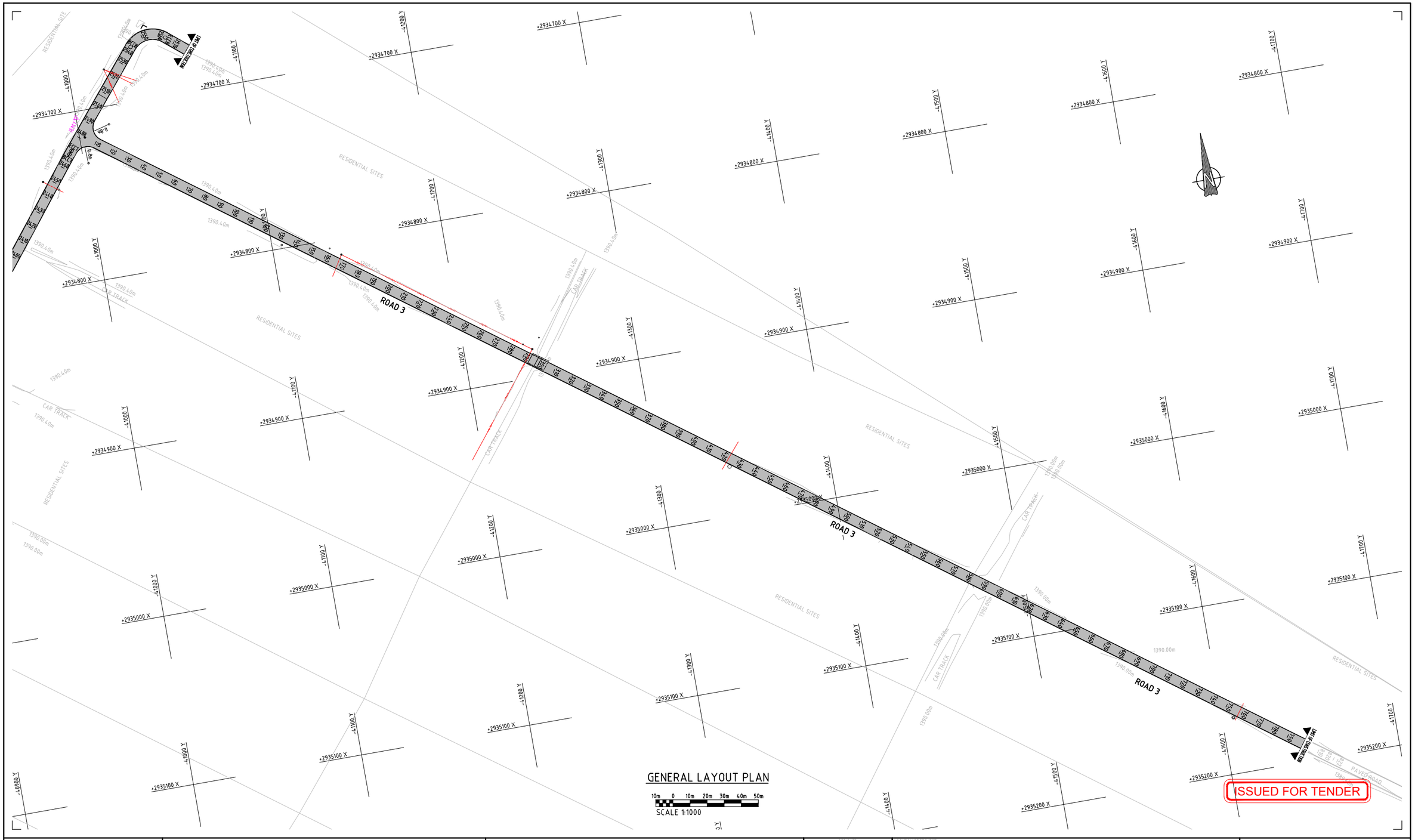
REMARKS:

ORIGINAL PAPER SIZE: A1

DRAWING NO.: LP/TLM/2022/23-002

SHEET NO: 5 OF 6

REVISION: 0



GENERAL LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m

SCALE 1:1000

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

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DRAWING CHECKED BY: M.H.

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APPROVED: L.M.

DRAWING APPROVED BY TLM

SIGNATURE: DATE:

LOCATION OF PROJECT: FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT: REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

GENERAL LAYOUT PLAN

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:

INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE

INSPECTOR OF WORKS:

SIGNATURE | DATE

REMARKS:

ORIGINAL PAPER SIZE: A1

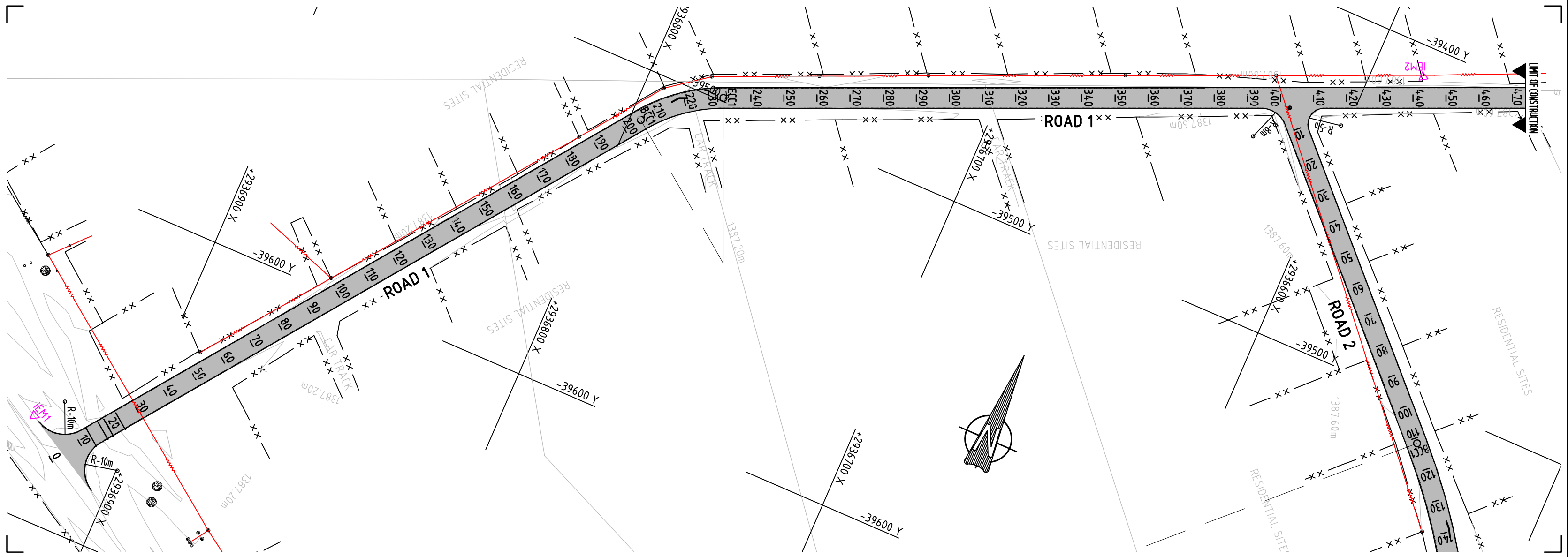
DRAWING NO.: LP/TLM/2022/23-002

SHEET NO.: 6 OF 6

REVISION: 0

LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m
SCALE 1:1000



LEGEND	
IEM1	Survey benchmark
	Sewerline
	Sewer manhole
	Stormwater channel
	Overhead powerline
	Electric pole
	Electric pole stay
– ×× –	Fence boundary
	Ward boundary

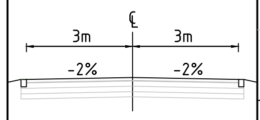
KERBS	LEFT	FIG. 16 EDGE BEAM
	RIGHT	
BARRIER LINES	LEFT	RM1
	RIGHT	
SIDE DRAIN TYPE	LEFT	
	RIGHT	

DESIGN SPEED
40 km/h

ROAD 1
LONG SECTION: CH0-473

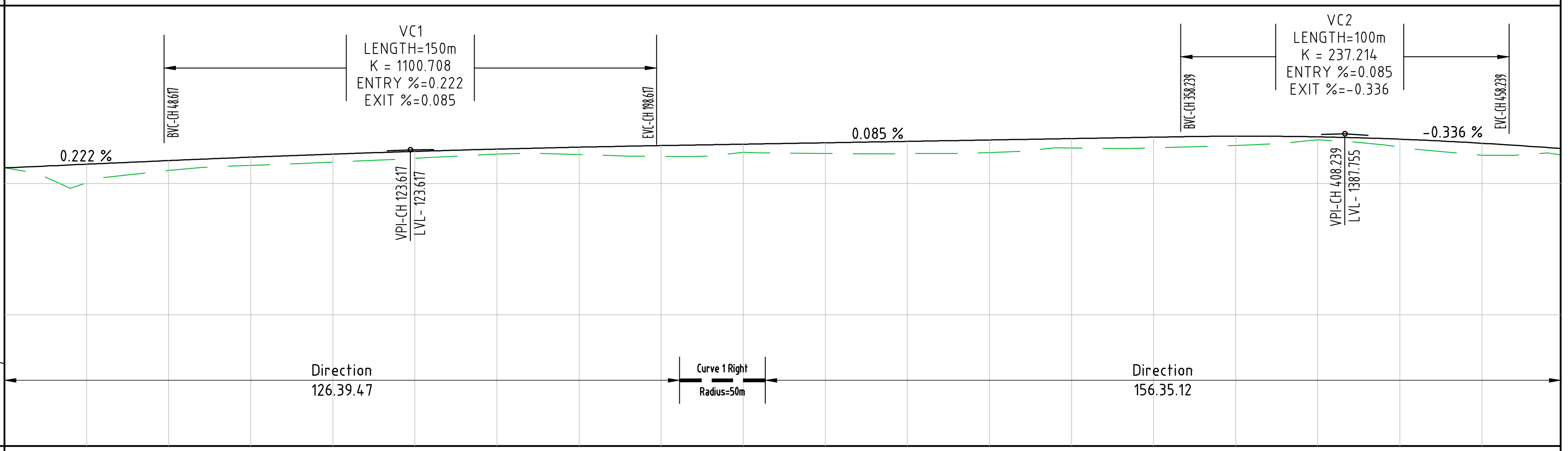
SCALE
HOR 1:1000
VERT 1:50

LEGEND :
GROUND PROFILE
DESIGN PROFILE



SECTION THROUGH PAVEMENT

Datum 1383.000



CHAINAGES (m)	C/L/ PEG LEVELS (m)	DESIGN ROAD LEVELS – LEFT EDGE (m)	DESIGN ROAD LEVELS – CENTRE LINE (m)	DESIGN ROAD LEVELS – RIGHT EDGE (m)
0	1387.237	1387.178	1387.238	1387.178
10	1387.154	1387.200	1387.260	1387.200
20	1386.925	1387.222	1387.282	1387.222
30	1387.090	1387.245	1387.304	1387.245
40	1387.142	1387.267	1387.327	1387.267
50	1387.198	1387.289	1387.349	1387.289
60	1387.243	1387.310	1387.370	1387.310
70	1387.264	1387.331	1387.391	1387.331
80	1387.286	1387.351	1387.411	1387.351
90	1387.302	1387.370	1387.430	1387.370
100	1387.326	1387.388	1387.448	1387.388
110	1387.348	1387.405	1387.465	1387.405
120	1387.371	1387.421	1387.481	1387.421
130	1387.396	1387.436	1387.496	1387.436
140	1387.422	1387.450	1387.510	1387.450
150	1387.448	1387.464	1387.524	1387.464
160	1387.464	1387.476	1387.536	1387.476
170	1387.447	1387.488	1387.548	1387.488
180	1387.432	1387.499	1387.559	1387.499
190	1387.416	1387.508	1387.568	1387.508
200	1387.414	1387.517	1387.577	1387.517
210	1387.413	1387.526	1387.586	1387.526
215	1387.419	1387.530	1387.590	1387.530
220	1387.448	1387.534	1387.594	1387.534
225	1387.476	1387.539	1387.599	1387.539
230	1387.466	1387.543	1387.603	1387.543
240	1387.461	1387.551	1387.611	1387.551
250	1387.457	1387.560	1387.620	1387.560
260	1387.452	1387.568	1387.628	1387.568
270	1387.453	1387.577	1387.637	1387.577
280	1387.455	1387.586	1387.646	1387.586
290	1387.458	1387.594	1387.654	1387.594
300	1387.468	1387.603	1387.663	1387.603
310	1387.489	1387.611	1387.671	1387.611
320	1387.544	1387.620	1387.680	1387.620
330	1387.538	1387.628	1387.688	1387.628
340	1387.532	1387.637	1387.697	1387.637
350	1387.541	1387.645	1387.705	1387.645
360	1387.556	1387.654	1387.714	1387.654
370	1387.570	1387.659	1387.719	1387.659
380	1387.588	1387.661	1387.721	1387.661
390	1387.617	1387.658	1387.718	1387.658
400	1387.664	1387.651	1387.711	1387.651
410	1387.635	1387.640	1387.700	1387.640
420	1387.590	1387.625	1387.685	1387.625
430	1387.519	1387.605	1387.665	1387.605
440	1387.475	1387.581	1387.641	1387.581
450	1387.431	1387.553	1387.613	1387.553
460	1387.428	1387.521	1387.581	1387.521
470	1387.467	1387.487	1387.547	1387.487
470 +73.977	1387.436	1387.474	1387.534	1387.474

VERTICAL ALIGNMENT

GRADES – CHAINAGE / ELEVATION, SLOPE (%): 0.222 % | 123.617 123.617 | 0.085 % | 408.239 1387.755 | -0.336 %

VERTICAL CURVES – CHAINAGE, CURVE LENGTH, K-FACTOR: B.V.C. 48.617 | 150.000m VC, K = 1100.708 | 198.617 E.V.C. | B.V.C. 358.239 | 100.000m VC, K = 237.214 | 458.239 E.V.C.

SUPERELEVATION (%) – RIGHT EDGE, LEFT EDGE: -2%

HORIZONTAL CURVES: Direction 126.39.47 | 205.609 BCC | Curve 1 Right, Radius=50m, l=29.55.25 | ECC 231.722 | Direction 156.35.12

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

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APPROVED	L.M.
DRAWING APPROVED BY TLM	SIGNATURE: ... DATE: ...

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

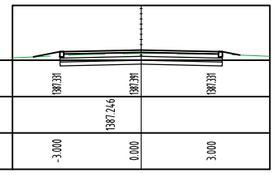
DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 1
LONGITUDINAL SECTION

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

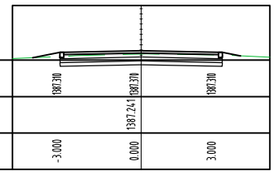
PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1
DRAWING NO. LP/TLM/2022/23-003
SHEET NO: 1 OF 3
REVISION 0

CHAINAGE 70
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



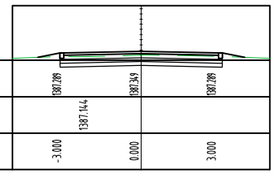
FINISHED	1387.331	1387.391	1387.331
GROUND		1387.246	
OFFSET	-3.000	0.000	3.000

CHAINAGE 60
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



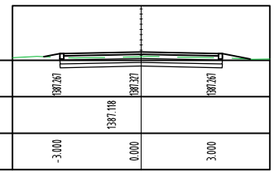
FINISHED	1387.330	1387.379	1387.330
GROUND		1387.241	
OFFSET	-3.000	0.000	3.000

CHAINAGE 50
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



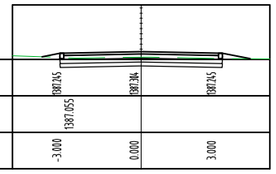
FINISHED	1387.289	1387.349	1387.289
GROUND		1387.144	
OFFSET	-3.000	0.000	3.000

CHAINAGE 40
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



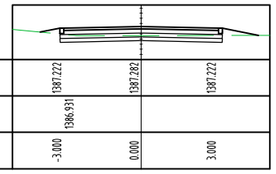
FINISHED	1387.267	1387.327	1387.267
GROUND		1387.118	
OFFSET	-3.000	0.000	3.000

CHAINAGE 30
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



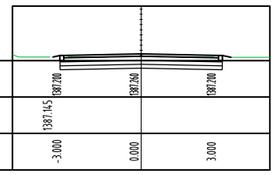
FINISHED	1387.245	1387.304	1387.245
GROUND		1387.052	
OFFSET	-3.000	0.000	3.000

CHAINAGE 20
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1386



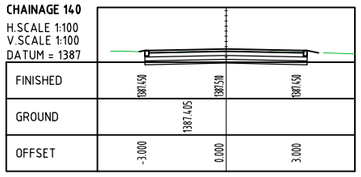
FINISHED	1387.222	1387.282	1387.222
GROUND		1386.931	
OFFSET	-3.000	0.000	3.000

CHAINAGE 10
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



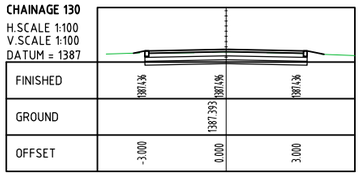
FINISHED	1387.200	1387.260	1387.200
GROUND		1387.145	
OFFSET	-3.000	0.000	3.000

CHAINAGE 140
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1387.458	1387.518	1387.458
GROUND		1387.405	
OFFSET	-3.000	0.000	3.000

CHAINAGE 130
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1387.436	1387.496	1387.436
GROUND		1387.393	
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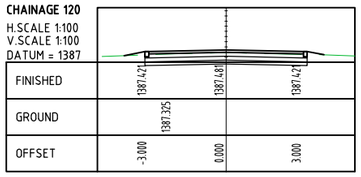
CHAINAGE 120
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1387.421	1387.481	1387.421
GROUND		1387.325	
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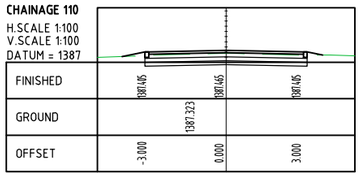
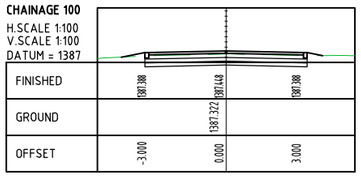
CHAINAGE 110
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



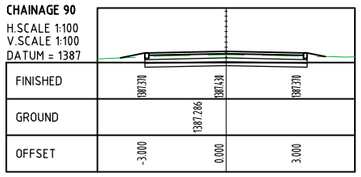
FINISHED	1387.445	1387.465	1387.445
GROUND		1387.323	
OFFSET	-3.000	0.000	3.000

CHAINAGE 100
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



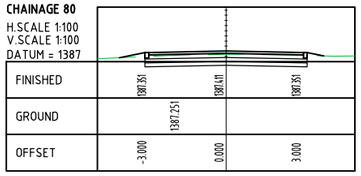
FINISHED	1387.388	1387.448	1387.388
GROUND		1387.322	
OFFSET	-3.000	0.000	3.000

CHAINAGE 90
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



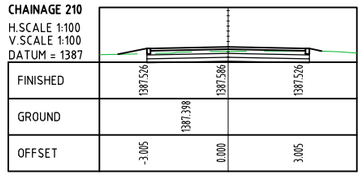
FINISHED	1387.370	1387.430	1387.370
GROUND		1387.286	
OFFSET	-3.000	0.000	3.000

CHAINAGE 80
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



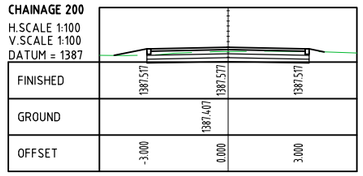
FINISHED	1387.351	1387.411	1387.351
GROUND		1387.251	
OFFSET	-3.000	0.000	3.000

CHAINAGE 210
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



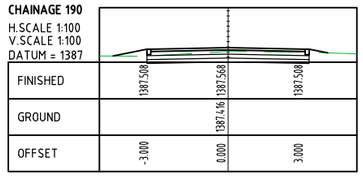
FINISHED	1387.526	1387.586	1387.526
GROUND		1387.398	
OFFSET	-3.005	0.000	3.005

CHAINAGE 200
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



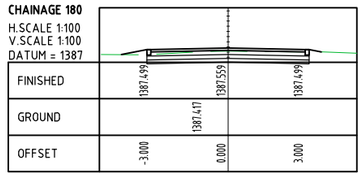
FINISHED	1387.517	1387.577	1387.517
GROUND		1387.407	
OFFSET	-3.000	0.000	3.000

CHAINAGE 190
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



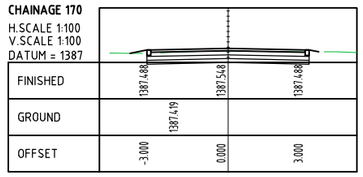
FINISHED	1387.508	1387.568	1387.508
GROUND		1387.416	
OFFSET	-3.000	0.000	3.000

CHAINAGE 180
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



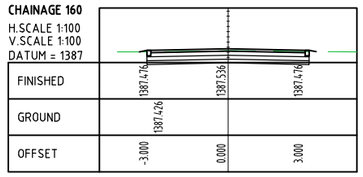
FINISHED	1387.499	1387.559	1387.499
GROUND		1387.417	
OFFSET	-3.000	0.000	3.000

CHAINAGE 170
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



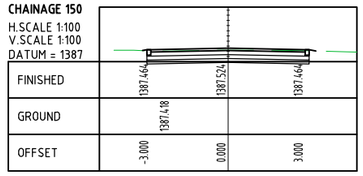
FINISHED	1387.488	1387.548	1387.488
GROUND		1387.419	
OFFSET	-3.000	0.000	3.000

CHAINAGE 160
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



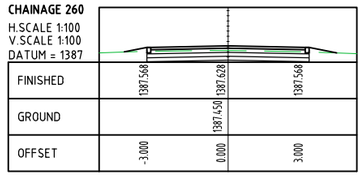
FINISHED	1387.476	1387.536	1387.476
GROUND		1387.426	
OFFSET	-3.000	0.000	3.000

CHAINAGE 150
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



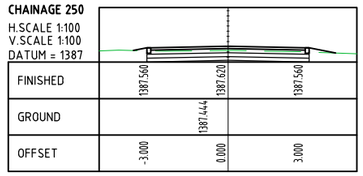
FINISHED	1387.464	1387.524	1387.464
GROUND		1387.418	
OFFSET	-3.000	0.000	3.000

CHAINAGE 260
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



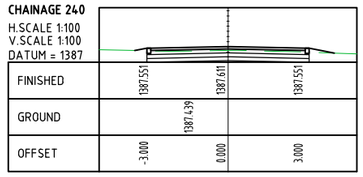
FINISHED	1387.568	1387.628	1387.568
GROUND		1387.450	
OFFSET	-3.000	0.000	3.000

CHAINAGE 250
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



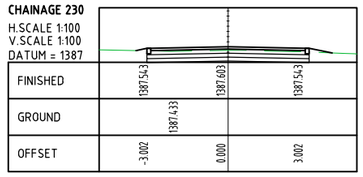
FINISHED	1387.560	1387.620	1387.560
GROUND		1387.444	
OFFSET	-3.000	0.000	3.000

CHAINAGE 240
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



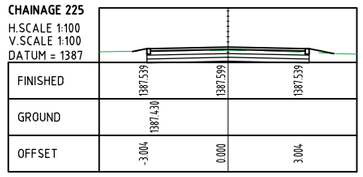
FINISHED	1387.551	1387.611	1387.551
GROUND		1387.439	
OFFSET	-3.000	0.000	3.000

CHAINAGE 230
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



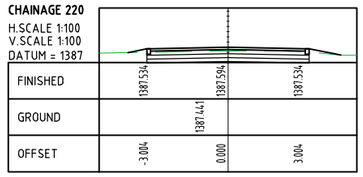
FINISHED	1387.543	1387.603	1387.543
GROUND		1387.433	
OFFSET	-3.002	0.000	3.002

CHAINAGE 225
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



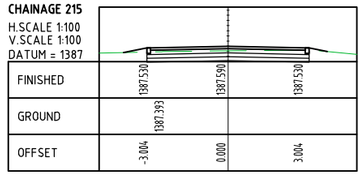
FINISHED	1387.539	1387.599	1387.539
GROUND		1387.430	
OFFSET	-3.004	0.000	3.004

CHAINAGE 220
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1387.534	1387.594	1387.534
GROUND		1387.441	
OFFSET	-3.004	0.000	3.004

CHAINAGE 215
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1387.530	1387.590	1387.530
GROUND		1387.393	
OFFSET	-3.004	0.000	3.004

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 1
CROSS-SECTIONS

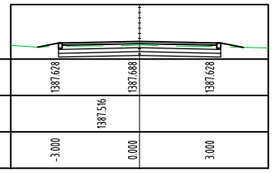
CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

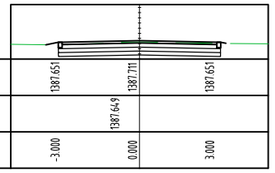
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-003	2 OF 3	0

CHAINAGE 330
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



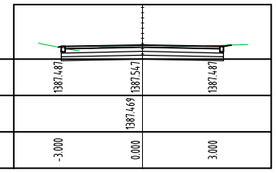
FINISHED	1387.628	1387.688	1387.628
GROUND		1387.536	
OFFSET	-3.000	0.000	3.000

CHAINAGE 400
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



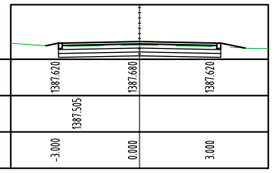
FINISHED	1387.651	1387.711	1387.651
GROUND		1387.649	
OFFSET	-3.000	0.000	3.000

CHAINAGE 470
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



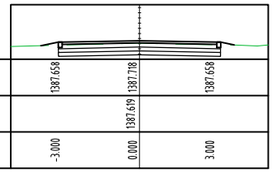
FINISHED	1387.487	1387.547	1387.487
GROUND		1387.469	
OFFSET	-3.000	0.000	3.000

CHAINAGE 320
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



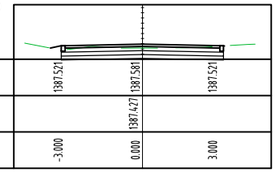
FINISHED	1387.620	1387.680	1387.620
GROUND		1387.505	
OFFSET	-3.000	0.000	3.000

CHAINAGE 390
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



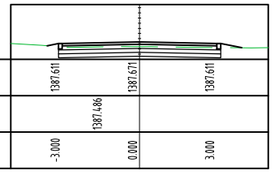
FINISHED	1387.658	1387.718	1387.658
GROUND		1387.619	
OFFSET	-3.000	0.000	3.000

CHAINAGE 460
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



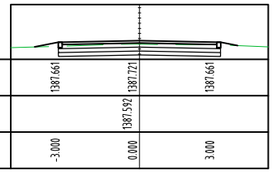
FINISHED	1387.521	1387.581	1387.521
GROUND		1387.427	
OFFSET	-3.000	0.000	3.000

CHAINAGE 310
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



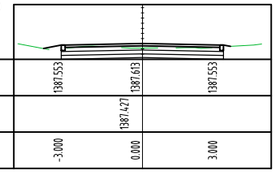
FINISHED	1387.611	1387.671	1387.611
GROUND		1387.486	
OFFSET	-3.000	0.000	3.000

CHAINAGE 380
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



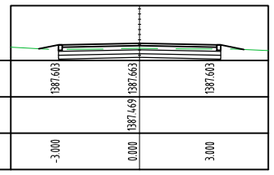
FINISHED	1387.661	1387.721	1387.661
GROUND		1387.592	
OFFSET	-3.000	0.000	3.000

CHAINAGE 450
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



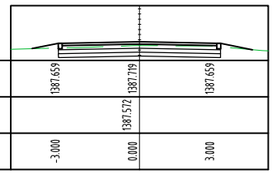
FINISHED	1387.553	1387.613	1387.553
GROUND		1387.427	
OFFSET	-3.000	0.000	3.000

CHAINAGE 300
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



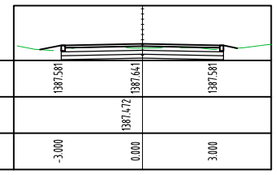
FINISHED	1387.603	1387.663	1387.603
GROUND		1387.469	
OFFSET	-3.000	0.000	3.000

CHAINAGE 370
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



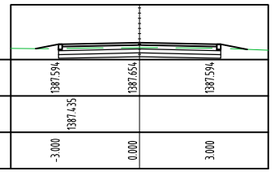
FINISHED	1387.659	1387.719	1387.659
GROUND		1387.572	
OFFSET	-3.000	0.000	3.000

CHAINAGE 440
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



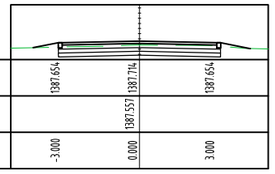
FINISHED	1387.591	1387.641	1387.591
GROUND		1387.472	
OFFSET	-3.000	0.000	3.000

CHAINAGE 290
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



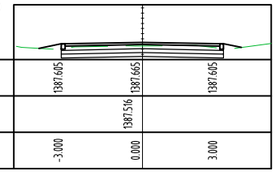
FINISHED	1387.594	1387.654	1387.594
GROUND		1387.435	
OFFSET	-3.000	0.000	3.000

CHAINAGE 360
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



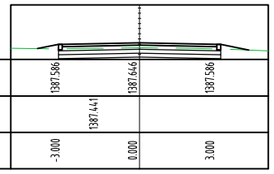
FINISHED	1387.654	1387.714	1387.654
GROUND		1387.553	
OFFSET	-3.000	0.000	3.000

CHAINAGE 430
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



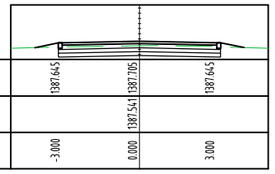
FINISHED	1387.605	1387.665	1387.605
GROUND		1387.516	
OFFSET	-3.000	0.000	3.000

CHAINAGE 280
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



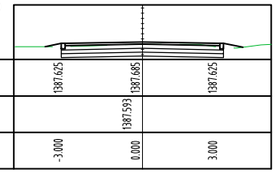
FINISHED	1387.586	1387.646	1387.586
GROUND		1387.441	
OFFSET	-3.000	0.000	3.000

CHAINAGE 350
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



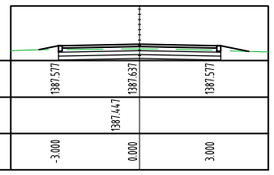
FINISHED	1387.645	1387.705	1387.645
GROUND		1387.541	
OFFSET	-3.000	0.000	3.000

CHAINAGE 420
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



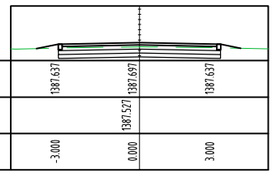
FINISHED	1387.625	1387.685	1387.625
GROUND		1387.593	
OFFSET	-3.000	0.000	3.000

CHAINAGE 270
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



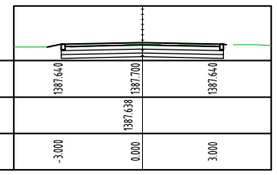
FINISHED	1387.577	1387.637	1387.577
GROUND		1387.447	
OFFSET	-3.000	0.000	3.000

CHAINAGE 340
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



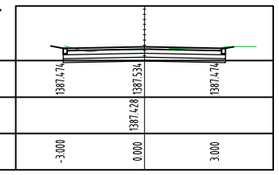
FINISHED	1387.637	1387.697	1387.637
GROUND		1387.527	
OFFSET	-3.000	0.000	3.000

CHAINAGE 410
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1387.640	1387.700	1387.640
GROUND		1387.638	
OFFSET	-3.000	0.000	3.000

CHAINAGE 474
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1387.474	1387.534	1387.474
GROUND		1387.428	
OFFSET	-3.000	0.000	3.000

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 1
CROSS-SECTIONS

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

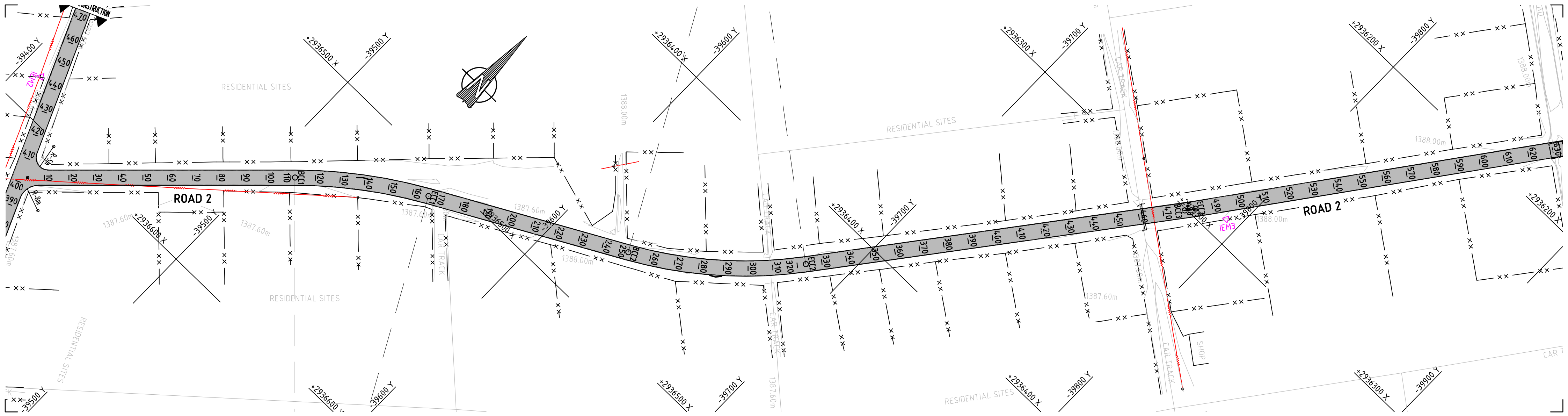
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-003	3 OF 3	0

LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m

SCALE 1:1000

LEGEND	
IEM1	Survey benchmark
	Sewerline
	Sewer manhole
	Stormwater channel
	Overhead powerline
	Electric pole
	Electric pole stay
– ×× –	Fence boundary
	Ward boundary



KERBS	LEFT / RIGHT	FIG. 16 EDGE BEAM
BARRIER LINES	LEFT / RIGHT	RM1
SIDE DRAIN TYPE	LEFT / RIGHT	

DESIGN SPEED
40 km/h

ROAD 2
LONG SECTION: CH0-620

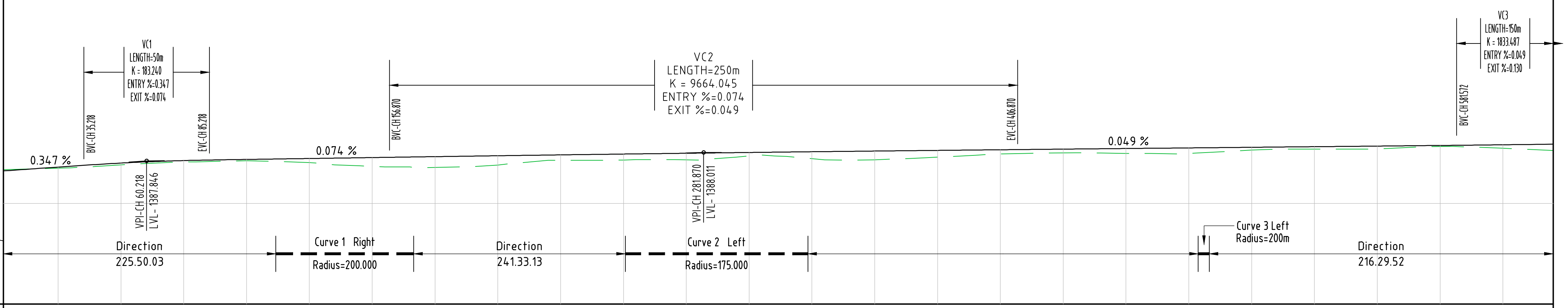
SCALE
HOR 1:1000
VERT 1:50

LEGEND :
GROUND PROFILE
DESIGN PROFILE

3m ℄ 3m
-2% -2%

SECTION THROUGH PAVEMENT

Datum 1385.000



VERTICAL ALIGNMENT / DESIGN ROAD LEVELS

CHAINAGES (m)	C/L/ PEG LEVELS (m)	LEFT EDGE (m)	CENTRE LINE (m)	RIGHT EDGE (m)
3.208	1387.673		1387.648	1387.625
10	1387.681	1387.612	1387.672	1387.612
20	1387.695	1387.646	1387.706	1387.646
30	1387.709	1387.681	1387.741	1387.681
40	1387.737	1387.715	1387.775	1387.715
50	1387.766	1387.745	1387.805	1387.745
60	1387.795	1387.768	1387.828	1387.768
70	1387.818	1387.787	1387.847	1387.787
80	1387.829	1387.800	1387.860	1387.800
90	1387.840	1387.808	1387.868	1387.808
100	1387.851	1387.816	1387.876	1387.816
110	1387.839	1387.823	1387.883	1387.823
115	1387.831	1387.827	1387.887	1387.827
120	1387.823	1387.830	1387.891	1387.830
125	1387.813	1387.834	1387.894	1387.834
130	1387.792	1387.838	1387.898	1387.838
135	1387.770	1387.842	1387.902	1387.842
140	1387.757	1387.845	1387.905	1387.845
145	1387.748	1387.849	1387.909	1387.849
150	1387.739	1387.853	1387.913	1387.853
155	1387.729	1387.857	1387.917	1387.857
160	1387.726	1387.860	1387.920	1387.860
165	1387.726	1387.864	1387.924	1387.864
170	1387.708	1387.868	1387.928	1387.868
180	1387.724	1387.875	1387.935	1387.875
190	1387.731	1387.882	1387.942	1387.882
200	1387.765	1387.889	1387.949	1387.889
210	1387.815	1387.896	1387.956	1387.896
220	1387.857	1387.903	1387.963	1387.903
230	1387.860	1387.910	1387.970	1387.910
240	1387.857	1387.916	1387.976	1387.916
250	1387.863	1387.923	1387.983	1387.923
255	1387.873	1387.926	1387.986	1387.926
260	1387.872	1387.929	1387.989	1387.929
265	1387.872	1387.932	1387.992	1387.932
270	1387.870	1387.936	1387.995	1387.936
275	1387.868	1387.939	1387.999	1387.939
280	1387.863	1387.942	1388.002	1387.942
285	1387.884	1387.945	1388.005	1387.945
290	1387.904	1387.948	1388.008	1387.948
295	1387.923	1387.951	1388.011	1387.951
300	1387.944	1387.954	1388.014	1387.954
305	1387.965	1387.957	1388.017	1387.957
310	1387.946	1387.960	1388.020	1387.960
315	1387.935	1387.963	1388.023	1387.963
320	1387.914	1387.966	1388.026	1387.966
330	1387.867	1387.971	1388.031	1387.971
340	1387.858	1387.977	1388.037	1387.977
350	1387.869	1387.982	1388.042	1387.982
360	1387.887	1387.988	1388.048	1387.988
370	1387.910	1387.993	1388.053	1387.993
380	1387.933	1387.998	1388.058	1387.998
390	1387.960	1388.003	1388.063	1388.003
400	1387.986	1388.008	1388.068	1388.008
410	1387.996	1388.013	1388.073	1388.013
420	1388.003	1388.018	1388.078	1388.018
430	1388.009	1388.023	1388.083	1388.023
440	1388.005	1388.028	1388.088	1388.028
450	1387.995	1388.033	1388.093	1388.033
460	1387.994	1388.037	1388.098	1388.037
470	1387.985	1388.042	1388.102	1388.042
480	1388.008	1388.047	1388.107	1388.047
490	1388.035	1388.052	1388.112	1388.052
500	1388.061	1388.057	1388.117	1388.057
510	1388.081	1388.062	1388.122	1388.062
520	1388.081	1388.067	1388.127	1388.067
530	1388.081	1388.072	1388.131	1388.072
540	1388.080	1388.076	1388.136	1388.076
550	1388.084	1388.081	1388.141	1388.081
560	1388.109	1388.086	1388.146	1388.086
570	1388.130	1388.091	1388.151	1388.091
580	1388.135	1388.096	1388.156	1388.096
590	1388.117	1388.101	1388.161	1388.101
600	1388.098	1388.106	1388.167	1388.106
610	1388.075	1388.113	1388.173	1388.113
620	1388.052	1388.119	1388.179	1388.119

GRADES (CHAINAGE / ELEVATION, SLOPE (%)): 0.347 % — 60.218 | 1387.846 — 0.074 % — 281.870 | 1388.011 — 0.049 % — 620.000 | 1388.193

VERTICAL CURVES (CHAINAGE, CURVE LENGTH, K-FACTOR): B.V.C. 35.218 — 50.000m VC, K = 183.240 — 85.218 E.V.C.; B.V.C. 156.870 — 250.000m VC, K = 9664.045 — 406.870 E.V.C.; B.V.C. 581.572 — 150.000m VC, K = 1833.487

SUPERELEVATION (%) (RIGHT EDGE, LEFT EDGE): -2%

HORIZONTAL CURVES: Direction 225.50.03 — 111.659 BCC — Curve 1 Right, Radius=200.000, I= 15.43.10 — ECC 166.530 — Direction 241.33.13 — 250.725 BCC — Curve 2 Left, Radius=175.000, I= 23.47.44 — ECC 323.405 — Direction 217.45.28 — 483.141 BCC — Curve 3 Left, Radius=200m, I= 1.15.37 — ECC 478.742 — Direction 216.29.52

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

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Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: .... DATE: ....

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 2
LONGITUDINAL SECTION

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

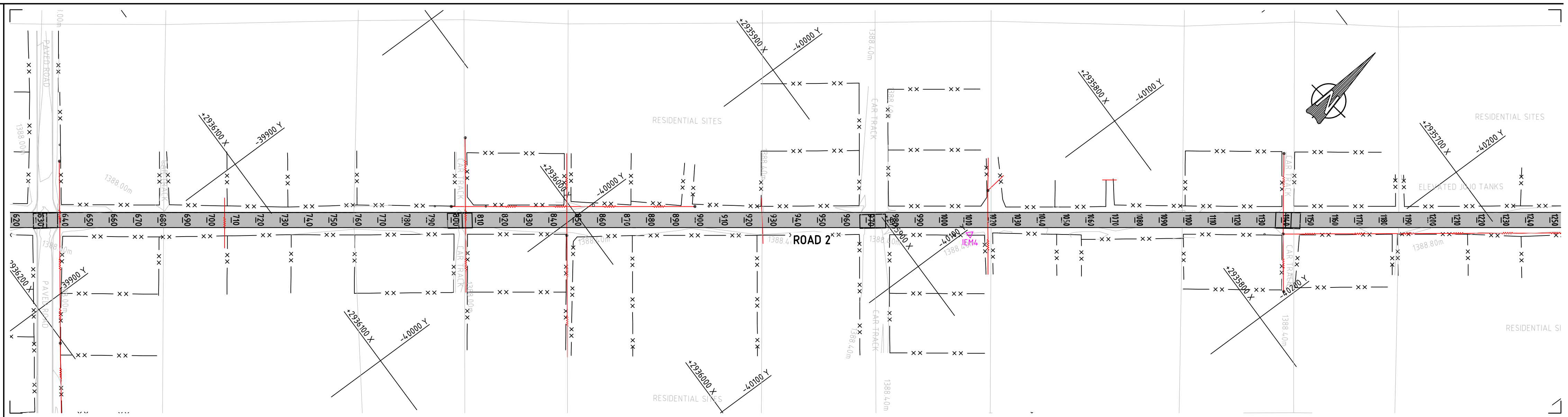
PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME — SIGNATURE & PR NUMBER — DATE
INSPECTOR OF WORKS:
SIGNATURE — DATE
REMARKS:
ORIGINAL PAPER SIZE: A1
DRAWING NO.: LP/TLM/2022/23-004
SHEET NO: 1 OF 11
REVISION: 0

LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m
SCALE 1:1000

LEGEND	
IEM1	Survey benchmark
	Sewerline
	Sewer manhole
	Stormwater channel
	Overhead powerline
	Electric pole
	Electric pole stay
— ×× —	Fence boundary
	Ward boundary



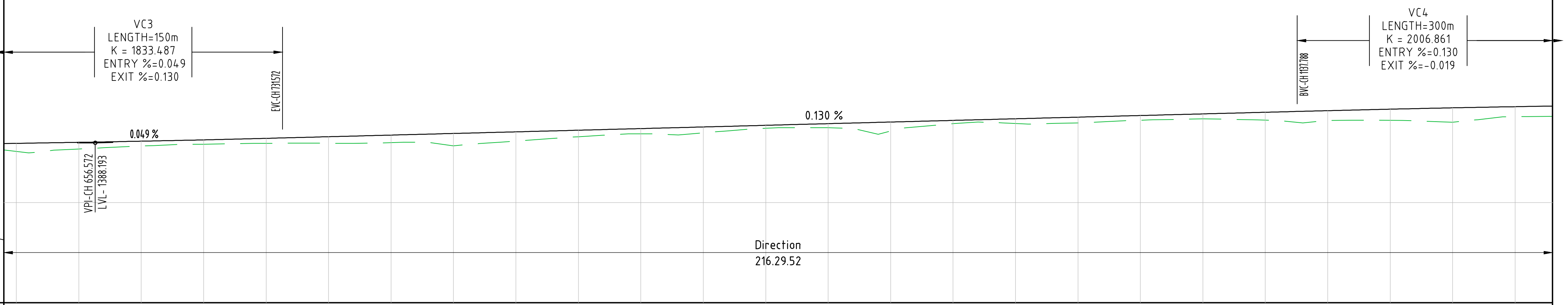
KERBS	LEFT	FIG. 16 EDGE BEAM
	RIGHT	
BARRIER LINES	LEFT	RM1
	RIGHT	
SIDE DRAIN TYPE	LEFT	
	RIGHT	

DESIGN SPEED
40 km/h

ROAD 2
LONG SECTION: CH620-1240

SCALE
HOR 1:1000
VERT 1:50

LEGEND :
GROUND PROFILE
DESIGN PROFILE



℄
3m 3m
-2% -2%
SECTION THROUGH PAVEMENT

Datum 1385.000

CHAINAGES (m)	C/L/ PEG LEVELS (m)	DESIGN ROAD LEVELS: LEFT EDGE (m)	DESIGN ROAD LEVELS: CENTRE LINE (m)	DESIGN ROAD LEVELS: RIGHT EDGE (m)
620	1388.052	1388.119	1388.179	1388.119
630	1387.991	1388.126	1388.187	1388.126
640	1388.045	1388.134	1388.194	1388.134
650	1388.068	1388.143	1388.203	1388.143
660	1388.095	1388.151	1388.211	1388.151
670	1388.117	1388.161	1388.221	1388.161
680	1388.137	1388.171	1388.231	1388.171
690	1388.161	1388.181	1388.241	1388.181
700	1388.166	1388.192	1388.252	1388.192
710	1388.172	1388.204	1388.264	1388.204
720	1388.181	1388.216	1388.276	1388.216
730	1388.185	1388.229	1388.289	1388.229
740	1388.187	1388.242	1388.302	1388.242
750	1388.185	1388.255	1388.315	1388.255
760	1388.183	1388.268	1388.328	1388.268
770	1388.191	1388.281	1388.341	1388.281
780	1388.205	1388.294	1388.354	1388.294
790	1388.203	1388.307	1388.367	1388.307
800	1388.134	1388.320	1388.380	1388.320
810	1388.176	1388.333	1388.393	1388.333
820	1388.211	1388.346	1388.406	1388.346
830	1388.246	1388.359	1388.419	1388.359
840	1388.281	1388.372	1388.432	1388.372
850	1388.315	1388.385	1388.445	1388.385
860	1388.345	1388.398	1388.458	1388.398
870	1388.375	1388.411	1388.471	1388.411
880	1388.373	1388.424	1388.484	1388.424
890	1388.350	1388.437	1388.497	1388.437
900	1388.394	1388.450	1388.510	1388.450
910	1388.433	1388.463	1388.523	1388.463
920	1388.473	1388.476	1388.536	1388.476
930	1388.497	1388.490	1388.550	1388.490
940	1388.494	1388.503	1388.563	1388.503
950	1388.494	1388.516	1388.576	1388.516
960	1388.481	1388.529	1388.589	1388.529
970	1388.365	1388.542	1388.602	1388.542
980	1388.490	1388.555	1388.615	1388.555
990	1388.533	1388.568	1388.628	1388.568
1000	1388.575	1388.581	1388.641	1388.581
1010	1388.608	1388.594	1388.654	1388.594
1020	1388.590	1388.607	1388.667	1388.607
1030	1388.568	1388.620	1388.680	1388.620
1040	1388.581	1388.633	1388.693	1388.633
1050	1388.590	1388.646	1388.706	1388.646
1060	1388.611	1388.659	1388.719	1388.659
1070	1388.636	1388.672	1388.732	1388.672
1080	1388.654	1388.685	1388.745	1388.685
1090	1388.661	1388.698	1388.758	1388.698
1100	1388.671	1388.711	1388.771	1388.711
1110	1388.664	1388.724	1388.784	1388.724
1120	1388.653	1388.737	1388.797	1388.737
1130	1388.642	1388.750	1388.810	1388.750
1140	1388.589	1388.763	1388.823	1388.763
1150	1388.641	1388.776	1388.836	1388.776
1160	1388.645	1388.788	1388.848	1388.788
1170	1388.647	1388.800	1388.860	1388.800
1180	1388.640	1388.811	1388.871	1388.811
1190	1388.622	1388.822	1388.882	1388.822
1200	1388.603	1388.832	1388.892	1388.832
1210	1388.655	1388.842	1388.902	1388.842
1220	1388.714	1388.851	1388.911	1388.851
1230	1388.719	1388.859	1388.919	1388.859
1240	1388.724	1388.868	1388.928	1388.868

VERTICAL ALIGNMENT

GRADES — CHAINAGE / ELEVATION, SLOPE (%): 0.049 % | 656.572 1388.193 | 0.130 % | 1240.000 1389.016

VERTICAL CURVES — CHAINAGE, CURVE LENGTH, K-FACTOR: 150.000m VC, K = 1833.487 | 731.572 E.V.C. | B.V.C. 1137.788 | 300.000m VC, K = 2006.861

SUPERELEVATION (%) — RIGHT EDGE / LEFT EDGE: -2%

HORIZONTAL CURVES: Direction 216.29.52

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
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pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE:...... DATE:......

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

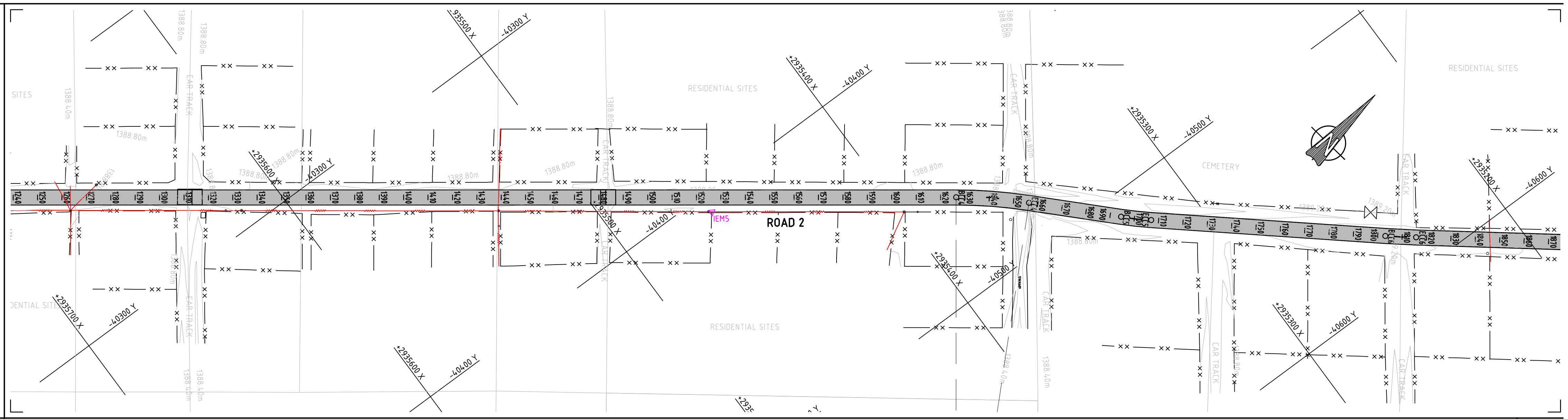
DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

ROAD 2
LONGITUDINAL SECTION

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
CONCEPT DRAWING | TENDER DRAWING (●) | APPROVED FOR CONSTRUCTION | AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1
DRAWING NO. LP/TLM/2022/23-004
SHEET NO: 2 OF 11
REVISION 0



LEGEND

Symbol	Description
IEM1	Survey benchmark
	Sewerline
	Sewer manhole
	Stormwater channel
	Overhead powerline
	Electric pole
	Electric pole stay
— ×× —	Fence boundary
	Ward boundary

KERBS: LEFT / RIGHT — FIG. 16 EDGE BEAM
BARRIER LINES: LEFT / RIGHT — RM1
SIDE DRAIN TYPE: LEFT / RIGHT

DESIGN SPEED
40 km/h

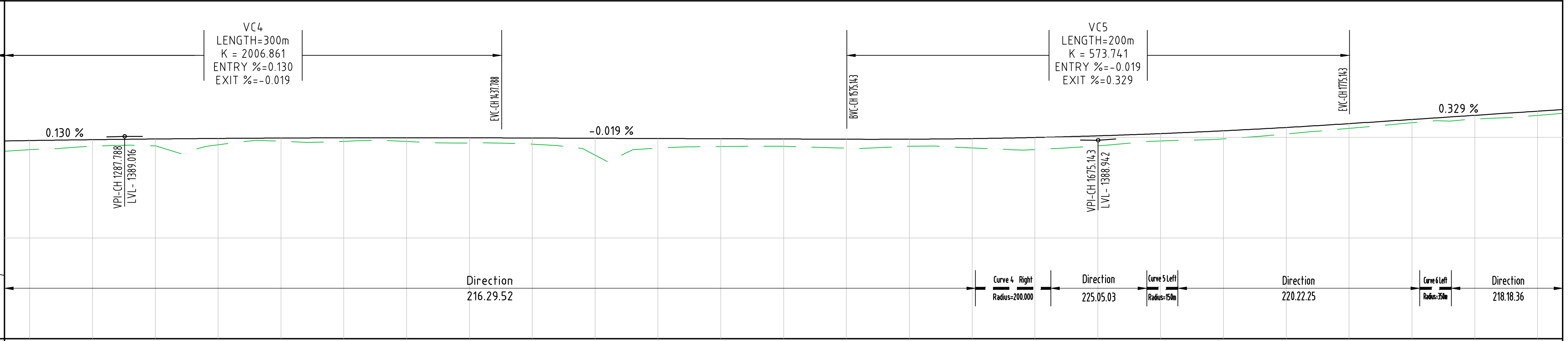
ROAD 2
LONG SECTION: CH1240–1860

SCALE
HOR 1:1000
VERT 1:50

LEGEND :
GROUND PROFILE
DESIGN PROFILE

SECTION THROUGH PAVEMENT (3m, -2% / 3m, -2%)

Datum 1385.000



VERTICAL ALIGNMENT – C/L PEG LEVELS AND DESIGN ROAD LEVELS

CHAINAGES (m)	C/L/ PEG LEVELS (m)	LEFT EDGE (m)	CENTRE LINE (m)	RIGHT EDGE (m)
1240	1388.724	1388.868	1388.928	1388.868
1250	1388.754	1388.875	1388.935	1388.875
1260	1388.773	1388.883	1388.943	1388.883
1270	1388.810	1388.889	1388.949	1388.889
1280	1388.833	1388.896	1388.955	1388.896
1290	1388.844	1388.901	1388.961	1388.901
1300	1388.829	1388.906	1388.966	1388.906
1310	1388.677	1388.911	1388.971	1388.911
1320	1388.819	1388.915	1388.975	1388.915
1330	1388.883	1388.919	1388.979	1388.919
1340	1388.939	1388.922	1388.982	1388.922
1350	1388.920	1388.925	1388.985	1388.925
1360	1388.899	1388.927	1388.987	1388.927
1370	1388.907	1388.929	1388.989	1388.929
1380	1388.929	1388.930	1388.990	1388.930
1390	1388.941	1388.931	1388.991	1388.931
1400	1388.916	1388.931	1388.991	1388.931
1410	1388.891	1388.931	1388.991	1388.931
1420	1388.887	1388.930	1388.990	1388.930
1430	1388.888	1388.929	1388.989	1388.929
1440	1388.881	1388.927	1388.987	1388.927
1450	1388.864	1388.925	1388.985	1388.925
1460	1388.834	1388.923	1388.983	1388.923
1470	1388.775	1388.921	1388.981	1388.921
1480	1388.512	1388.919	1388.979	1388.919
1490	1388.753	1388.917	1388.977	1388.917
1500	1388.781	1388.915	1388.975	1388.915
1510	1388.810	1388.914	1388.974	1388.914
1520	1388.816	1388.912	1388.972	1388.912
1530	1388.819	1388.910	1388.970	1388.910
1540	1388.823	1388.908	1388.968	1388.908
1550	1388.820	1388.906	1388.966	1388.906
1560	1388.805	1388.904	1388.964	1388.904
1570	1388.790	1388.902	1388.962	1388.902
1580	1388.776	1388.900	1388.960	1388.900
1590	1388.799	1388.900	1388.960	1388.900
1600	1388.822	1388.902	1388.962	1388.902
1610	1388.825	1388.905	1388.965	1388.905
1620	1388.801	1388.910	1388.970	1388.910
1630	1388.777	1388.917	1388.977	1388.917
1635	1388.766	1388.921	1388.981	1388.921
1640	1388.756	1388.925	1388.985	1388.925
1645	1388.743	1388.930	1388.990	1388.930
1650	1388.753	1388.936	1388.996	1388.936
1655	1388.768	1388.941	1389.001	1388.941
1660	1388.779	1388.948	1389.008	1388.948
1670	1388.809	1388.961	1389.021	1388.961
1680	1388.851	1388.977	1389.037	1388.977
1690	1388.894	1388.994	1389.054	1388.994
1695	1388.915	1389.003	1389.063	1389.003
1700	1388.928	1389.013	1389.073	1389.013
1705	1388.936	1389.023	1389.083	1389.023
1710	1388.942	1389.034	1389.094	1389.034
1720	1388.953	1389.056	1389.116	1389.056
1730	1388.986	1389.080	1389.141	1389.080
1740	1389.022	1389.106	1389.167	1389.106
1750	1389.064	1389.134	1389.194	1389.134
1760	1389.110	1389.164	1389.224	1389.164
1770	1389.154	1389.195	1389.255	1389.195
1780	1389.199	1389.228	1389.287	1389.228
1790	1389.244	1389.260	1389.320	1389.260
1800	1389.290	1389.293	1389.353	1389.293
1805	1389.310	1389.310	1389.370	1389.310
1810	1389.330	1389.326	1389.386	1389.326
1815	1389.322	1389.343	1389.403	1389.343
1820	1389.344	1389.359	1389.419	1389.359
1830	1389.373	1389.392	1389.452	1389.392
1840	1389.394	1389.425	1389.485	1389.425
1850	1389.434	1389.458	1389.518	1389.458
1860	1389.476	1389.491	1389.551	1389.491

GRADES (CHAINAGE / ELEVATION, SLOPE (%)): 0.130 % — 1287.788 | 1389.016 — -0.019 % — 1675.143 | 1388.942 — 0.329 % — 1860.000 | 1390.272

VERTICAL CURVES (CHAINAGE, CURVE LENGTH, K-FACTOR): 300.000m VC, K = 2006.861 — 1437.788 E.V.C. — B.V.C. 1575.143 — 200.000m VC, K = 573.741 — 1775.143 E.V.C.

SUPERELEVATION (%) (RIGHT EDGE / LEFT EDGE): -2%

HORIZONTAL CURVES: Direction 216.29.52 — 1626.327 BCC — Curve 4 Right, Radius=200.000, I= 8.35.12 — ECC 1656.300 — Direction 225.05.03 — 1694.518 BCC — Curve 5 Left, Radius=150m, I= 4.42.38 — ECC 1706.850 — Direction 220.22.25 — 1803.076 BCC — Curve 6 Left, Radius=350m, I= 2.03.49 — ECC 1815.682 — Direction 218.18.36

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

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Delareyville
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DESIGNED	M.M.
DRAWING CHECKED BY	M.H.
DRAWN	T.R.
APPROVED	L.M.
DRAWING APPROVED BY TLM	SIGNATURE: ... DATE: ...

LOCATION OF PROJECT: FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT:

REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

ROAD 2
LONGITUDINAL SECTION

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS: CONCEPT DRAWING ○ | TENDER DRAWING ● | APPROVED FOR CONSTRUCTION ○ | AS BUILT DRAWING ○

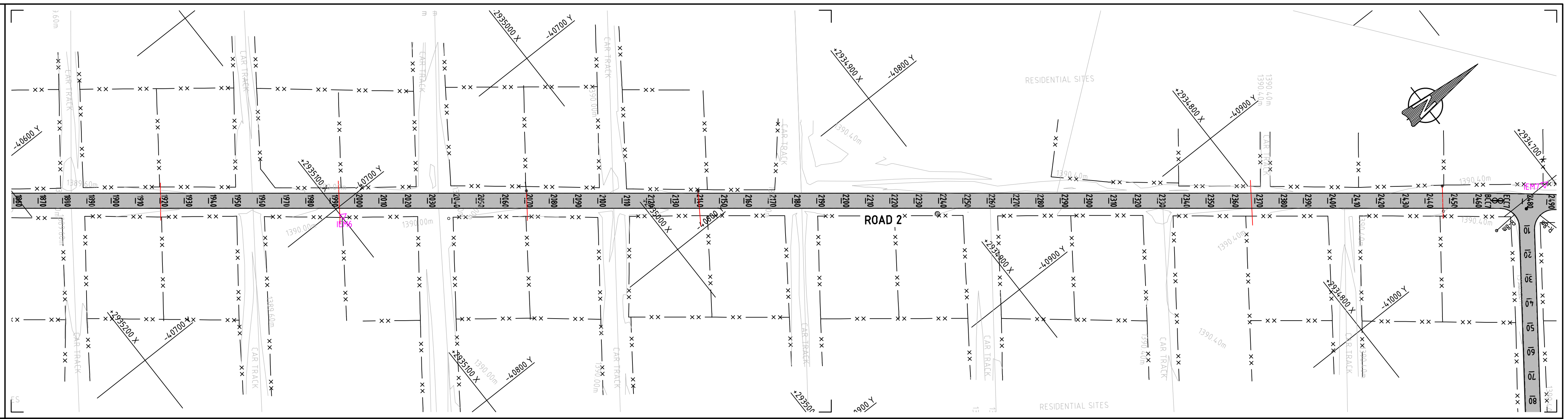
PROJECT ENGINEER: INITIALS AND SURNAME / SIGNATURE & PR NUMBER / DATE
INSPECTOR OF WORKS: SIGNATURE / DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-004	3 OF 11	0

LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m
SCALE 1:1000

LEGEND	
IEM1	Survey benchmark
	Sewerline
	Sewer manhole
	Stormwater channel
	Overhead powerline
	Electric pole
	Electric pole stay
— ×× —	Fence boundary
▬ ▬ ▬	Ward boundary



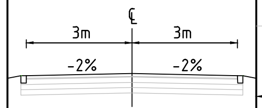
KERBS	LEFT / RIGHT	FIG. 16 EDGE BEAM
BARRIER LINES	LEFT / RIGHT	RM1
SIDE DRAIN TYPE	LEFT / RIGHT	

DESIGN SPEED
40 km/h

ROAD 2
LONG SECTION: CH1860-2480

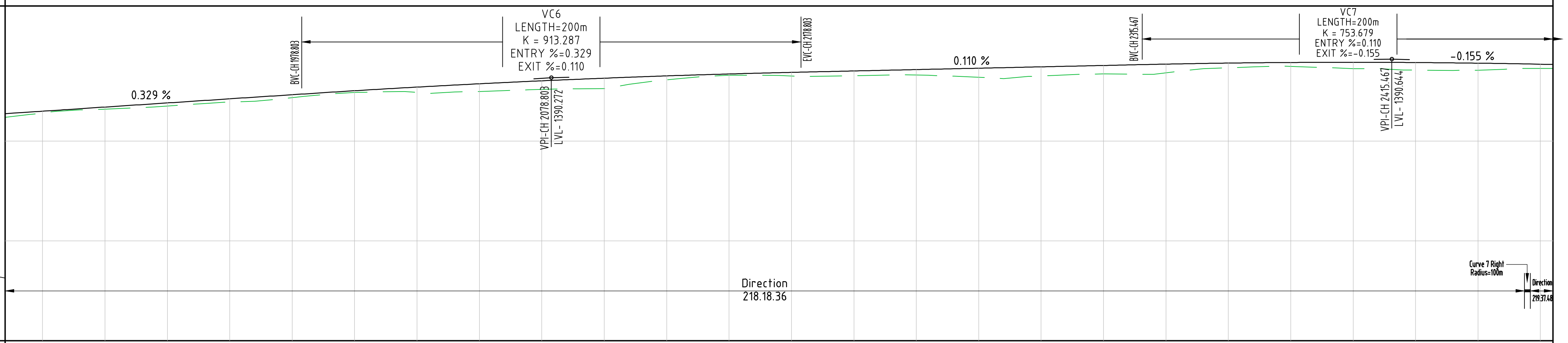
SCALE
HOR 1:1000
VERT 1:50

LEGEND :
GROUND PROFILE
DESIGN PROFILE



SECTION THROUGH PAVEMENT

Datum 1385.000



VERTICAL ALIGNMENT

CHAINAGES (m)	C/L/ PEG LEVELS (m)	DESIGN ROAD LEVELS: LEFT EDGE (m)	CENTRE LINE (m)	RIGHT EDGE (m)
1860	1389.476	1389.491	1389.551	1389.491
1870	1389.535	1389.524	1389.584	1389.524
1880	1389.594	1389.557	1389.617	1389.557
1890	1389.625	1389.590	1389.650	1389.590
1900	1389.638	1389.623	1389.683	1389.623
1910	1389.662	1389.656	1389.716	1389.656
1920	1389.687	1389.689	1389.749	1389.689
1930	1389.720	1389.722	1389.782	1389.722
1940	1389.753	1389.755	1389.815	1389.755
1950	1389.786	1389.788	1389.848	1389.788
1960	1389.797	1389.821	1389.881	1389.821
1970	1389.842	1389.854	1389.913	1389.854
1980	1389.897	1389.886	1389.946	1389.886
1990	1389.946	1389.919	1389.979	1389.919
2000	1389.975	1389.950	1390.010	1389.950
2010	1389.987	1389.980	1390.040	1389.980
2020	1389.995	1390.009	1390.069	1390.009
2030	1389.954	1390.037	1390.097	1390.037
2040	1389.986	1390.064	1390.124	1390.064
2050	1389.992	1390.089	1390.149	1390.089
2060	1390.011	1390.114	1390.174	1390.114
2070	1390.029	1390.137	1390.198	1390.137
2080	1390.043	1390.160	1390.220	1390.160
2090	1390.047	1390.181	1390.241	1390.181
2100	1390.051	1390.201	1390.261	1390.201
2110	1390.141	1390.221	1390.281	1390.221
2120	1390.206	1390.239	1390.299	1390.239
2130	1390.251	1390.255	1390.316	1390.255
2140	1390.297	1390.271	1390.331	1390.271
2150	1390.322	1390.286	1390.346	1390.286
2160	1390.319	1390.300	1390.360	1390.300
2170	1390.316	1390.312	1390.372	1390.312
2180	1390.295	1390.324	1390.384	1390.324
2190	1390.300	1390.335	1390.395	1390.335
2200	1390.312	1390.346	1390.406	1390.346
2210	1390.321	1390.357	1390.417	1390.357
2220	1390.329	1390.368	1390.428	1390.368
2230	1390.318	1390.379	1390.439	1390.379
2240	1390.301	1390.390	1390.450	1390.390
2250	1390.279	1390.401	1390.461	1390.401
2260	1390.254	1390.412	1390.472	1390.412
2270	1390.296	1390.423	1390.483	1390.423
2280	1390.316	1390.434	1390.494	1390.434
2290	1390.337	1390.445	1390.505	1390.445
2300	1390.346	1390.456	1390.516	1390.456
2310	1390.343	1390.467	1390.527	1390.467
2320	1390.338	1390.478	1390.538	1390.478
2330	1390.399	1390.488	1390.548	1390.488
2340	1390.450	1390.497	1390.557	1390.497
2350	1390.468	1390.504	1390.564	1390.504
2360	1390.487	1390.510	1390.570	1390.510
2370	1390.505	1390.514	1390.574	1390.514
2380	1390.490	1390.517	1390.577	1390.517
2390	1390.473	1390.519	1390.579	1390.519
2400	1390.451	1390.520	1390.579	1390.520
2410	1390.456	1390.519	1390.579	1390.519
2420	1390.424	1390.516	1390.577	1390.516
2430	1390.420	1390.513	1390.573	1390.513
2440	1390.417	1390.508	1390.568	1390.508
2450	1390.420	1390.502	1390.562	1390.502
2460	1390.439	1390.495	1390.555	1390.495
2470	1390.458	1390.486	1390.546	1390.486
2480	1390.456	1390.476	1390.536	1390.476

GRADES (CHAINAGE / ELEVATION, SLOPE (%)): 0.329 % — 2078.803 \| 1390.272 — 0.110 % — 2415.467 \| 1390.644 — -0.155 %

VERTICAL CURVES (CHAINAGE, CURVE LENGTH, K-FACTOR): B.V.C. 1978.803 — 200.000m VC, K = 913.287 — 2178.803 E.V.C. ; B.V.C. 2315.467 — 200.000m VC, K = 753.679

SUPERELEVATION (%) (– – – RIGHT EDGE, —— LEFT EDGE): -2%

HORIZONTAL CURVES: Direction 218.18.36 — Curve 7 Right, Radius=100m, I= 1.19.12, 2468.642 BCC, ECC 2470.946 — Direction 219.37.48

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

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Delareyville
2732

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DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE:........ DATE:........

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

ROAD 2
LONGITUDINAL SECTION

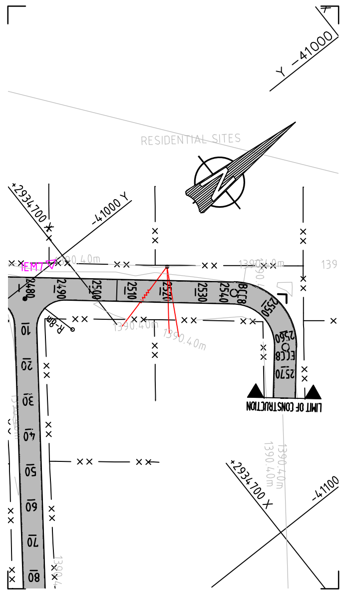
CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME — SIGNATURE & PR NUMBER — DATE
INSPECTOR OF WORKS:
SIGNATURE — DATE
REMARKS:
ORIGINAL PAPER SIZE: A1
DRAWING NO. LP/TLM/2022/23-004
SHEET NO: 4 OF 11
REVISION 0

LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m
SCALE 1:1000



LEGEND	
IEM1	Survey benchmark
	Sewerline
	Sewer manhole
	Stormwater channel
	Overhead powerline
	Electric pole
	Electric pole stay
– ×× –	Fence boundary
▬ ▬ ▬	Ward boundary

KERBS	LEFT	FIG. 16 EDGE BEAM
	RIGHT	
BARRIER LINES	LEFT	RM1
	RIGHT	
SIDE DRAIN TYPE	LEFT	
	RIGHT	

DESIGN SPEED
40 km/h

ROAD 2
LONG SECTION: CH2480-2578

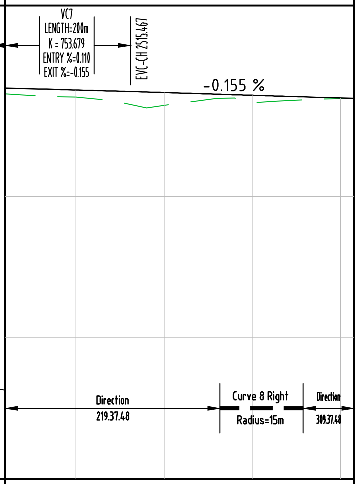
SCALE
HOR 1:1000
VERT 1:50

LEGEND :
GROUND PROFILE
DESIGN PROFILE

℄
3m 3m
-2% -2%

SECTION THROUGH PAVEMENT

Datum 1385.000



CHAINAGES (m)	2480	2490	2500	2510	2520	2530	2540	2545	2550	2555	2560	2570	2578.831
C/L/ PEG LEVELS (m)	1390.456	1390.424	1390.409	1390.363	1390.255	1390.327	1390.393	1390.396	1390.328	1390.346	1390.359	1390.381	1390.391
VERTICAL ALIGNMENT – DESIGN ROAD LEVELS – LEFT EDGE (m)	1390.476	1390.464	1390.452	1390.437	1390.422	1390.407	1390.391	1390.383	1390.376	1390.368	1390.360	1390.345	1390.331
CENTRE LINE (m)	1390.536	1390.524	1390.511	1390.497	1390.482	1390.467	1390.451	1390.443	1390.436	1390.428	1390.420	1390.405	1390.391
RIGHT EDGE (m)	1390.476	1390.464	1390.452	1390.437	1390.422	1390.407	1390.391	1390.383	1390.376	1390.368	1390.360	1390.345	1390.331

GRADES	CHAINAGE / ELEVATION SLOPE (%)	-0.155 %
VERTICAL CURVES	CHAINAGE CURVE LENGTH K-FACTOR	200.000m VC K = 753.679 — 2515.467 E.V.C.
SUPERELEVATION (%)	RIGHT EDGE LEFT EDGE	-2%
HORIZONTAL CURVES		Direction 219.37.48 — 2540.848 BCC — Curve 8 Right Radius=15m T=90.00.00 — ECC 2564.410 — Direction 309.37.48

CHAINAGE 70
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.787	1387.847	1387.787
GROUND		1387.814	
OFFSET	-3.000	0.000	3.000

CHAINAGE 60
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.768	1387.828	1387.768
GROUND		1387.785	
OFFSET	-3.000	0.000	3.000

CHAINAGE 50
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.745	1387.805	1387.745
GROUND		1387.739	
OFFSET	-3.000	0.000	3.000

CHAINAGE 40
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.715	1387.775	1387.715
GROUND		1387.693	
OFFSET	-3.000	0.000	3.000

CHAINAGE 30
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.681	1387.741	1387.681
GROUND		1387.709	
OFFSET	-3.000	0.000	3.000

CHAINAGE 20
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.646	1387.706	1387.646
GROUND		1387.697	
OFFSET	-3.000	0.000	3.000

CHAINAGE 10
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.612	1387.672	1387.612
GROUND		1387.685	
OFFSET	-3.916	0.000	3.000

CHAINAGE 125
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.834	1387.894	1387.834
GROUND		1387.804	
OFFSET	-3.000	0.000	3.000

CHAINAGE 120
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.830	1387.891	1387.830
GROUND		1387.815	
OFFSET	-3.000	0.000	3.000

CHAINAGE 115
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.827	1387.887	1387.827
GROUND		1387.826	
OFFSET	-3.000	0.000	3.000

CHAINAGE 110
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.823	1387.883	1387.823
GROUND		1387.836	
OFFSET	-3.000	0.000	3.000

CHAINAGE 100
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.816	1387.876	1387.816
GROUND		1387.788	
OFFSET	-3.000	0.000	3.000

CHAINAGE 90
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.808	1387.868	1387.808
GROUND		1387.797	
OFFSET	-3.000	0.000	3.000

CHAINAGE 80
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.800	1387.860	1387.800
GROUND		1387.805	
OFFSET	-3.000	0.000	3.000

CHAINAGE 160
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.860	1387.920	1387.860
GROUND		1387.732	
OFFSET	-3.000	0.000	3.000

CHAINAGE 155
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.857	1387.917	1387.857
GROUND		1387.731	
OFFSET	-3.000	0.000	3.000

CHAINAGE 150
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.853	1387.913	1387.853
GROUND		1387.740	
OFFSET	-3.000	0.000	3.000

CHAINAGE 145
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.849	1387.909	1387.849
GROUND		1387.749	
OFFSET	-3.000	0.000	3.000

CHAINAGE 140
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.845	1387.905	1387.845
GROUND		1387.758	
OFFSET	-3.000	0.000	3.000

CHAINAGE 135
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.842	1387.902	1387.842
GROUND		1387.772	
OFFSET	-3.000	0.000	3.000

CHAINAGE 130
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.838	1387.898	1387.838
GROUND		1387.787	
OFFSET	-3.000	0.000	3.000

CHAINAGE 220
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.903	1387.963	1387.903
GROUND		1387.857	
OFFSET	-3.000	0.000	3.000

CHAINAGE 210
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.896	1387.956	1387.896
GROUND		1387.815	
OFFSET	-3.000	0.000	3.000

CHAINAGE 200
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.889	1387.949	1387.889
GROUND		1387.765	
OFFSET	-3.000	0.000	3.000

CHAINAGE 190
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.882	1387.942	1387.882
GROUND		1387.734	
OFFSET	-3.000	0.000	3.000

CHAINAGE 180
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.875	1387.935	1387.875
GROUND		1387.730	
OFFSET	-3.000	0.000	3.000

CHAINAGE 170
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.868	1387.928	1387.868
GROUND		1387.719	
OFFSET	-3.000	0.000	3.000

CHAINAGE 165
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387

FINISHED	1387.864	1387.924	1387.864
GROUND		1387.732	
OFFSET	-3.000	0.000	3.000

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
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Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE:............ DATE:............

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 2
LONGITUDINAL & CROSS-SECTIONS

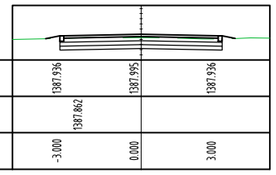
CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME — SIGNATURE & PR NUMBER — DATE
INSPECTOR OF WORKS:
SIGNATURE — DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

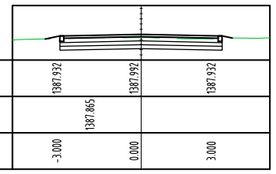
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-004	5 OF 11	0

CHAINAGE 270
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



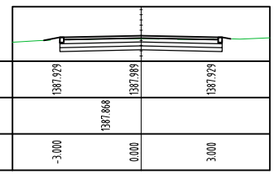
FINISHED	1387.936	1387.995	1387.936
GROUND		1387.862	
OFFSET	-3.000	0.000	3.000

CHAINAGE 265
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



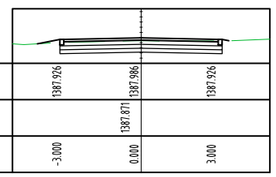
FINISHED	1387.932	1387.992	1387.932
GROUND		1387.865	
OFFSET	-3.000	0.000	3.000

CHAINAGE 260
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



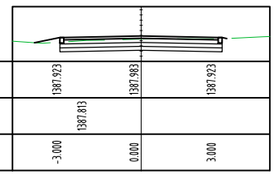
FINISHED	1387.929	1387.989	1387.929
GROUND		1387.868	
OFFSET	-3.000	0.000	3.000

CHAINAGE 255
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



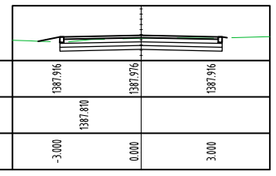
FINISHED	1387.926	1387.986	1387.926
GROUND		1387.871	
OFFSET	-3.000	0.000	3.000

CHAINAGE 250
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



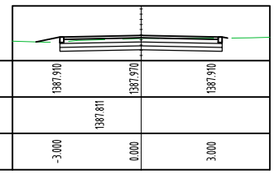
FINISHED	1387.923	1387.983	1387.923
GROUND		1387.813	
OFFSET	-3.000	0.000	3.000

CHAINAGE 240
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



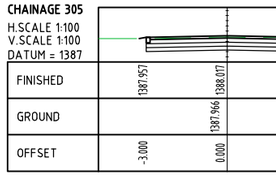
FINISHED	1387.916	1387.976	1387.916
GROUND		1387.810	
OFFSET	-3.000	0.000	3.000

CHAINAGE 230
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



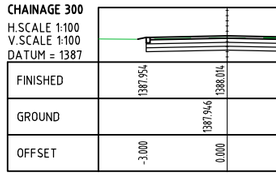
FINISHED	1387.910	1387.970	1387.910
GROUND		1387.811	
OFFSET	-3.000	0.000	3.000

CHAINAGE 305
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



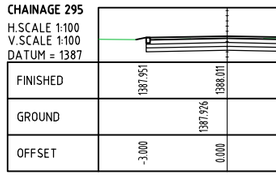
FINISHED	1387.957	1388.017	1387.957
GROUND		1387.966	
OFFSET	-3.000	0.000	3.000

CHAINAGE 300
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



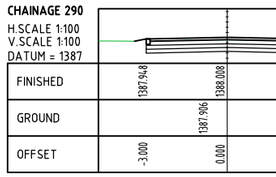
FINISHED	1387.954	1388.014	1387.954
GROUND		1387.946	
OFFSET	-3.000	0.000	3.000

CHAINAGE 295
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



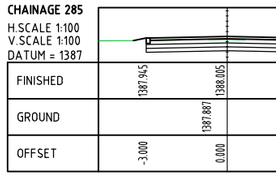
FINISHED	1387.951	1388.011	1387.951
GROUND		1387.926	
OFFSET	-3.000	0.000	3.000

CHAINAGE 290
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



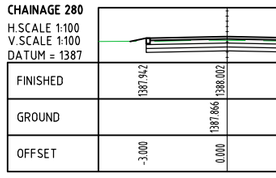
FINISHED	1387.948	1388.008	1387.948
GROUND		1387.906	
OFFSET	-3.000	0.000	3.000

CHAINAGE 285
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



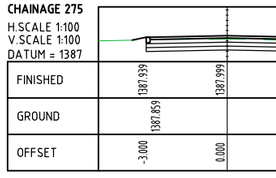
FINISHED	1387.945	1388.005	1387.945
GROUND		1387.887	
OFFSET	-3.000	0.000	3.000

CHAINAGE 280
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



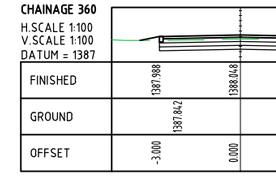
FINISHED	1387.942	1388.002	1387.942
GROUND		1387.866	
OFFSET	-3.000	0.000	3.000

CHAINAGE 275
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



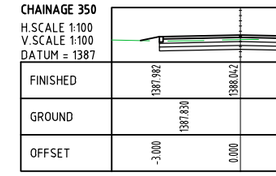
FINISHED	1387.939	1387.999	1387.939
GROUND		1387.859	
OFFSET	-3.000	0.000	3.000

CHAINAGE 360
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



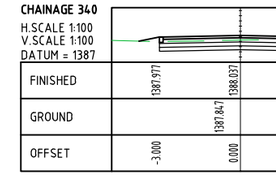
FINISHED	1387.988	1388.048	1387.988
GROUND		1387.842	
OFFSET	-3.000	0.000	3.000

CHAINAGE 350
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



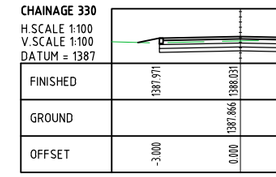
FINISHED	1387.982	1388.042	1387.982
GROUND		1387.830	
OFFSET	-3.000	0.000	3.000

CHAINAGE 340
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



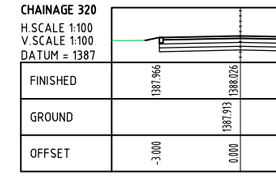
FINISHED	1387.977	1388.037	1387.977
GROUND		1387.847	
OFFSET	-3.000	0.000	3.000

CHAINAGE 330
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



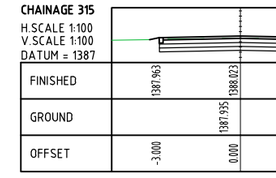
FINISHED	1387.971	1388.031	1387.971
GROUND		1387.866	
OFFSET	-3.000	0.000	3.000

CHAINAGE 320
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



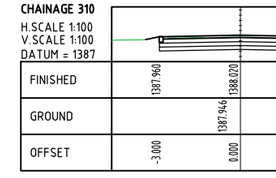
FINISHED	1387.966	1388.026	1387.966
GROUND		1387.913	
OFFSET	-3.000	0.000	3.000

CHAINAGE 315
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



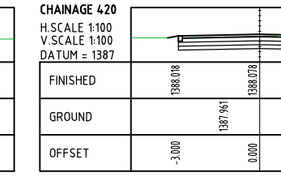
FINISHED	1387.963	1388.023	1387.963
GROUND		1387.935	
OFFSET	-3.000	0.000	3.000

CHAINAGE 310
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



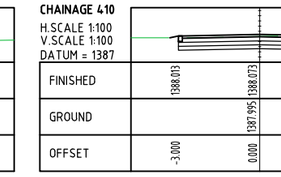
FINISHED	1387.960	1388.020	1387.960
GROUND		1387.946	
OFFSET	-3.000	0.000	3.000

CHAINAGE 420
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



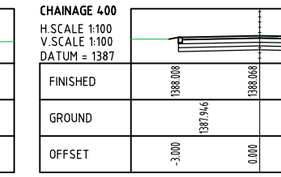
FINISHED	1388.078	1388.078	1388.078
GROUND		1387.961	
OFFSET	-3.000	0.000	3.000

CHAINAGE 410
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



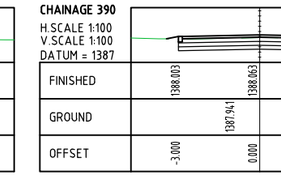
FINISHED	1388.073	1388.073	1388.073
GROUND		1387.995	
OFFSET	-3.000	0.000	3.000

CHAINAGE 400
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



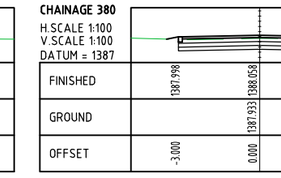
FINISHED	1388.068	1388.068	1388.068
GROUND		1387.946	
OFFSET	-3.000	0.000	3.000

CHAINAGE 390
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



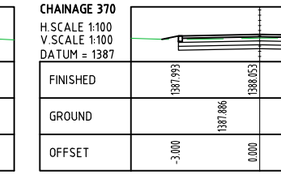
FINISHED	1388.063	1388.063	1388.063
GROUND		1387.941	
OFFSET	-3.000	0.000	3.000

CHAINAGE 380
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



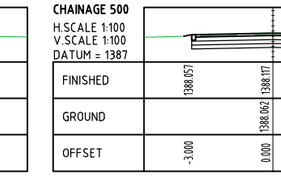
FINISHED	1388.058	1388.058	1388.058
GROUND		1387.933	
OFFSET	-3.000	0.000	3.000

CHAINAGE 370
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



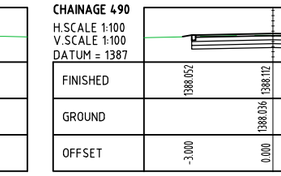
FINISHED	1388.053	1388.053	1388.053
GROUND		1387.886	
OFFSET	-3.000	0.000	3.000

CHAINAGE 500
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



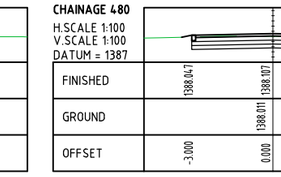
FINISHED	1388.057	1388.117	1388.057
GROUND		1388.062	
OFFSET	-3.000	0.000	3.000

CHAINAGE 490
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



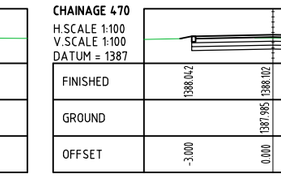
FINISHED	1388.052	1388.112	1388.052
GROUND		1388.036	
OFFSET	-3.000	0.000	3.000

CHAINAGE 480
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



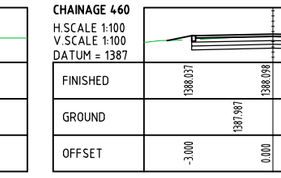
FINISHED	1388.047	1388.107	1388.047
GROUND		1388.011	
OFFSET	-3.000	0.000	3.000

CHAINAGE 470
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



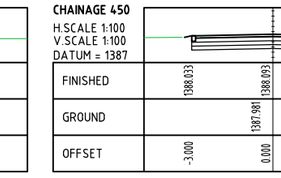
FINISHED	1388.042	1388.102	1388.042
GROUND		1387.985	
OFFSET	-3.000	0.000	3.000

CHAINAGE 460
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



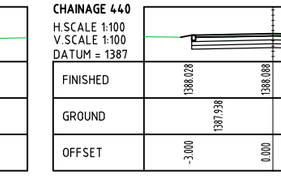
FINISHED	1388.037	1388.098	1388.037
GROUND		1387.987	
OFFSET	-3.000	0.000	3.000

CHAINAGE 450
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



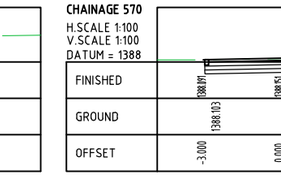
FINISHED	1388.033	1388.093	1388.033
GROUND		1387.981	
OFFSET	-3.000	0.000	3.000

CHAINAGE 440
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



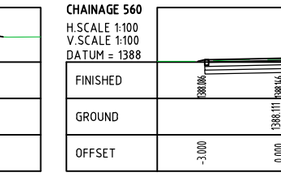
FINISHED	1388.028	1388.088	1388.028
GROUND		1387.938	
OFFSET	-3.000	0.000	3.000

CHAINAGE 570
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



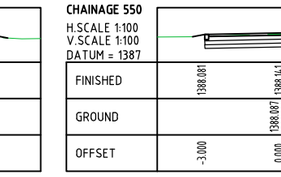
FINISHED	1388.191	1388.151	1388.191
GROUND		1388.163	
OFFSET	-3.000	0.000	3.000

CHAINAGE 560
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



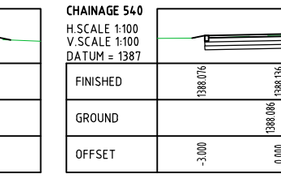
FINISHED	1388.186	1388.146	1388.186
GROUND		1388.111	
OFFSET	-3.000	0.000	3.000

CHAINAGE 550
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



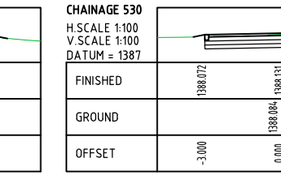
FINISHED	1388.081	1388.141	1388.081
GROUND		1388.087	
OFFSET	-3.000	0.000	3.000

CHAINAGE 540
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



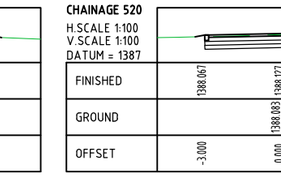
FINISHED	1388.076	1388.136	1388.076
GROUND		1388.086	
OFFSET	-3.000	0.000	3.000

CHAINAGE 530
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



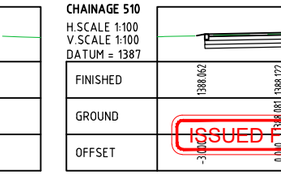
FINISHED	1388.072	1388.131	1388.072
GROUND		1388.084	
OFFSET	-3.000	0.000	3.000

CHAINAGE 520
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1388.067	1388.127	1388.067
GROUND		1388.083	
OFFSET	-3.000	0.000	3.000

CHAINAGE 510
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



FINISHED	1388.062	1388.122	1388.062
GROUND		1388.081	
OFFSET	-3.000	0.000	3.000

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAINING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 2
CROSS-SECTIONS

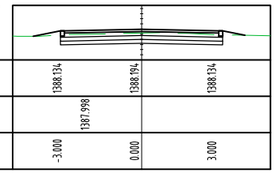
CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

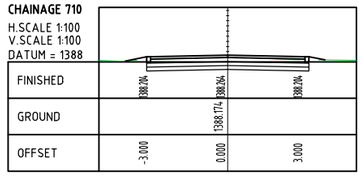
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-004	6 OF 11	0

CHAINAGE 640
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



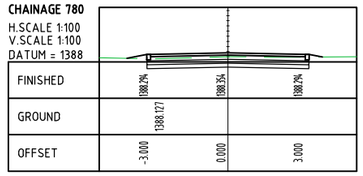
	-3.000	0.000	3.000
FINISHED	1388.134	1388.194	1388.134
GROUND		1387.998	
OFFSET			

CHAINAGE 710
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



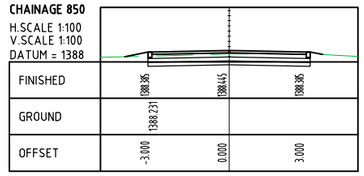
	-3.000	0.000	3.000
FINISHED	1388.284	1388.284	1388.284
GROUND		1388.174	
OFFSET			

CHAINAGE 780
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



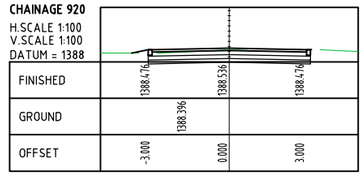
	-3.000	0.000	3.000
FINISHED	1388.296	1388.354	1388.296
GROUND		1388.127	
OFFSET			

CHAINAGE 850
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



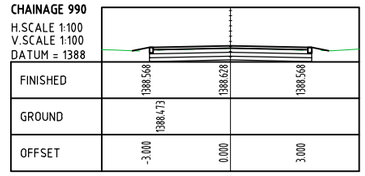
	-3.000	0.000	3.000
FINISHED	1388.365	1388.445	1388.365
GROUND		1388.231	
OFFSET			

CHAINAGE 920
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



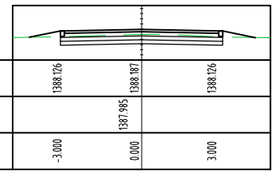
	-3.000	0.000	3.000
FINISHED	1388.476	1388.536	1388.476
GROUND		1388.396	
OFFSET			

CHAINAGE 990
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



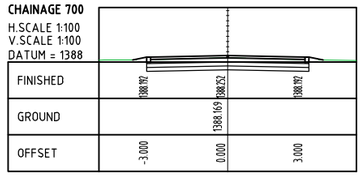
	-3.000	0.000	3.000
FINISHED	1388.568	1388.628	1388.568
GROUND		1388.473	
OFFSET			

CHAINAGE 630
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



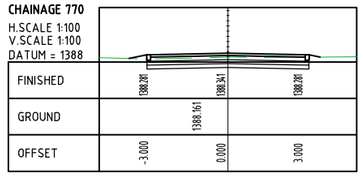
	-3.000	0.000	3.000
FINISHED	1388.126	1388.187	1388.126
GROUND		1387.985	
OFFSET			

CHAINAGE 700
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



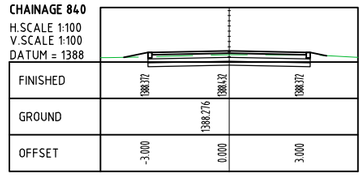
	-3.000	0.000	3.000
FINISHED	1388.197	1388.252	1388.197
GROUND		1388.159	
OFFSET			

CHAINAGE 770
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



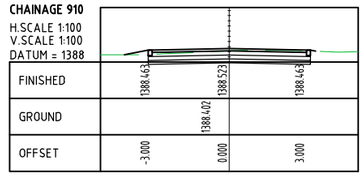
	-3.000	0.000	3.000
FINISHED	1388.291	1388.341	1388.291
GROUND		1388.161	
OFFSET			

CHAINAGE 840
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



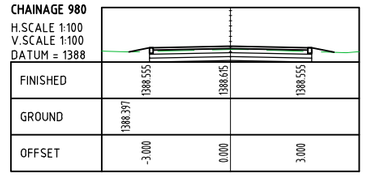
	-3.000	0.000	3.000
FINISHED	1388.372	1388.432	1388.372
GROUND		1388.276	
OFFSET			

CHAINAGE 910
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



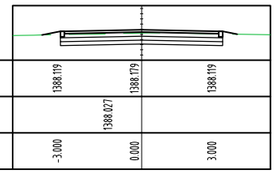
	-3.000	0.000	3.000
FINISHED	1388.463	1388.523	1388.463
GROUND		1388.402	
OFFSET			

CHAINAGE 980
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



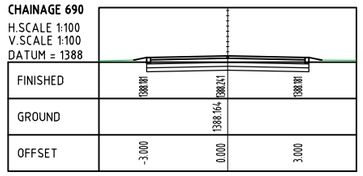
	-3.000	0.000	3.000
FINISHED	1388.555	1388.615	1388.555
GROUND	1388.397		
OFFSET			

CHAINAGE 620
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



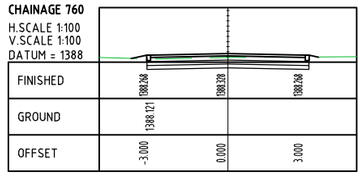
	-3.000	0.000	3.000
FINISHED	1388.119	1388.179	1388.119
GROUND		1388.027	
OFFSET			

CHAINAGE 690
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



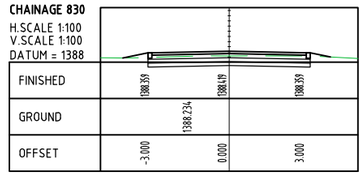
	-3.000	0.000	3.000
FINISHED	1388.181	1388.241	1388.181
GROUND		1388.164	
OFFSET			

CHAINAGE 760
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



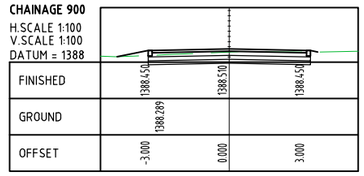
	-3.000	0.000	3.000
FINISHED	1388.268	1388.328	1388.268
GROUND		1388.121	
OFFSET			

CHAINAGE 830
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



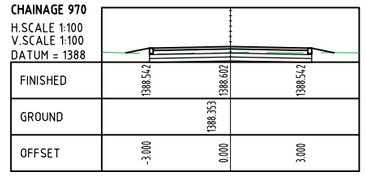
	-3.000	0.000	3.000
FINISHED	1388.359	1388.419	1388.359
GROUND		1388.234	
OFFSET			

CHAINAGE 900
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



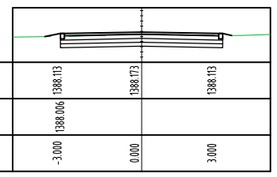
	-3.000	0.000	3.000
FINISHED	1388.450	1388.510	1388.450
GROUND		1388.289	
OFFSET			

CHAINAGE 970
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



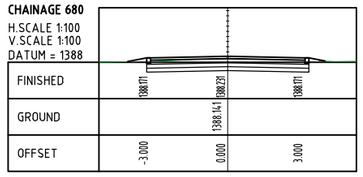
	-3.000	0.000	3.000
FINISHED	1388.542	1388.602	1388.542
GROUND		1388.353	
OFFSET			

CHAINAGE 610
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



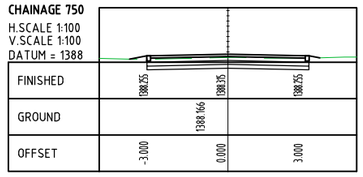
	-3.000	0.000	3.000
FINISHED	1388.113	1388.173	1388.113
GROUND	1388.006		
OFFSET			

CHAINAGE 680
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



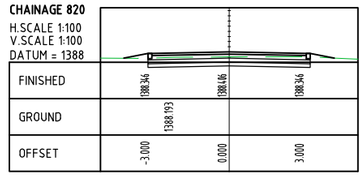
	-3.000	0.000	3.000
FINISHED	1388.171	1388.231	1388.171
GROUND		1388.141	
OFFSET			

CHAINAGE 750
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



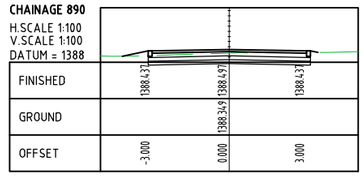
	-3.000	0.000	3.000
FINISHED	1388.255	1388.315	1388.255
GROUND		1388.166	
OFFSET			

CHAINAGE 820
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



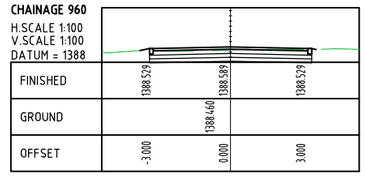
	-3.000	0.000	3.000
FINISHED	1388.346	1388.406	1388.346
GROUND		1388.193	
OFFSET			

CHAINAGE 890
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



	-3.000	0.000	3.000
FINISHED	1388.437	1388.497	1388.437
GROUND		1388.349	
OFFSET			

CHAINAGE 960
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



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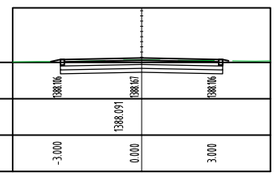
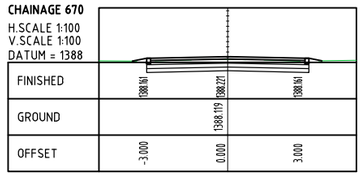
FINISHED	1388.529	1388.589	1388.529
GROUND		1388.460	
OFFSET			

CHAINAGE 600
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



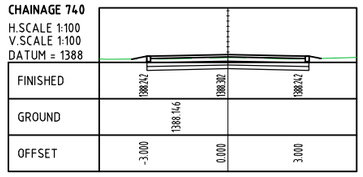
	-3.000	0.000	3.000
FINISHED	1388.186	1388.167	1388.186
GROUND		1388.091	
OFFSET			

CHAINAGE 670
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



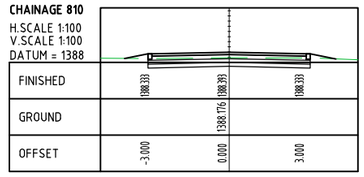
	-3.000	0.000	3.000
FINISHED	1388.161	1388.221	1388.161
GROUND		1388.119	
OFFSET			

CHAINAGE 740
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



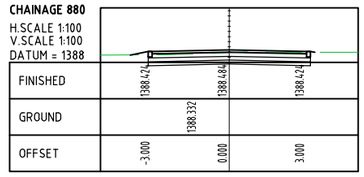
	-3.000	0.000	3.000
FINISHED	1388.252	1388.312	1388.252
GROUND		1388.146	
OFFSET			

CHAINAGE 810
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



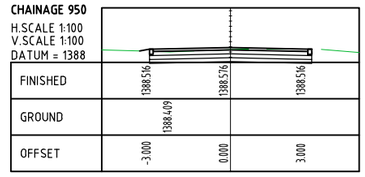
	-3.000	0.000	3.000
FINISHED	1388.333	1388.393	1388.333
GROUND		1388.176	
OFFSET			

CHAINAGE 880
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



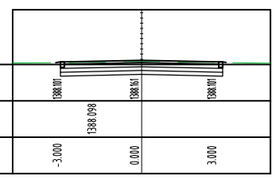
	-3.000	0.000	3.000
FINISHED	1388.424	1388.484	1388.424
GROUND		1388.332	
OFFSET			

CHAINAGE 950
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



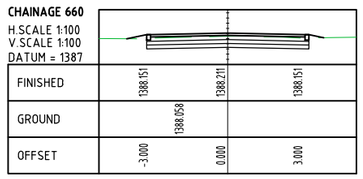
	-3.000	0.000	3.000
FINISHED	1388.516	1388.576	1388.516
GROUND		1388.409	
OFFSET			

CHAINAGE 590
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



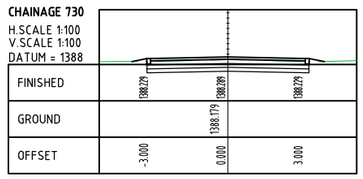
	-3.000	0.000	3.000
FINISHED	1388.181	1388.241	1388.181
GROUND		1388.098	
OFFSET			

CHAINAGE 660
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



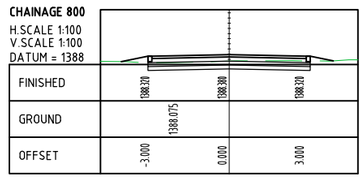
	-3.000	0.000	3.000
FINISHED	1388.151	1388.211	1388.151
GROUND		1388.058	
OFFSET			

CHAINAGE 730
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



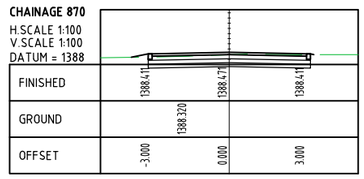
	-3.000	0.000	3.000
FINISHED	1388.229	1388.289	1388.229
GROUND		1388.179	
OFFSET			

CHAINAGE 800
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



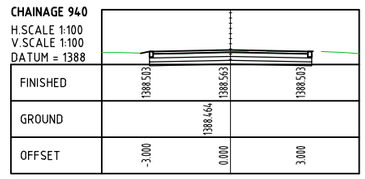
	-3.000	0.000	3.000
FINISHED	1388.320	1388.380	1388.320
GROUND		1388.075	
OFFSET			

CHAINAGE 870
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



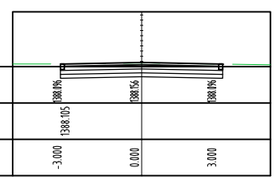
	-3.000	0.000	3.000
FINISHED	1388.411	1388.471	1388.411
GROUND		1388.320	
OFFSET			

CHAINAGE 940
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



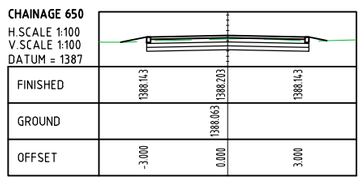
	-3.000	0.000	3.000
FINISHED	1388.503	1388.563	1388.503
GROUND		1388.464	
OFFSET			

CHAINAGE 580
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



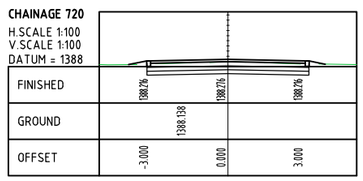
	-3.000	0.000	3.000
FINISHED	1388.196	1388.156	1388.196
GROUND	1388.105		
OFFSET			

CHAINAGE 650
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1387



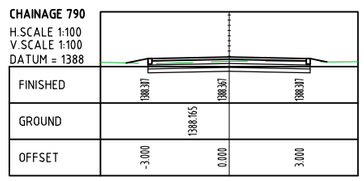
	-3.000	0.000	3.000
FINISHED	1388.143	1388.203	1388.143
GROUND		1388.063	
OFFSET			

CHAINAGE 720
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



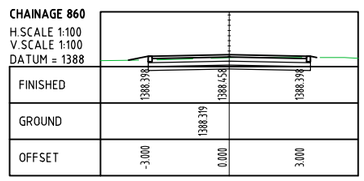
	-3.000	0.000	3.000
FINISHED	1388.276	1388.276	1388.276
GROUND		1388.138	
OFFSET			

CHAINAGE 790
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



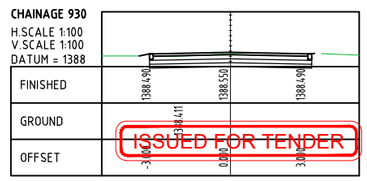
	-3.000	0.000	3.000
FINISHED	1388.367	1388.367	1388.367
GROUND		1388.165	
OFFSET			

CHAINAGE 860
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



	-3.000	0.000	3.000
FINISHED	1388.398	1388.458	1388.398
GROUND		1388.319	
OFFSET			

CHAINAGE 930
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



	-3.000	0.000	3.000
FINISHED	1388.490	1388.550	1388.490
GROUND		1388.411	
OFFSET			

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAINA LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 2
CROSS-SECTIONS

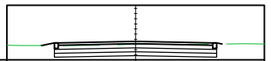
CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

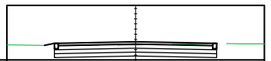
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-004	7 OF 11	1

CHAINAGE 1060
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



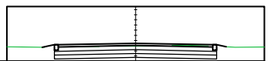
FINISHED	1388.659	1388.719	1388.659
GROUND		1388.574	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1050
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



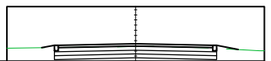
FINISHED	1388.646	1388.706	1388.646
GROUND	1388.561		
OFFSET	-3.000	0.000	3.000

CHAINAGE 1040
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



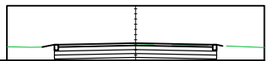
FINISHED	1388.633	1388.693	1388.633
GROUND		1388.563	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1030
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



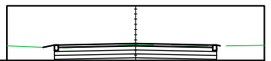
FINISHED	1388.620	1388.680	1388.620
GROUND		1388.565	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1020
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



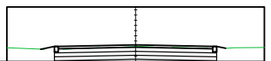
FINISHED	1388.607	1388.667	1388.607
GROUND		1388.576	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1010
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



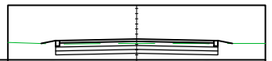
FINISHED	1388.594	1388.654	1388.594
GROUND	1388.494		
OFFSET	-3.000	0.000	3.000

CHAINAGE 1000
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



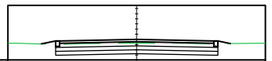
FINISHED	1388.581	1388.641	1388.581
GROUND		1388.548	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1130
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



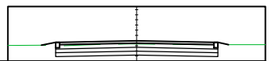
FINISHED	1388.750	1388.810	1388.750
GROUND		1388.642	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1120
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



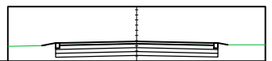
FINISHED	1388.737	1388.797	1388.737
GROUND		1388.653	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1110
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



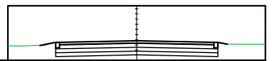
FINISHED	1388.724	1388.784	1388.724
GROUND		1388.665	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1100
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



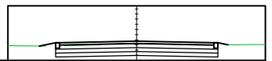
FINISHED	1388.711	1388.771	1388.711
GROUND		1388.675	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1090
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



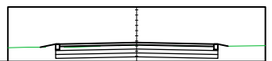
FINISHED	1388.698	1388.758	1388.698
GROUND		1388.685	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1080
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



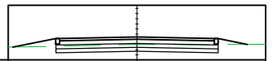
FINISHED	1388.685	1388.745	1388.685
GROUND		1388.654	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1070
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



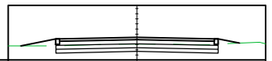
FINISHED	1388.672	1388.732	1388.672
GROUND		1388.557	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1200
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



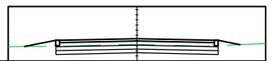
FINISHED	1388.832	1388.892	1388.832
GROUND		1388.604	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1190
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



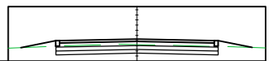
FINISHED	1388.822	1388.882	1388.822
GROUND		1388.623	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1180
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



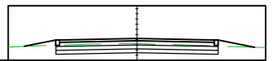
FINISHED	1388.811	1388.871	1388.811
GROUND		1388.642	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1170
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



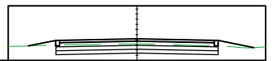
FINISHED	1388.800	1388.860	1388.800
GROUND		1388.662	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1160
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



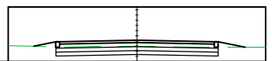
FINISHED	1388.788	1388.848	1388.788
GROUND		1388.653	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1150
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



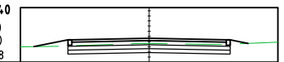
FINISHED	1388.776	1388.836	1388.776
GROUND		1388.603	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1140
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



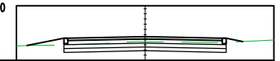
FINISHED	1388.763	1388.823	1388.763
GROUND		1388.584	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1240
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



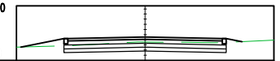
FINISHED	1388.868	1388.928	1388.868
GROUND		1388.728	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1230
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



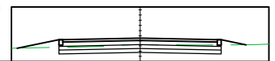
FINISHED	1388.859	1388.919	1388.859
GROUND		1388.722	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1220
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



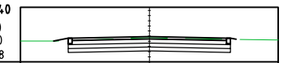
FINISHED	1388.851	1388.911	1388.851
GROUND		1388.776	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1210
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



FINISHED	1388.842	1388.902	1388.842
GROUND		1388.656	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1340
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388

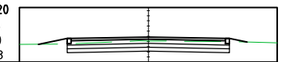


FINISHED	1388.922	1388.982	1388.922
GROUND		1388.939	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1330
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388

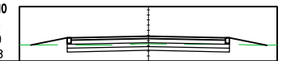
FINISHED	1388.919	1388.979	1388.919
GROUND		1388.888	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1320
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



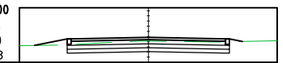
FINISHED	1388.915	1388.975	1388.915
GROUND		1388.820	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1310
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



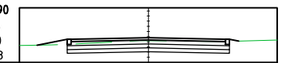
FINISHED	1388.911	1388.971	1388.911
GROUND		1388.681	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1300
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



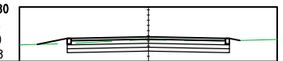
FINISHED	1388.906	1388.966	1388.906
GROUND		1388.832	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1290
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



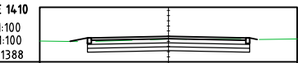
FINISHED	1388.901	1388.961	1388.901
GROUND		1388.848	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1280
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



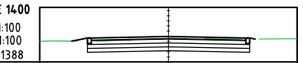
FINISHED	1388.896	1388.955	1388.896
GROUND		1388.838	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1410
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



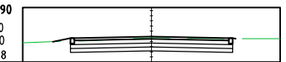
FINISHED	1388.931	1388.991	1388.931
GROUND		1388.880	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1400
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



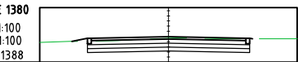
FINISHED	1388.931	1388.991	1388.931
GROUND		1388.851	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1390
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



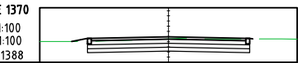
FINISHED	1388.931	1388.991	1388.931
GROUND		1388.822	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1380
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



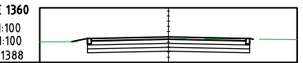
FINISHED	1388.930	1388.990	1388.930
GROUND		1388.841	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1370
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



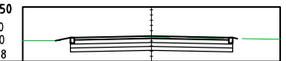
FINISHED	1388.929	1388.989	1388.929
GROUND		1388.878	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1360
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



FINISHED	1388.927	1388.987	1388.927
GROUND		1388.875	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1350
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



FINISHED	1388.925	1388.985	1388.925
GROUND		1388.874	
OFFSET	-3.000	0.000	3.000

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 2
CROSS-SECTIONS

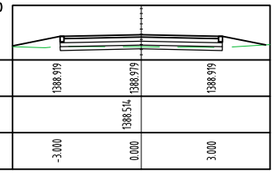
CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

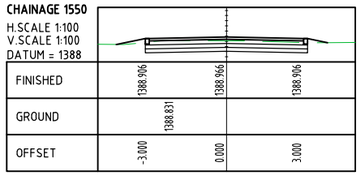
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-004	8 OF 11	0

CHAINAGE 1480
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



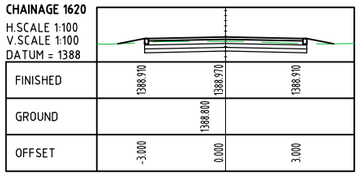
	-3.000	0.000	3.000
FINISHED	1388.919	1388.979	1388.919
GROUND		1388.514	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1550
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



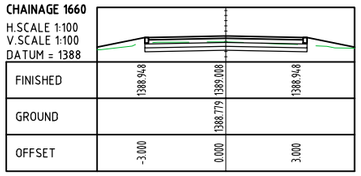
	-3.000	0.000	3.000
FINISHED	1388.906	1388.966	1388.906
GROUND		1388.831	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1620
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



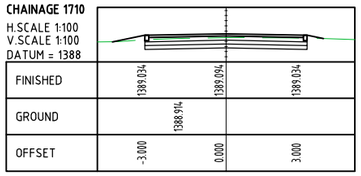
	-3.000	0.000	3.000
FINISHED	1388.910	1388.970	1388.910
GROUND		1388.800	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1660
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



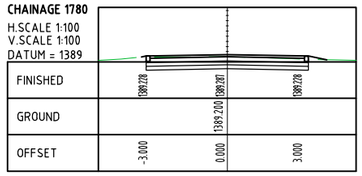
	-3.000	0.000	3.000
FINISHED	1388.948	1389.008	1388.948
GROUND		1388.779	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1710
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



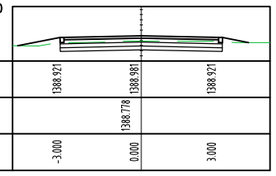
	-3.000	0.000	3.000
FINISHED	1389.034	1389.094	1389.034
GROUND		1388.914	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1780
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



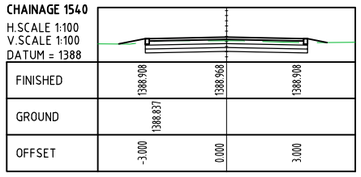
	-3.000	0.000	3.000
FINISHED	1390.228	1390.287	1390.228
GROUND		1389.200	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1470
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



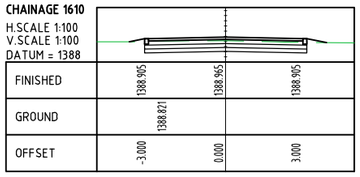
	-3.000	0.000	3.000
FINISHED	1388.921	1388.981	1388.921
GROUND		1388.778	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1540
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



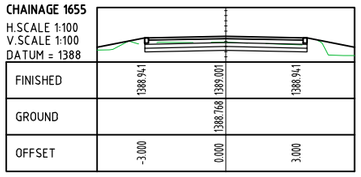
	-3.000	0.000	3.000
FINISHED	1388.908	1388.968	1388.908
GROUND		1388.837	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1610
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



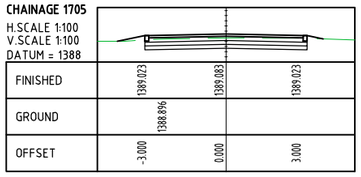
	-3.000	0.000	3.000
FINISHED	1388.905	1388.965	1388.905
GROUND		1388.821	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1655
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



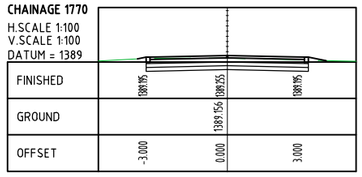
	-3.000	0.000	3.000
FINISHED	1388.941	1389.001	1388.941
GROUND		1388.768	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1705
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



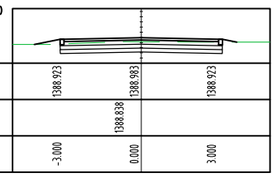
	-3.000	0.000	3.000
FINISHED	1389.023	1389.083	1389.023
GROUND		1388.896	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1770
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



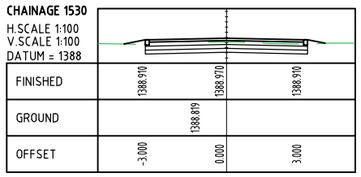
	-3.000	0.000	3.000
FINISHED	1389.195	1389.255	1389.195
GROUND		1389.156	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1460
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



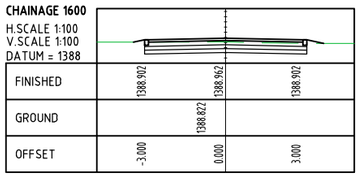
	-3.000	0.000	3.000
FINISHED	1388.923	1388.983	1388.923
GROUND		1388.838	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1530
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



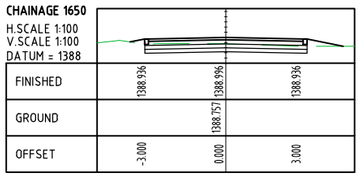
	-3.000	0.000	3.000
FINISHED	1388.910	1388.970	1388.910
GROUND		1388.819	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1600
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



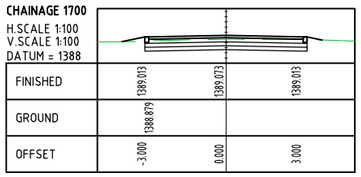
	-3.000	0.000	3.000
FINISHED	1388.902	1388.962	1388.902
GROUND		1388.822	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1650
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



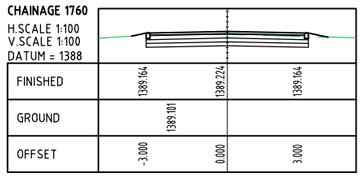
	-3.000	0.000	3.000
FINISHED	1388.936	1388.996	1388.936
GROUND		1388.757	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1700
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



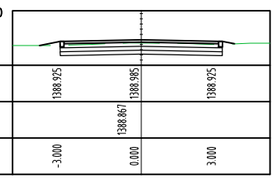
	-3.000	0.000	3.000
FINISHED	1389.013	1389.073	1389.013
GROUND		1388.879	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1760
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



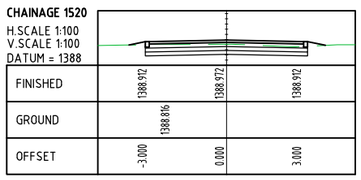
	-3.000	0.000	3.000
FINISHED	1389.164	1389.224	1389.164
GROUND		1389.101	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1450
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



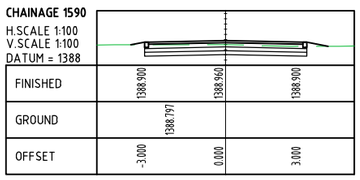
	-3.000	0.000	3.000
FINISHED	1388.925	1388.985	1388.925
GROUND		1388.867	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1520
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



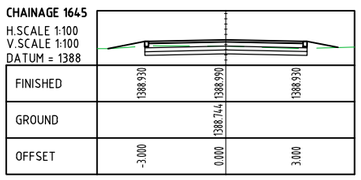
	-3.000	0.000	3.000
FINISHED	1388.912	1388.972	1388.912
GROUND		1388.816	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1590
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



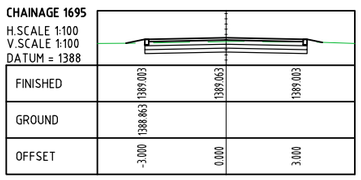
	-3.000	0.000	3.000
FINISHED	1388.900	1388.960	1388.900
GROUND		1388.797	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1645
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



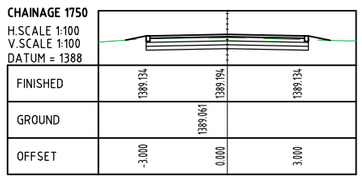
	-3.000	0.000	3.000
FINISHED	1388.930	1388.990	1388.930
GROUND		1388.744	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1695
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



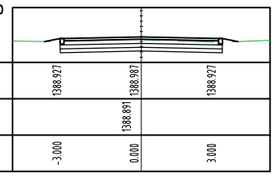
	-3.000	0.000	3.000
FINISHED	1389.003	1389.063	1389.003
GROUND		1388.863	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1750
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



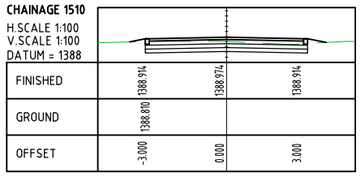
	-3.000	0.000	3.000
FINISHED	1389.134	1389.194	1389.134
GROUND		1389.061	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1440
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



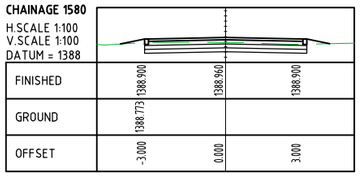
	-3.000	0.000	3.000
FINISHED	1388.927	1388.987	1388.927
GROUND		1388.891	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1510
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



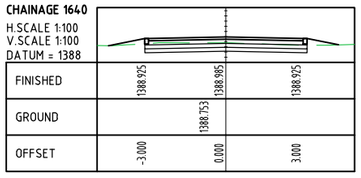
	-3.000	0.000	3.000
FINISHED	1388.914	1388.974	1388.914
GROUND		1388.870	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1580
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



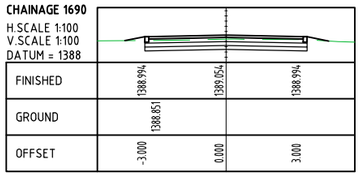
	-3.000	0.000	3.000
FINISHED	1388.900	1388.960	1388.900
GROUND		1388.773	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1640
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



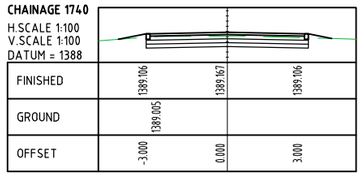
	-3.000	0.000	3.000
FINISHED	1388.925	1388.985	1388.925
GROUND		1388.753	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1690
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



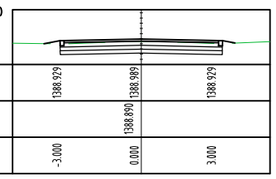
	-3.000	0.000	3.000
FINISHED	1388.994	1389.054	1388.994
GROUND		1388.851	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1740
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



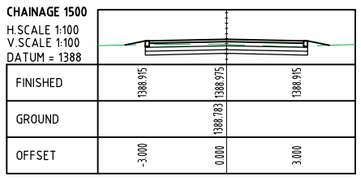
	-3.000	0.000	3.000
FINISHED	1389.106	1389.167	1389.106
GROUND		1389.005	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1430
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



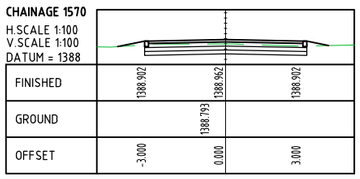
	-3.000	0.000	3.000
FINISHED	1388.929	1388.989	1388.929
GROUND		1388.890	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1500
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



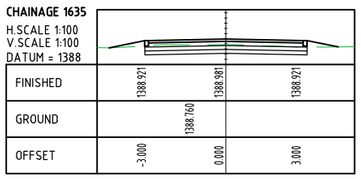
	-3.000	0.000	3.000
FINISHED	1388.915	1388.975	1388.915
GROUND		1388.783	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1570
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



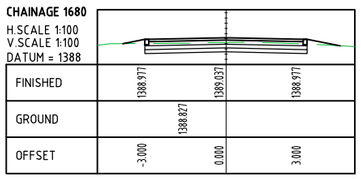
	-3.000	0.000	3.000
FINISHED	1388.902	1388.962	1388.902
GROUND		1388.793	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1635
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



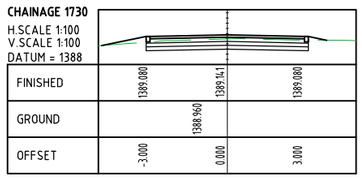
	-3.000	0.000	3.000
FINISHED	1388.921	1388.981	1388.921
GROUND		1388.760	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1680
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



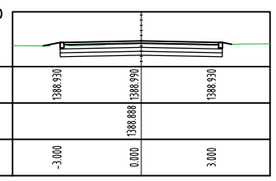
	-3.000	0.000	3.000
FINISHED	1388.977	1389.037	1388.977
GROUND		1388.827	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1730
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



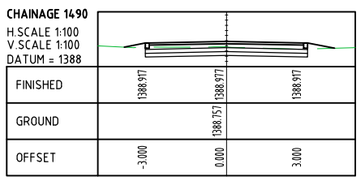
	-3.000	0.000	3.000
FINISHED	1389.080	1389.141	1389.080
GROUND		1388.960	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1420
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



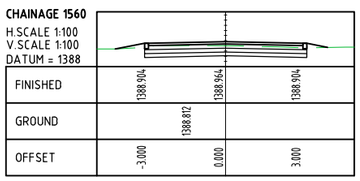
	-3.000	0.000	3.000
FINISHED	1388.930	1388.990	1388.930
GROUND		1388.888	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1490
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



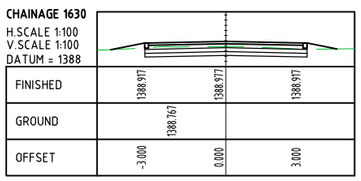
	-3.000	0.000	3.000
FINISHED	1388.917	1388.977	1388.917
GROUND		1388.757	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1560
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



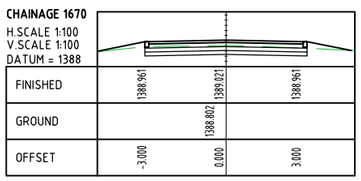
	-3.000	0.000	3.000
FINISHED	1388.904	1388.964	1388.904
GROUND		1388.812	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1630
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



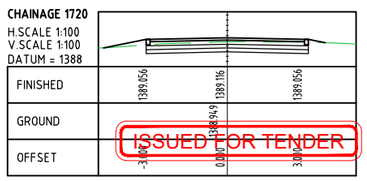
	-3.000	0.000	3.000
FINISHED	1388.917	1388.977	1388.917
GROUND		1388.767	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1670
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



	-3.000	0.000	3.000
FINISHED	1388.961	1389.021	1388.961
GROUND		1388.802	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1720
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1388



	-3.000	0.000	3.000
FINISHED	1389.056	1389.116	1389.056
GROUND		1388.949	
OFFSET	-3.000	0.000	3.000

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 2
CROSS-SECTIONS

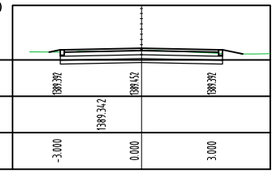
CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

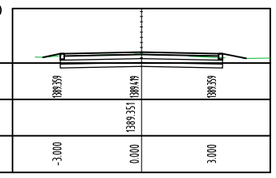
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-004	9 OF 11	1

CHAINAGE 1830
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



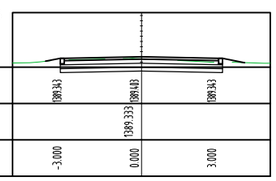
FINISHED	1390.392	1390.452	1390.392
GROUND		1389.342	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1820
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



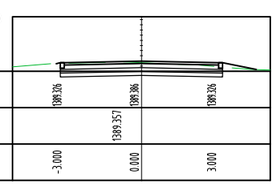
FINISHED	1390.359	1390.419	1390.359
GROUND		1389.351	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1815
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



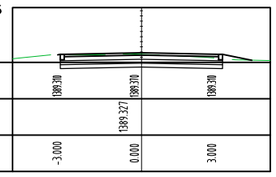
FINISHED	1390.343	1390.403	1390.343
GROUND		1389.333	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1810
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



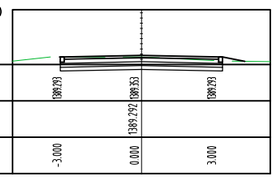
FINISHED	1390.326	1390.386	1390.326
GROUND		1389.357	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1805
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



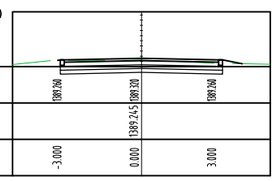
FINISHED	1390.318	1390.378	1390.318
GROUND		1389.327	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1800
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



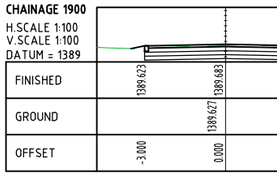
FINISHED	1390.293	1390.353	1390.293
GROUND		1389.292	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1790
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



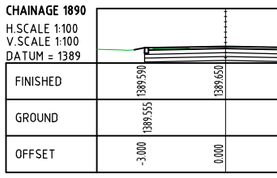
FINISHED	1390.268	1390.328	1390.268
GROUND		1389.245	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1900
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



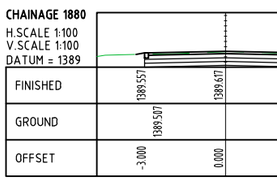
FINISHED	1389.623	1389.683	1389.623
GROUND		1389.627	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1890
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



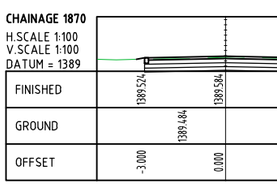
FINISHED	1389.590	1389.650	1389.590
GROUND		1389.555	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1880
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



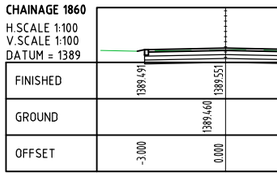
FINISHED	1389.557	1389.617	1389.557
GROUND		1389.507	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1870
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



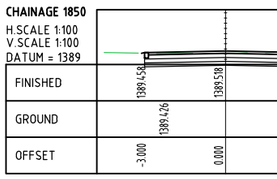
FINISHED	1389.524	1389.584	1389.524
GROUND		1389.484	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1860
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



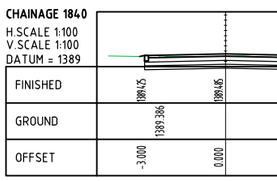
FINISHED	1389.491	1389.551	1389.491
GROUND		1389.440	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1850
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



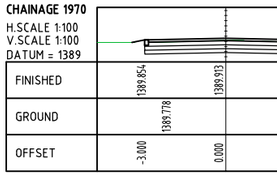
FINISHED	1389.458	1389.518	1389.458
GROUND		1389.426	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1840
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



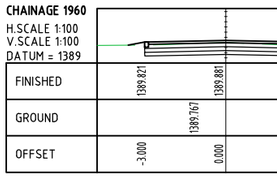
FINISHED	1389.425	1389.485	1389.425
GROUND		1389.386	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1970
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



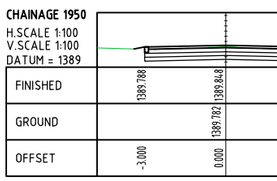
FINISHED	1389.854	1389.913	1389.854
GROUND		1389.778	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1960
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



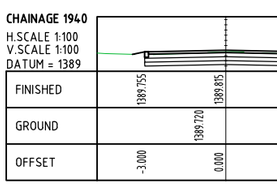
FINISHED	1389.821	1389.881	1389.821
GROUND		1389.767	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1950
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



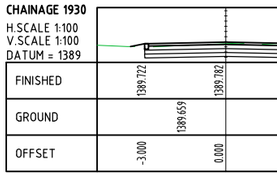
FINISHED	1389.788	1389.848	1389.788
GROUND		1389.732	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1940
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



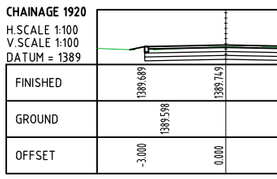
FINISHED	1389.755	1389.815	1389.755
GROUND		1389.720	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1930
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



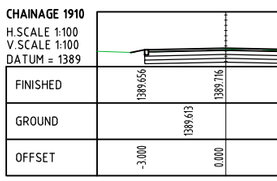
FINISHED	1389.722	1389.782	1389.722
GROUND		1389.659	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1920
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



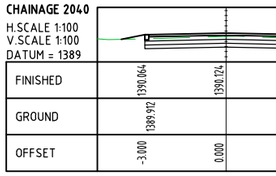
FINISHED	1389.689	1389.749	1389.689
GROUND		1389.598	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1910
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



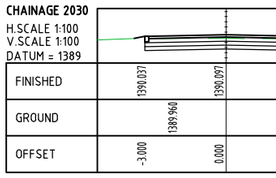
FINISHED	1389.656	1389.716	1389.656
GROUND		1389.613	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2040
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



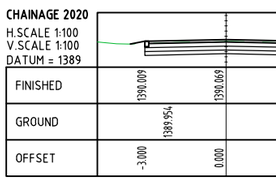
FINISHED	1390.064	1390.124	1390.064
GROUND		1389.972	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2030
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



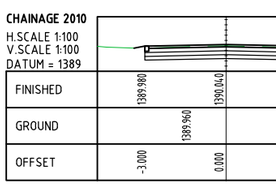
FINISHED	1390.037	1390.097	1390.037
GROUND		1389.960	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2020
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



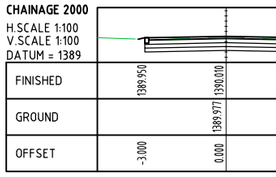
FINISHED	1390.009	1390.069	1390.009
GROUND		1389.954	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2010
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



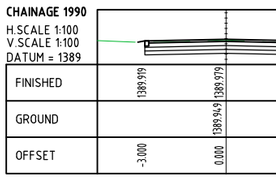
FINISHED	1389.980	1390.040	1389.980
GROUND		1389.960	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2000
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



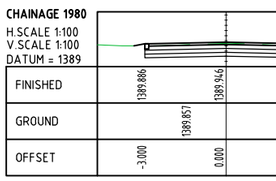
FINISHED	1389.950	1390.010	1389.950
GROUND		1389.977	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1990
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



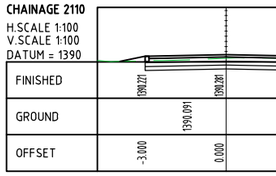
FINISHED	1389.979	1389.979	1389.979
GROUND		1389.949	
OFFSET	-3.000	0.000	3.000

CHAINAGE 1980
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



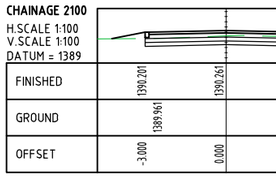
FINISHED	1389.886	1389.946	1389.886
GROUND		1389.857	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2110
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



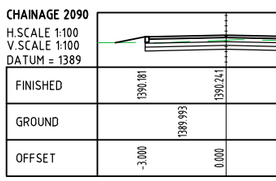
FINISHED	1390.221	1390.281	1390.221
GROUND		1390.091	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2100
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



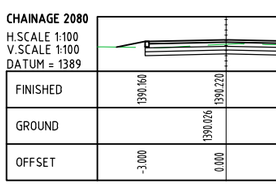
FINISHED	1390.201	1390.261	1390.201
GROUND		1389.961	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2090
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



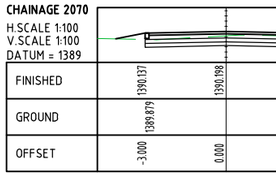
FINISHED	1390.181	1390.241	1390.181
GROUND		1389.993	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2080
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



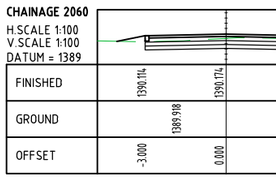
FINISHED	1390.160	1390.220	1390.160
GROUND		1390.026	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2070
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



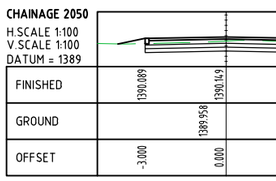
FINISHED	1390.137	1390.198	1390.137
GROUND		1389.879	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2060
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



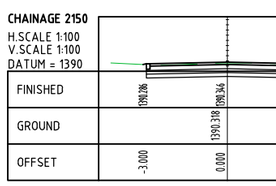
FINISHED	1390.114	1390.174	1390.114
GROUND		1389.908	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2050
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



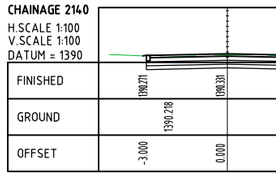
FINISHED	1390.089	1390.149	1390.089
GROUND		1389.958	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2150
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



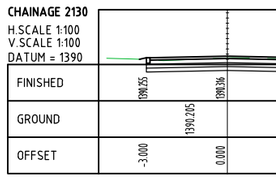
FINISHED	1390.286	1390.346	1390.286
GROUND		1390.318	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2140
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



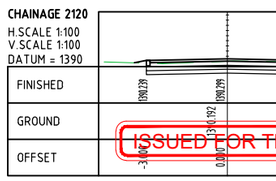
FINISHED	1390.271	1390.331	1390.271
GROUND		1390.278	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2130
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



FINISHED	1390.255	1390.316	1390.255
GROUND		1390.265	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2120
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



FINISHED	1390.228	1390.299	1390.228
GROUND		1390.252	
OFFSET	-3.000	0.000	3.000

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 2
CROSS-SECTIONS

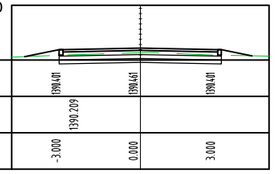
CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

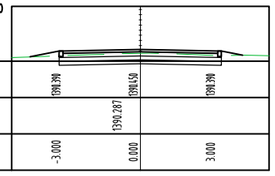
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-004	10 OF 11	1

CHAINAGE 2250
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



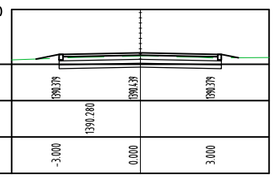
FINISHED	1398.401	1398.451	1398.401
GROUND		1390.209	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2240
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



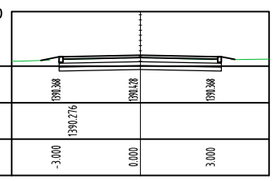
FINISHED	1398.398	1398.458	1398.398
GROUND		1390.287	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2230
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



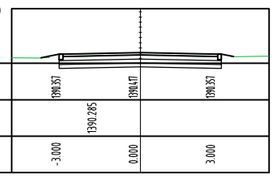
FINISHED	1398.379	1398.439	1398.379
GROUND		1390.280	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2220
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



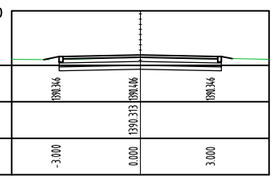
FINISHED	1398.388	1398.428	1398.388
GROUND		1390.276	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2210
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



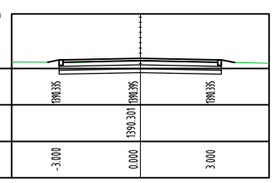
FINISHED	1398.357	1398.417	1398.357
GROUND		1390.285	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2200
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



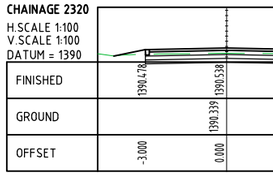
FINISHED	1398.344	1398.404	1398.344
GROUND		1390.313	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2190
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



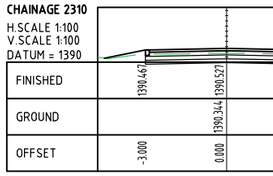
FINISHED	1398.335	1398.395	1398.335
GROUND		1390.301	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2320
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



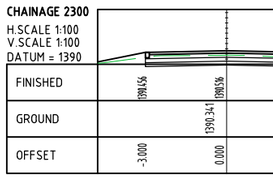
FINISHED	1390.478	1390.538	1390.478
GROUND		1390.339	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2310
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



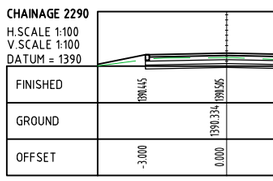
FINISHED	1390.467	1390.527	1390.467
GROUND		1390.344	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2300
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



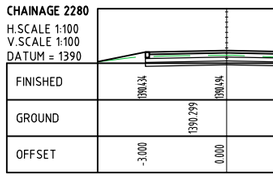
FINISHED	1398.456	1398.516	1398.456
GROUND		1390.341	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2290
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



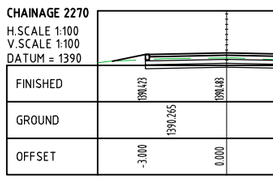
FINISHED	1398.445	1398.505	1398.445
GROUND		1390.334	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2280
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



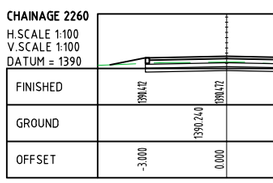
FINISHED	1398.434	1398.494	1398.434
GROUND		1390.299	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2270
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



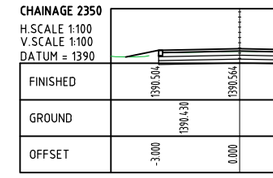
FINISHED	1398.413	1398.473	1398.413
GROUND		1390.265	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2260
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



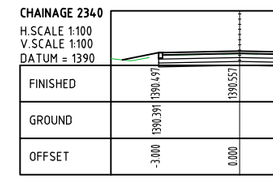
FINISHED	1398.412	1398.472	1398.412
GROUND		1390.240	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2350
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



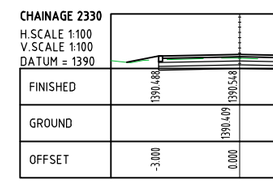
FINISHED	1390.504	1390.564	1390.504
GROUND		1390.438	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2340
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



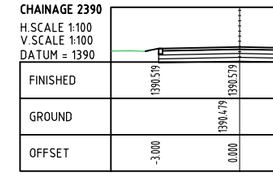
FINISHED	1390.497	1390.557	1390.497
GROUND		1390.391	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2330
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



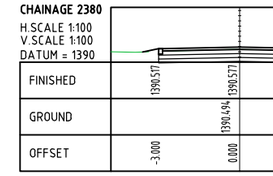
FINISHED	1390.488	1390.548	1390.488
GROUND		1390.409	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2390
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



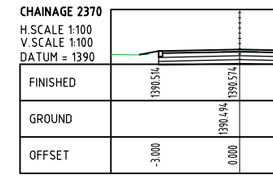
FINISHED	1390.519	1390.579	1390.519
GROUND		1390.479	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2380
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



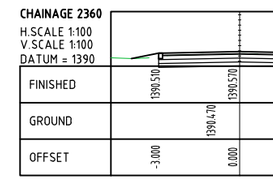
FINISHED	1390.517	1390.577	1390.517
GROUND		1390.494	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2370
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



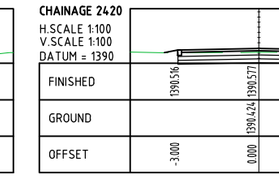
FINISHED	1390.514	1390.574	1390.514
GROUND		1390.494	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2360
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



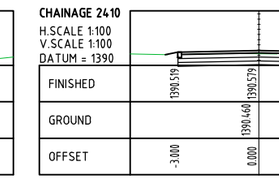
FINISHED	1390.510	1390.570	1390.510
GROUND		1390.470	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2420
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



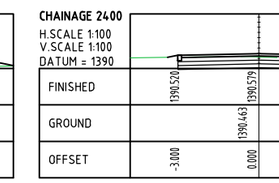
FINISHED	1390.536	1390.577	1390.536
GROUND		1390.424	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2410
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



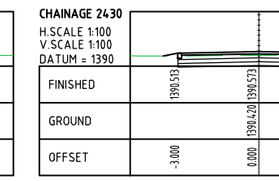
FINISHED	1390.579	1390.579	1390.579
GROUND		1390.460	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2400
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



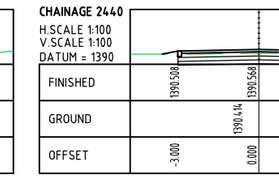
FINISHED	1390.520	1390.579	1390.520
GROUND		1390.463	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2430
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



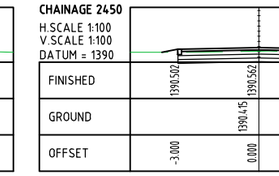
FINISHED	1390.533	1390.573	1390.533
GROUND		1390.420	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2440
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



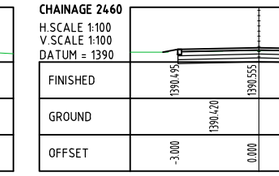
FINISHED	1390.508	1390.568	1390.508
GROUND		1390.414	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2450
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



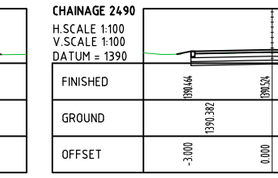
FINISHED	1390.502	1390.562	1390.502
GROUND		1390.415	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2460
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



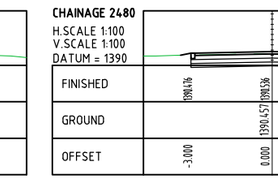
FINISHED	1390.495	1390.555	1390.495
GROUND		1390.420	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2490
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



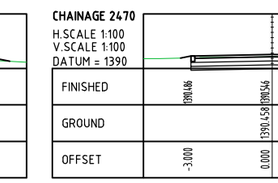
FINISHED	1398.446	1398.506	1398.446
GROUND		1390.382	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2480
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



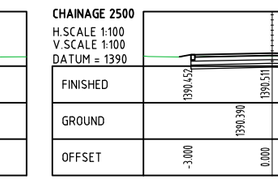
FINISHED	1398.476	1398.536	1398.476
GROUND		1390.457	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2470
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



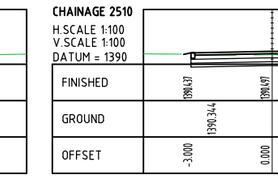
FINISHED	1398.486	1398.546	1398.486
GROUND		1390.458	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2500
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



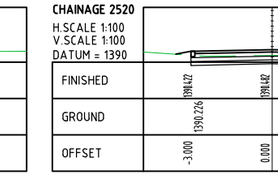
FINISHED	1390.452	1390.511	1390.452
GROUND		1390.390	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2510
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



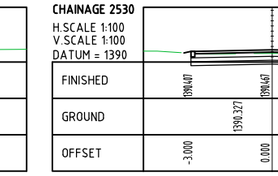
FINISHED	1398.437	1398.497	1398.437
GROUND		1390.344	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2520
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



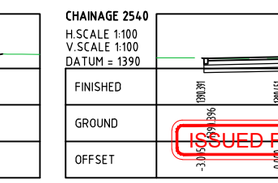
FINISHED	1398.422	1398.482	1398.422
GROUND		1390.226	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2530
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



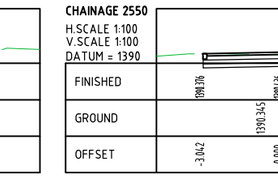
FINISHED	1398.407	1398.467	1398.407
GROUND		1390.327	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2540
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



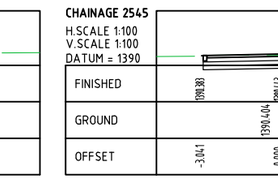
FINISHED	1398.391	1398.451	1398.391
GROUND		1390.396	
OFFSET	-3.005	0.000	3.005

CHAINAGE 2550
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



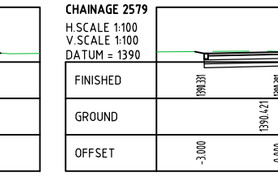
FINISHED	1398.376	1398.436	1398.376
GROUND		1390.345	
OFFSET	-3.042	0.000	3.042

CHAINAGE 2545
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



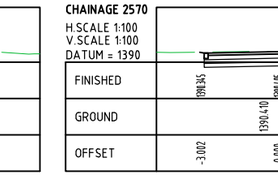
FINISHED	1398.383	1398.443	1398.383
GROUND		1390.404	
OFFSET	-3.041	0.000	3.041

CHAINAGE 2579
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



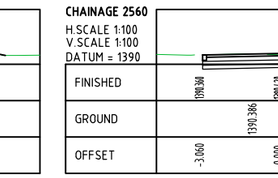
FINISHED	1398.331	1398.391	1398.331
GROUND		1390.421	
OFFSET	-3.000	0.000	3.000

CHAINAGE 2570
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



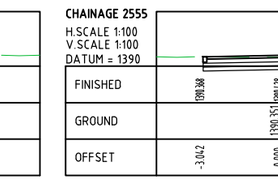
FINISHED	1398.345	1398.405	1398.345
GROUND		1390.410	
OFFSET	-3.002	0.000	3.002

CHAINAGE 2560
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



FINISHED	1398.364	1398.424	1398.364
GROUND		1390.386	
OFFSET	-3.060	0.000	3.060

CHAINAGE 2555
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



FINISHED	1398.368	1398.428	1398.368
GROUND		1390.351	
OFFSET	-3.042	0.000	3.042

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 2
CROSS-SECTIONS

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

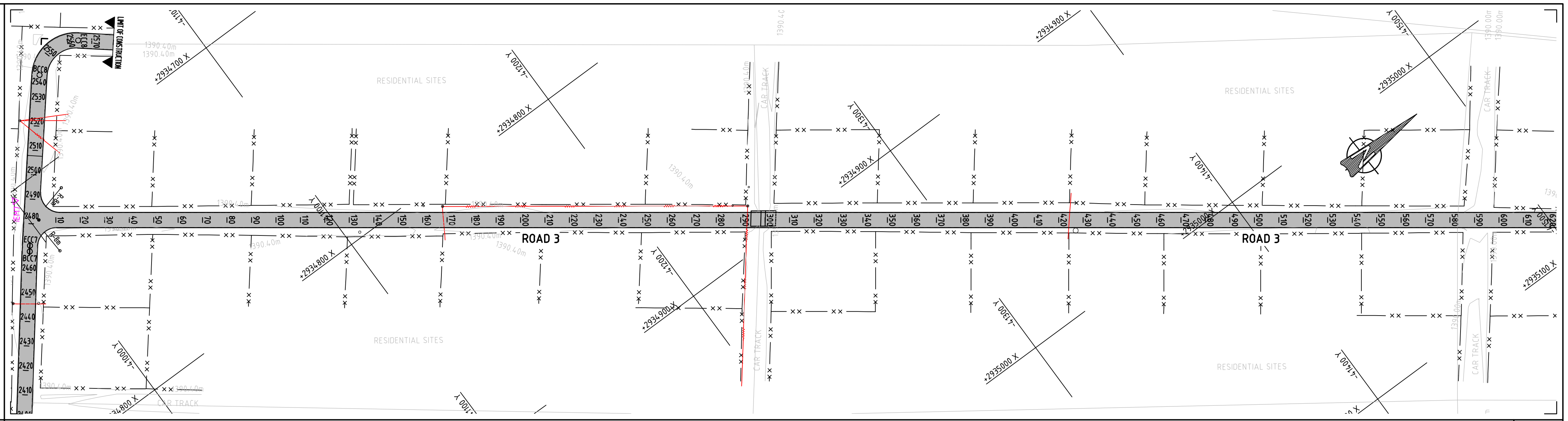
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-004	11 OF 11	0

LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m

SCALE 1:1000

LEGEND	
IEM1 △	Survey benchmark
	Sewerline
	Sewer manhole
	Stormwater channel
	Overhead powerline
	Electric pole
	Electric pole stay
— ×× —	Fence boundary
▬ ▬ ▬	Ward boundary



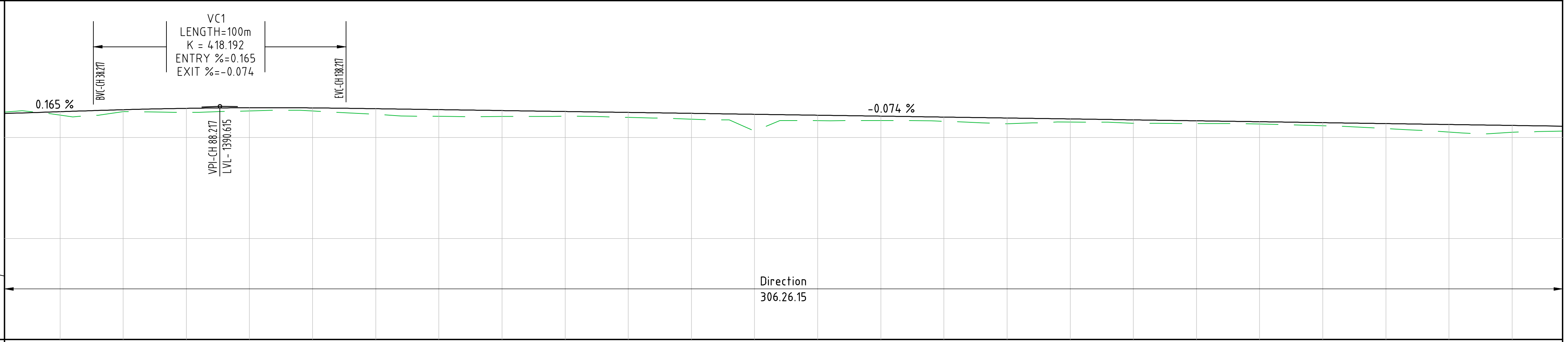
KERBS	LEFT	FIG. 16 EDGE BEAM
	RIGHT	
BARRIER LINES	LEFT	RM1
	RIGHT	
SIDE DRAIN TYPE	LEFT	
	RIGHT	

DESIGN SPEED
40 km/h

ROAD 3
LONG SECTION: CH0-620

SCALE
HOR 1:1000
VERT 1:50

LEGEND :
GROUND PROFILE
DESIGN PROFILE



3m ℄ 3m
-2% -2%

SECTION THROUGH PAVEMENT

Datum 1386.000

VERTICAL ALIGNMENT

CHAINAGES (m)	C/L/ PEG LEVELS (m)	DESIGN ROAD LEVELS: LEFT EDGE (m)	DESIGN ROAD LEVELS: CENTRE LINE (m)	DESIGN ROAD LEVELS: RIGHT EDGE (m)
3.005	1390.504		1390.474	1390.470
10	1390.529	1390.415	1390.486	1390.423
20	1390.481	1390.442	1390.502	1390.442
30	1390.409	1390.459	1390.519	1390.459
40	1390.441	1390.475	1390.535	1390.475
50	1390.512	1390.490	1390.550	1390.490
60	1390.505	1390.503	1390.563	1390.503
70	1390.496	1390.513	1390.573	1390.513
80	1390.499	1390.521	1390.581	1390.521
90	1390.514	1390.526	1390.586	1390.526
100	1390.526	1390.529	1390.589	1390.529
110	1390.539	1390.529	1390.589	1390.529
120	1390.540	1390.528	1390.588	1390.528
130	1390.512	1390.523	1390.583	1390.523
140	1390.484	1390.517	1390.577	1390.517
150	1390.457	1390.510	1390.569	1390.510
160	1390.426	1390.502	1390.562	1390.502
170	1390.421	1390.495	1390.555	1390.495
180	1390.416	1390.487	1390.547	1390.487
190	1390.412	1390.480	1390.540	1390.480
200	1390.417	1390.473	1390.533	1390.473
210	1390.418	1390.465	1390.525	1390.465
220	1390.418	1390.458	1390.518	1390.458
230	1390.419	1390.451	1390.511	1390.451
240	1390.410	1390.443	1390.503	1390.443
250	1390.397	1390.436	1390.496	1390.436
260	1390.384	1390.428	1390.489	1390.428
270	1390.371	1390.421	1390.481	1390.421
280	1390.353	1390.414	1390.474	1390.414
290	1390.349	1390.406	1390.466	1390.406
300	1390.127	1390.399	1390.459	1390.399
310	1390.334	1390.392	1390.452	1390.392
320	1390.333	1390.384	1390.444	1390.384
330	1390.332	1390.377	1390.437	1390.377
340	1390.332	1390.370	1390.430	1390.370
350	1390.334	1390.362	1390.422	1390.362
360	1390.336	1390.355	1390.415	1390.355
370	1390.329	1390.347	1390.407	1390.347
380	1390.313	1390.340	1390.400	1390.340
390	1390.291	1390.333	1390.393	1390.333
400	1390.270	1390.325	1390.385	1390.325
410	1390.288	1390.318	1390.378	1390.318
420	1390.305	1390.311	1390.371	1390.311
430	1390.304	1390.303	1390.363	1390.303
440	1390.302	1390.296	1390.356	1390.296
450	1390.280	1390.289	1390.349	1390.289
460	1390.278	1390.281	1390.341	1390.281
470	1390.277	1390.274	1390.334	1390.274
480	1390.277	1390.266	1390.326	1390.266
490	1390.276	1390.259	1390.319	1390.259
500	1390.266	1390.252	1390.312	1390.252
510	1390.253	1390.244	1390.304	1390.244
520	1390.239	1390.237	1390.297	1390.237
530	1390.226	1390.230	1390.290	1390.230
540	1390.204	1390.222	1390.282	1390.222
550	1390.177	1390.215	1390.275	1390.215
560	1390.150	1390.208	1390.267	1390.208
570	1390.124	1390.200	1390.260	1390.200
580	1390.088	1390.193	1390.253	1390.193
590	1390.071	1390.185	1390.245	1390.185
600	1390.104	1390.178	1390.238	1390.178
610	1390.116	1390.171	1390.231	1390.171
620	1390.126	1390.163	1390.223	1390.163

GRADES — CHAINAGE / ELEVATION, SLOPE (%): 0.165 % → 88.217 | 1390.615 → -0.074 % → 620.000 | 1390.167

VERTICAL CURVES — CHAINAGE, CURVE LENGTH, K-FACTOR: B.V.C. 38.217 — 100.000m VC, K = 418.192 — 138.217 E.V.C.

SUPERELEVATION (%) — RIGHT EDGE / LEFT EDGE: -2%

HORIZONTAL CURVES: Direction 306.26.15

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 3
LONGITUDINAL SECTION

CONTRACT No. : SCM005/2022/23
PROJECT No. : LP00008
SCALE : AS SHOWN
DATE : 17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

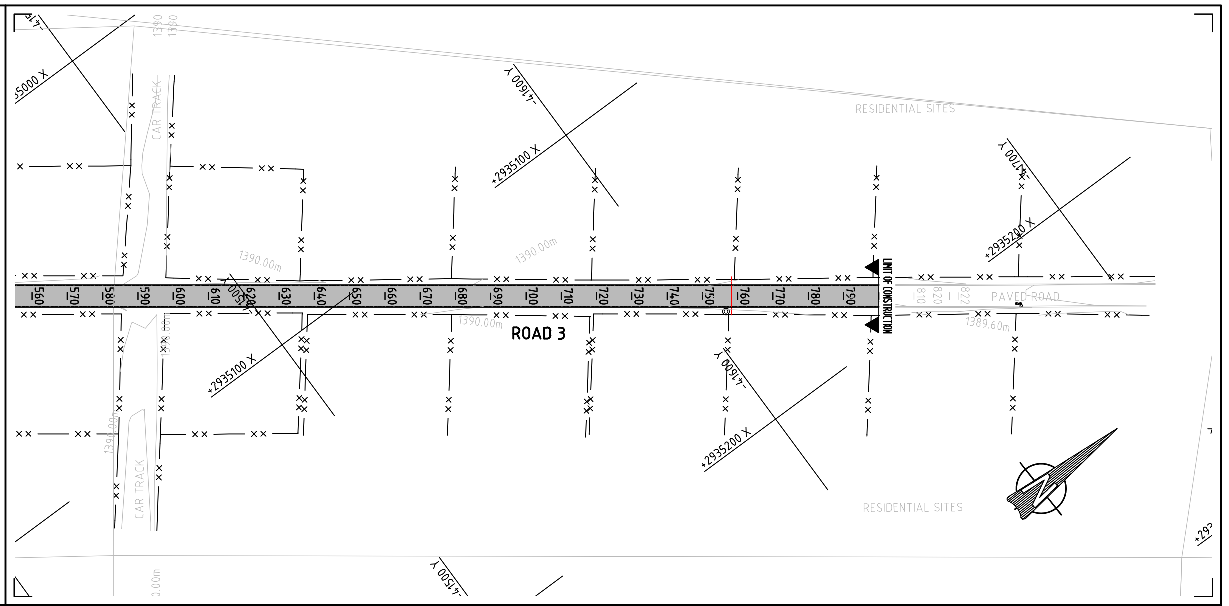
PROJECT ENGINEER:
INITIALS AND SURNAME — SIGNATURE & PR NUMBER — DATE
INSPECTOR OF WORKS:
SIGNATURE — DATE
REMARKS:
ORIGINAL PAPER SIZE: A1
DRAWING NO. LP/TLM/2022/23-005
SHEET NO: 1 OF 4
REVISION 0

LAYOUT PLAN

10m 0 10m 20m 30m 40m 50m

SCALE 1:1000

LEGEND	
IEM1 △	Survey benchmark
	Sewerline
	Sewer manhole
	Stormwater channel
	Overhead powerline
	Electric pole
	Electric pole stay
— ×× —	Fence boundary
▬ ▬ ▬	Ward boundary



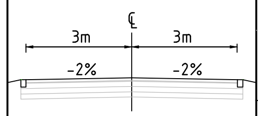
KERBS	LEFT	FIG. 16 EDGE BEAM
	RIGHT	
BARRIER LINES	LEFT	RM1
	RIGHT	
SIDE DRAIN TYPE	LEFT	
	RIGHT	

DESIGN SPEED
40 km/h

ROAD 3
LONG SECTION: CH620-822

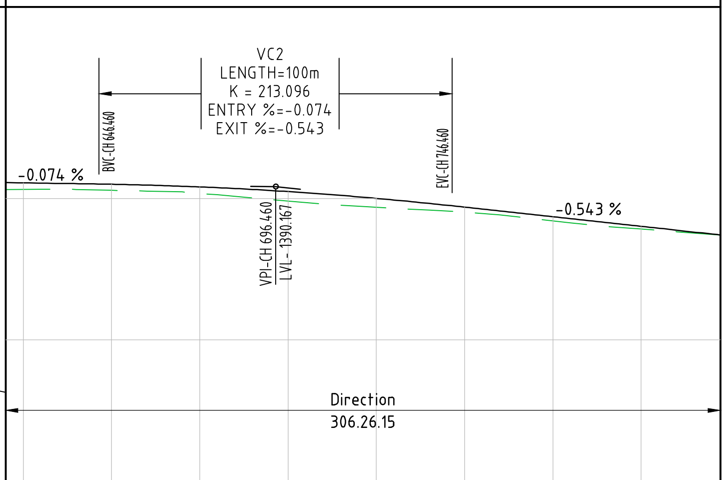
SCALE
HOR 1:1000
VERT 1:50

LEGEND :
GROUND PROFILE
DESIGN PROFILE



SECTION THROUGH PAVEMENT

Datum 1386.000



CHAINAGES (m)	C/L/ PEG LEVELS (m)	LEFT EDGE (m)	CENTRE LINE (m)	RIGHT EDGE (m)
620	1390.126	1390.163	1390.223	1390.163
630	1390.131	1390.156	1390.216	1390.156
640	1390.127	1390.149	1390.209	1390.149
650	1390.115	1390.141	1390.201	1390.141
660	1390.103	1390.130	1390.190	1390.130
670	1390.092	1390.114	1390.173	1390.114
680	1390.051	1390.093	1390.153	1390.093
690	1390.007	1390.067	1390.127	1390.067
700	1389.963	1390.037	1390.097	1390.037
710	1389.918	1390.002	1390.062	1390.002
720	1389.888	1389.963	1390.023	1389.963
730	1389.861	1389.919	1389.979	1389.919
740	1389.833	1389.870	1389.930	1389.870
750	1389.807	1389.816	1389.876	1389.816
760	1389.765	1389.762	1389.822	1389.762
770	1389.709	1389.708	1389.768	1389.708
780	1389.654	1389.653	1389.713	1389.653
790	1389.602	1389.599	1389.659	1389.599
800	1389.565	1389.545	1389.605	1389.545
810	1389.529	1389.491	1389.551	1389.491
820	1389.492	1389.436	1389.496	1389.436
822.444	1389.483	1389.423	1389.483	1389.423

VERTICAL ALIGNMENT — DESIGN ROAD LEVELS

GRADES — CHAINAGE / ELEVATION, SLOPE (%): -0.074 % | 696.460 | 1390.167 | -0.543 %

VERTICAL CURVES — CHAINAGE, CURVE LENGTH, K-FACTOR: B.V.C. 646.460 | 100.000m VC, K = 213.096 | 746.460 E.V.C.

SUPERELEVATION (%) — RIGHT EDGE, LEFT EDGE: -2%

HORIZONTAL CURVES: Direction 306.26.15

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED	M.M.
DRAWING CHECKED BY	M.H.
DRAWN	T.R.
APPROVED	L.M.
DRAWING APPROVED BY TLM	SIGNATURE: ... DATE: ...

LOCATION OF PROJECT: FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT

REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

ROAD 3
LONGITUDINAL SECTION

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER: INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE

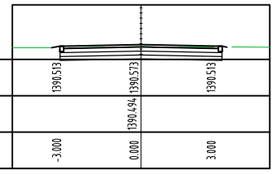
INSPECTOR OF WORKS: SIGNATURE | DATE

REMARKS:

ORIGINAL PAPER SIZE: A1

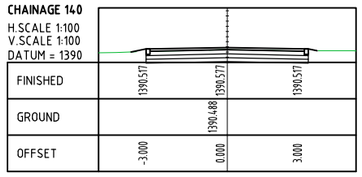
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-005	2 OF 4	0

CHAINAGE 70
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



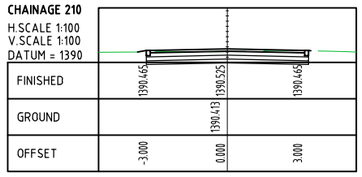
FINISHED	1390.513	1390.573	1390.513
GROUND		1390.494	
OFFSET	-3.000	0.000	3.000

CHAINAGE 140
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



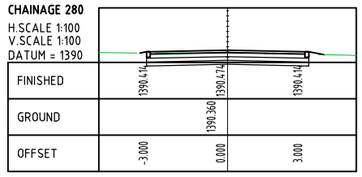
FINISHED	1390.517	1390.577	1390.517
GROUND		1390.488	
OFFSET	-3.000	0.000	3.000

CHAINAGE 210
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



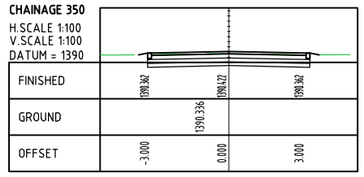
FINISHED	1390.465	1390.525	1390.465
GROUND		1390.413	
OFFSET	-3.000	0.000	3.000

CHAINAGE 280
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



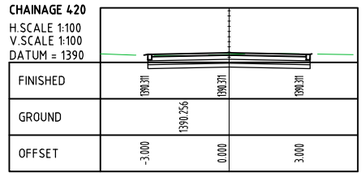
FINISHED	1390.414	1390.474	1390.414
GROUND		1390.360	
OFFSET	-3.000	0.000	3.000

CHAINAGE 350
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



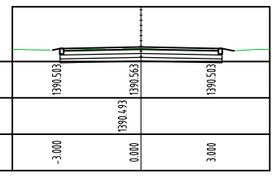
FINISHED	1390.362	1390.422	1390.362
GROUND		1390.336	
OFFSET	-3.000	0.000	3.000

CHAINAGE 420
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



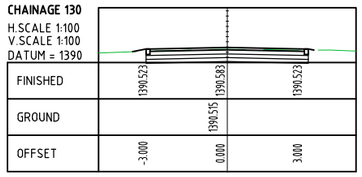
FINISHED	1390.311	1390.371	1390.311
GROUND		1390.256	
OFFSET	-3.000	0.000	3.000

CHAINAGE 60
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



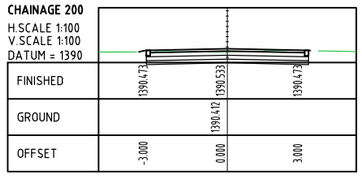
FINISHED	1390.563	1390.623	1390.563
GROUND		1390.493	
OFFSET	-3.000	0.000	3.000

CHAINAGE 130
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



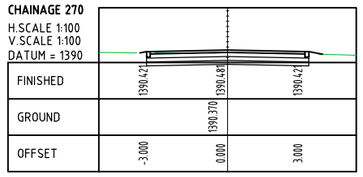
FINISHED	1390.523	1390.583	1390.523
GROUND		1390.535	
OFFSET	-3.000	0.000	3.000

CHAINAGE 200
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



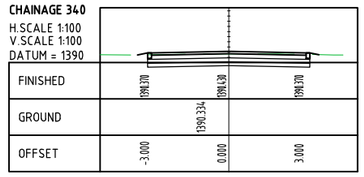
FINISHED	1390.473	1390.533	1390.473
GROUND		1390.412	
OFFSET	-3.000	0.000	3.000

CHAINAGE 270
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



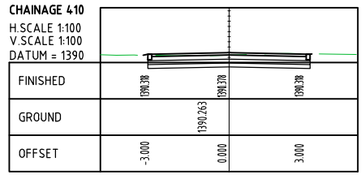
FINISHED	1390.421	1390.481	1390.421
GROUND		1390.370	
OFFSET	-3.000	0.000	3.000

CHAINAGE 340
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



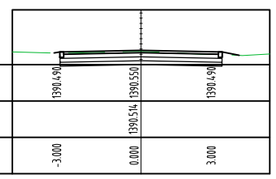
FINISHED	1390.370	1390.430	1390.370
GROUND		1390.334	
OFFSET	-3.000	0.000	3.000

CHAINAGE 410
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



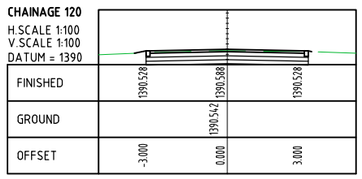
FINISHED	1390.319	1390.378	1390.319
GROUND		1390.263	
OFFSET	-3.000	0.000	3.000

CHAINAGE 50
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



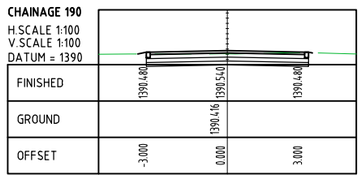
FINISHED	1390.490	1390.550	1390.490
GROUND		1390.514	
OFFSET	-3.000	0.000	3.000

CHAINAGE 120
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



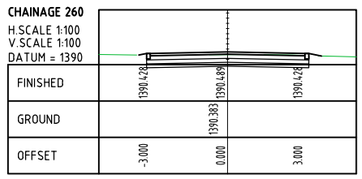
FINISHED	1390.528	1390.588	1390.528
GROUND		1390.542	
OFFSET	-3.000	0.000	3.000

CHAINAGE 190
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



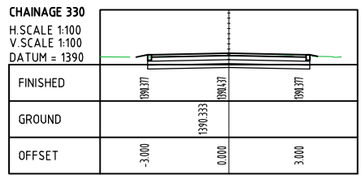
FINISHED	1390.480	1390.540	1390.480
GROUND		1390.416	
OFFSET	-3.000	0.000	3.000

CHAINAGE 260
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



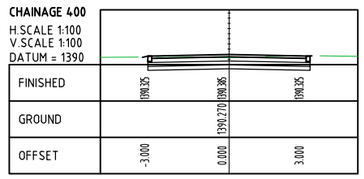
FINISHED	1390.428	1390.489	1390.428
GROUND		1390.383	
OFFSET	-3.000	0.000	3.000

CHAINAGE 330
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



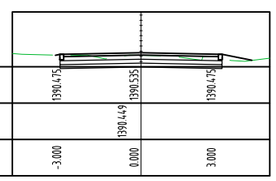
FINISHED	1390.377	1390.437	1390.377
GROUND		1390.333	
OFFSET	-3.000	0.000	3.000

CHAINAGE 400
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



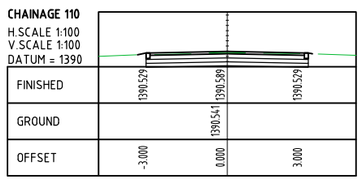
FINISHED	1390.325	1390.385	1390.325
GROUND		1390.270	
OFFSET	-3.000	0.000	3.000

CHAINAGE 40
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



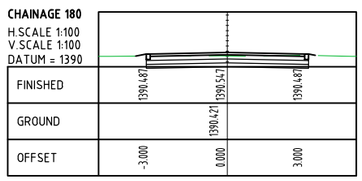
FINISHED	1390.475	1390.535	1390.475
GROUND		1390.449	
OFFSET	-3.000	0.000	3.000

CHAINAGE 110
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



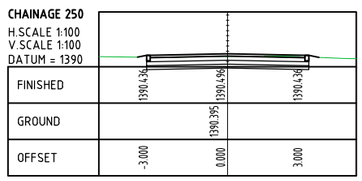
FINISHED	1390.529	1390.589	1390.529
GROUND		1390.541	
OFFSET	-3.000	0.000	3.000

CHAINAGE 180
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



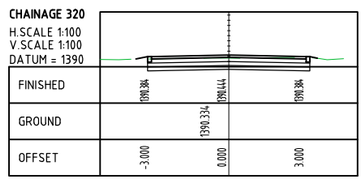
FINISHED	1390.487	1390.547	1390.487
GROUND		1390.421	
OFFSET	-3.000	0.000	3.000

CHAINAGE 250
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



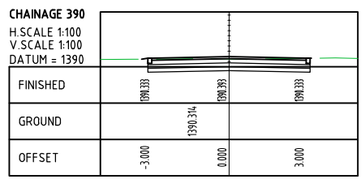
FINISHED	1390.436	1390.496	1390.436
GROUND		1390.395	
OFFSET	-3.000	0.000	3.000

CHAINAGE 320
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



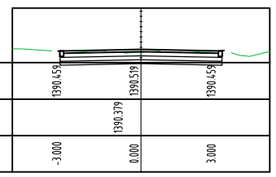
FINISHED	1390.384	1390.444	1390.384
GROUND		1390.334	
OFFSET	-3.000	0.000	3.000

CHAINAGE 390
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



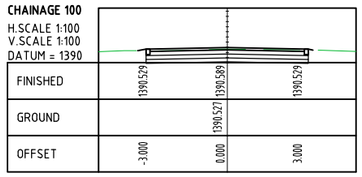
FINISHED	1390.333	1390.393	1390.333
GROUND		1390.314	
OFFSET	-3.000	0.000	3.000

CHAINAGE 30
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



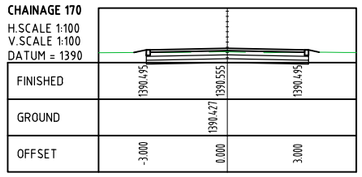
FINISHED	1390.559	1390.619	1390.559
GROUND		1390.379	
OFFSET	-3.000	0.000	3.000

CHAINAGE 100
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



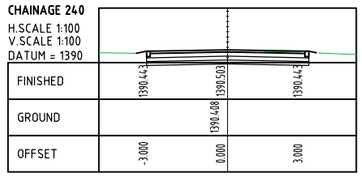
FINISHED	1390.529	1390.589	1390.529
GROUND		1390.527	
OFFSET	-3.000	0.000	3.000

CHAINAGE 170
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



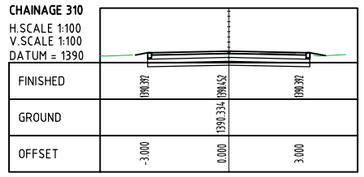
FINISHED	1390.495	1390.555	1390.495
GROUND		1390.427	
OFFSET	-3.000	0.000	3.000

CHAINAGE 240
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



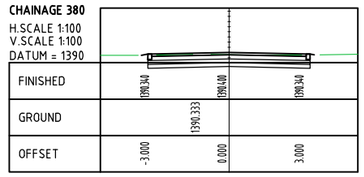
FINISHED	1390.443	1390.503	1390.443
GROUND		1390.408	
OFFSET	-3.000	0.000	3.000

CHAINAGE 310
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



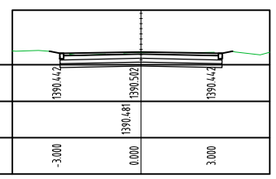
FINISHED	1390.392	1390.452	1390.392
GROUND		1390.334	
OFFSET	-3.000	0.000	3.000

CHAINAGE 380
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



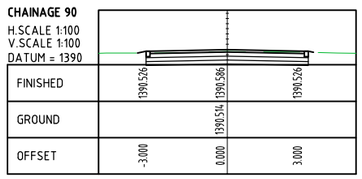
FINISHED	1390.340	1390.400	1390.340
GROUND		1390.333	
OFFSET	-3.000	0.000	3.000

CHAINAGE 20
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



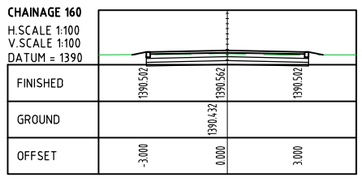
FINISHED	1390.443	1390.502	1390.443
GROUND		1390.481	
OFFSET	-3.000	0.000	3.000

CHAINAGE 90
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



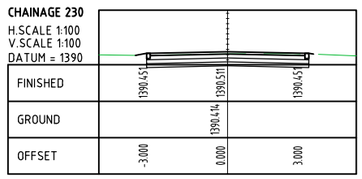
FINISHED	1390.526	1390.586	1390.526
GROUND		1390.514	
OFFSET	-3.000	0.000	3.000

CHAINAGE 160
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



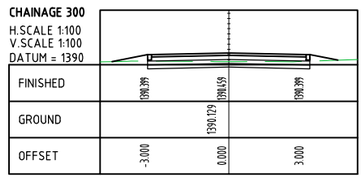
FINISHED	1390.502	1390.562	1390.502
GROUND		1390.432	
OFFSET	-3.000	0.000	3.000

CHAINAGE 230
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



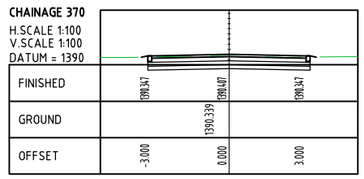
FINISHED	1390.451	1390.511	1390.451
GROUND		1390.414	
OFFSET	-3.000	0.000	3.000

CHAINAGE 300
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



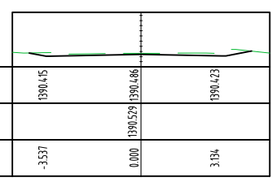
FINISHED	1390.399	1390.459	1390.399
GROUND		1390.379	
OFFSET	-3.000	0.000	3.000

CHAINAGE 370
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



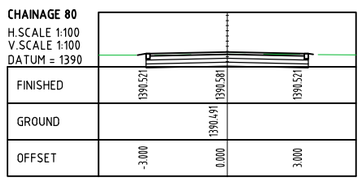
FINISHED	1390.347	1390.407	1390.347
GROUND		1390.339	
OFFSET	-3.000	0.000	3.000

CHAINAGE 10
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



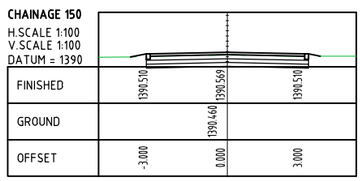
FINISHED	1390.415	1390.486	1390.423
GROUND		1390.529	
OFFSET	-3.537	0.000	3.134

CHAINAGE 80
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



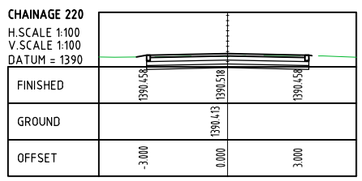
FINISHED	1390.521	1390.581	1390.521
GROUND		1390.491	
OFFSET	-3.000	0.000	3.000

CHAINAGE 150
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



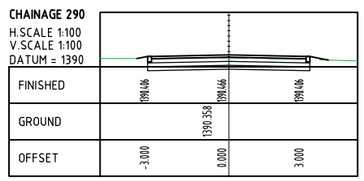
FINISHED	1390.510	1390.569	1390.510
GROUND		1390.460	
OFFSET	-3.000	0.000	3.000

CHAINAGE 220
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



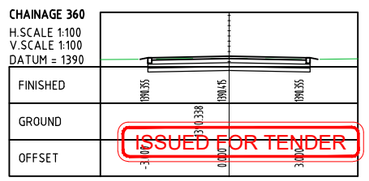
FINISHED	1390.458	1390.518	1390.458
GROUND		1390.413	
OFFSET	-3.000	0.000	3.000

CHAINAGE 290
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



FINISHED	1390.446	1390.466	1390.446
GROUND		1390.358	
OFFSET	-3.000	0.000	3.000

CHAINAGE 360
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



FINISHED	1390.355	1390.415	1390.355
GROUND		1390.338	
OFFSET	-3.000	0.000	3.000

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 3
CROSS-SECTIONS

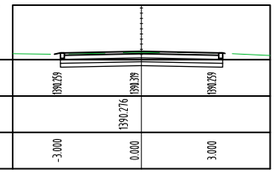
CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

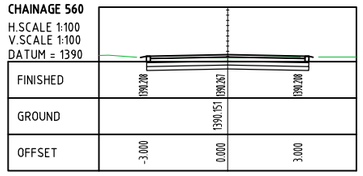
PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-005	3 OF 4	0

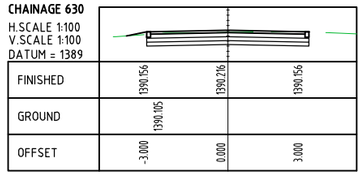
CHAINAGE 490
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



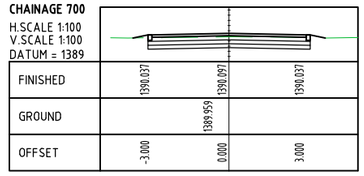
CHAINAGE 560
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



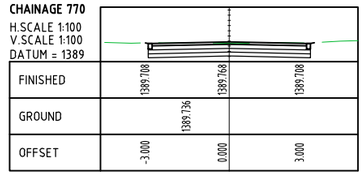
CHAINAGE 630
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



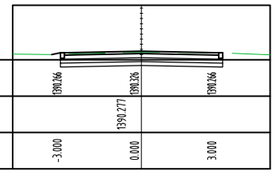
CHAINAGE 700
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



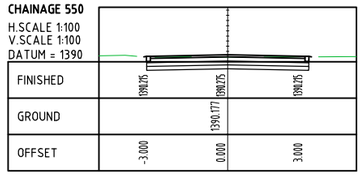
CHAINAGE 770
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



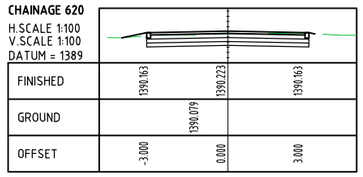
CHAINAGE 480
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



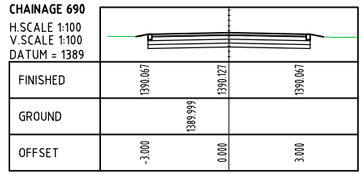
CHAINAGE 550
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



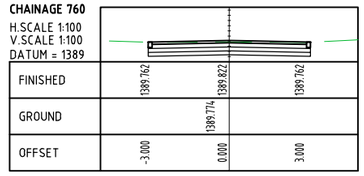
CHAINAGE 620
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



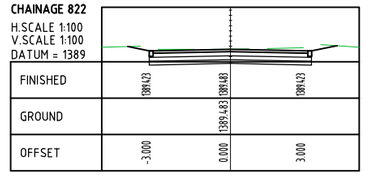
CHAINAGE 690
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



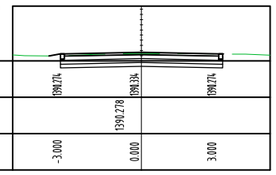
CHAINAGE 760
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



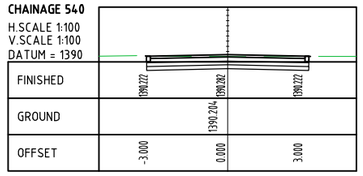
CHAINAGE 822
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



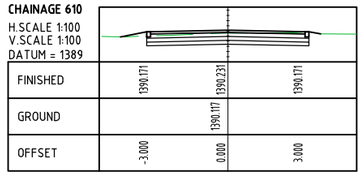
CHAINAGE 470
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



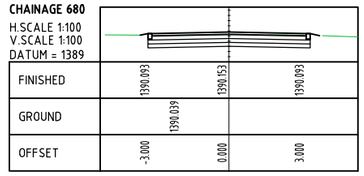
CHAINAGE 540
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1390



CHAINAGE 610
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



CHAINAGE 680
H.SCALE 1:100
V.SCALE 1:100
DATUM = 1389



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V.SCALE 1:100
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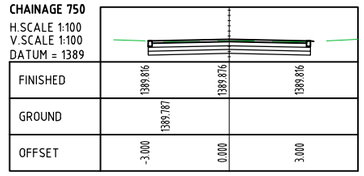

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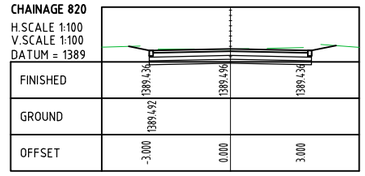

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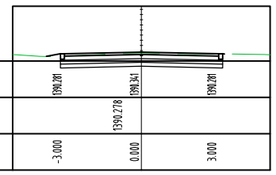

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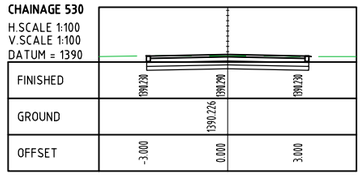

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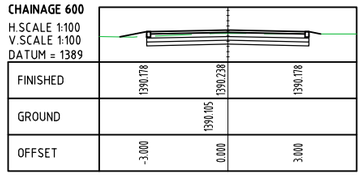

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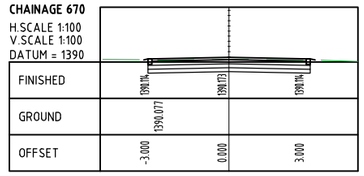

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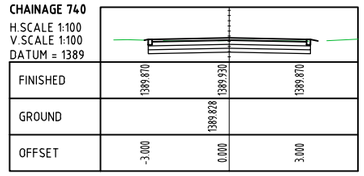

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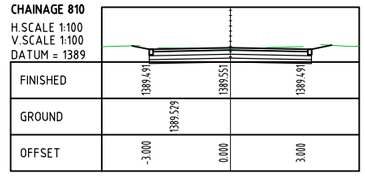

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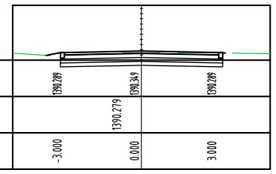

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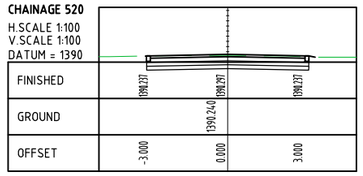

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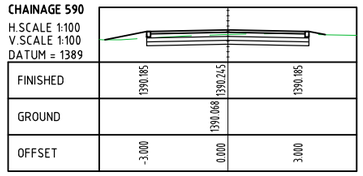

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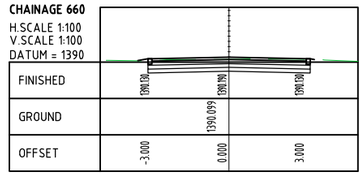

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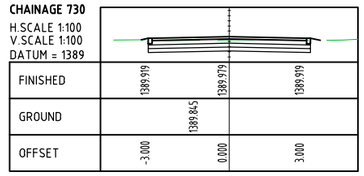

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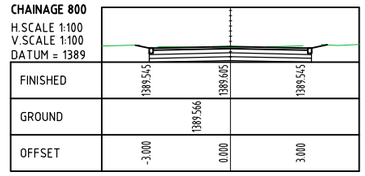

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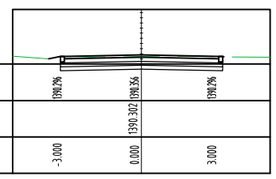

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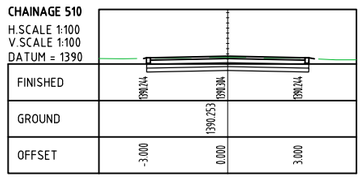

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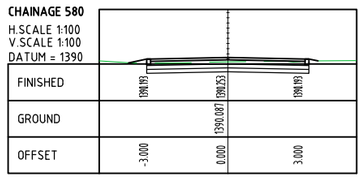

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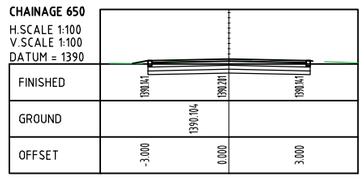

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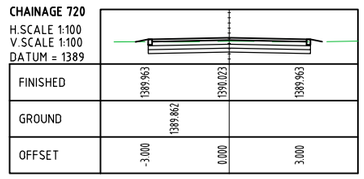

CHAINAGE 790
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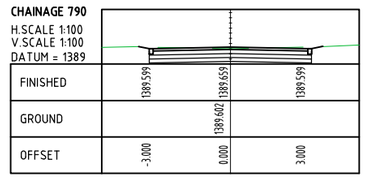

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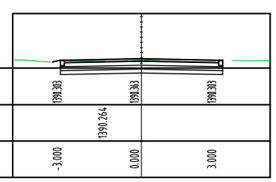

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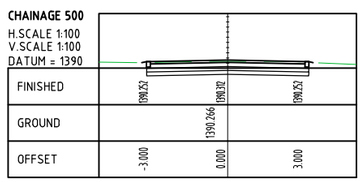

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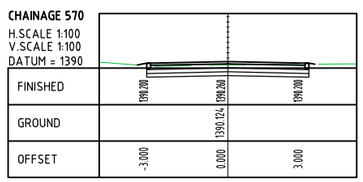

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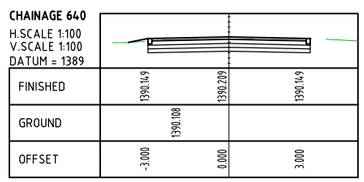

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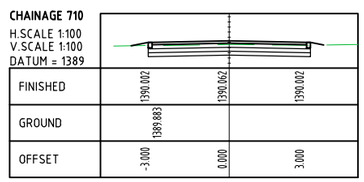

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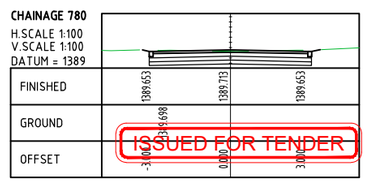


ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
2732

Tel: (053) 948 2787
Fax: (053) 948 1500
pmu@tswaing.co.za

DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

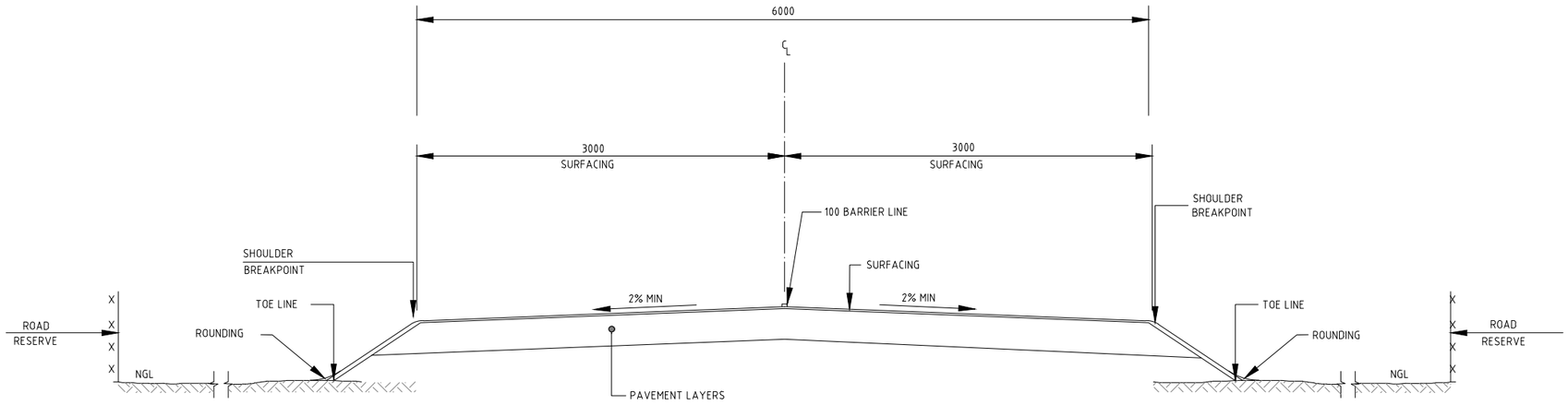
DESCRIPTION OF PROJECT
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS
ROAD 3
CROSS-SECTIONS

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

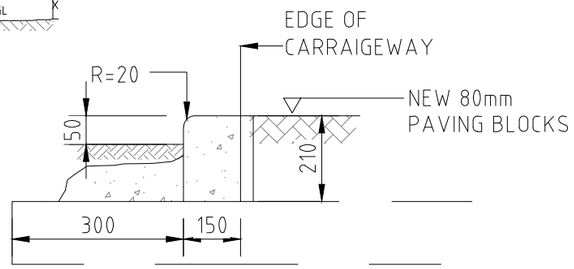
PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE
REMARKS:
ORIGINAL PAPER SIZE: A1

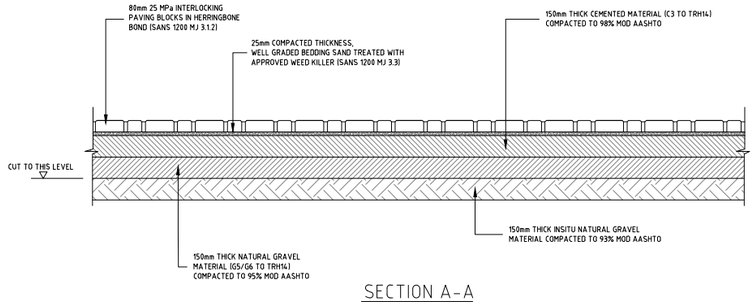
DRAWING NO.	SHEET NO:	REVISION
LP/TLM/2022/23-005	4 OF 4	0



PAVEMENT CROSS SECTION

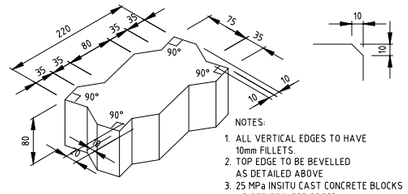
NTS





SECTION A-A

SCALE 1:5O



NOTES:

1. ALL VERTICAL EDGES TO HAVE 10mm FILLETS.
2. TOP EDGE TO BE BEVELLED AS DETAILED ABOVE.
3. 25 MPa INSITU CAST CONCRETE BLOCKS AS PER PROJECT SPECS.

INTERLOCKING PAVING BLOCK

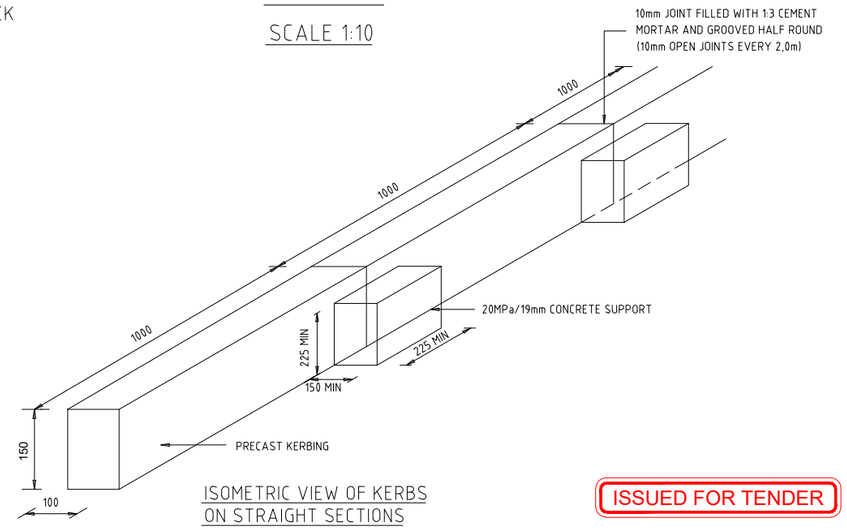
SCALE 1:5

RECTANGULAR EDGING

SCALE 1:10

NOTES:

1. ROAD CONSTRUCTION MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF TRH 14: GUIDELINES FOR ROAD CONSTRUCTION MATERIALS, WHICH SHALL REPLACE THE REQUIREMENTS STIPULATED IN SABS 1200 UNDER THE VARIOUS SECTIONS.
2. ALL KERBS TO COMPLY WITH SABS/SANS 927
3. KERB LENGTHS:
   - 3.1. ON STRAIGHT SECTIONS: 1.0m.
   - 3.2. AROUND CURVES R<1.2m: 0.3m.
4. KERBS TO HAVE EXPANSION JOINT (13mm) SOFTBOARD EVERY 12m.



ISOMETRIC VIEW OF KERBS ON STRAIGHT SECTIONS

SCALE 1:10

ISSUED FOR TENDER

AMENDMENTS

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TSWAING LOCAL MUNICIPALITY

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APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT:
FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT:
REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

ROAD CROSS-SECTION DETAILS

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

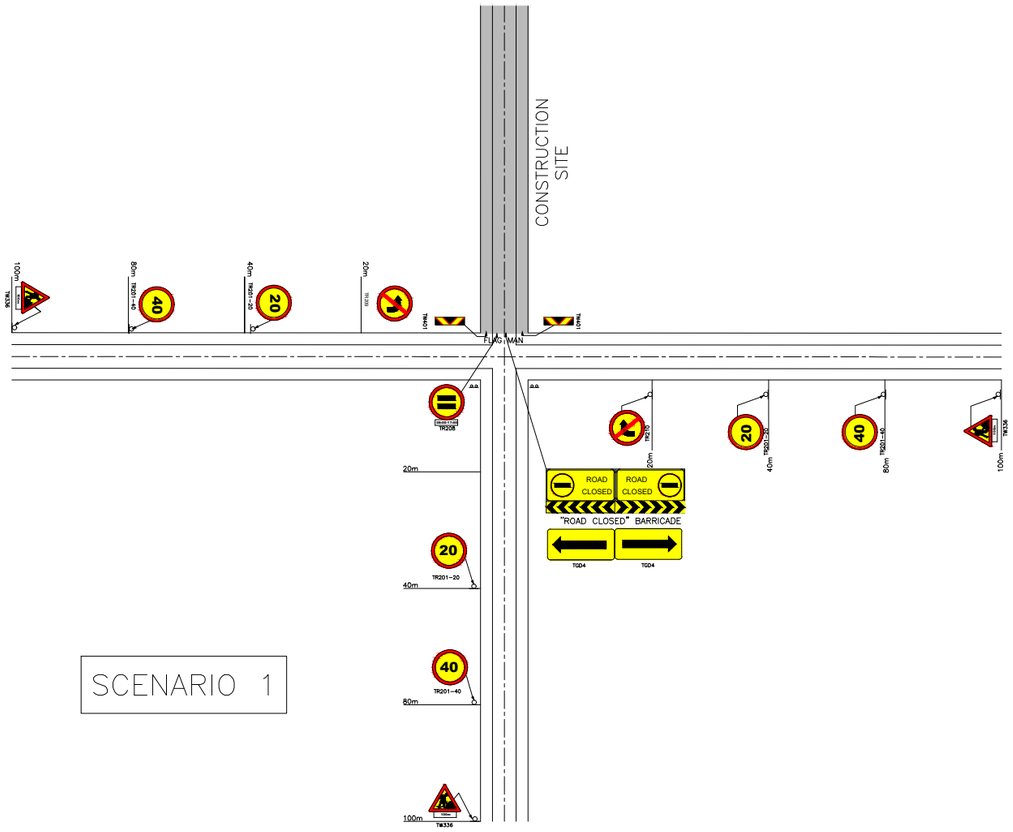
PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS-BUILT DRAWING

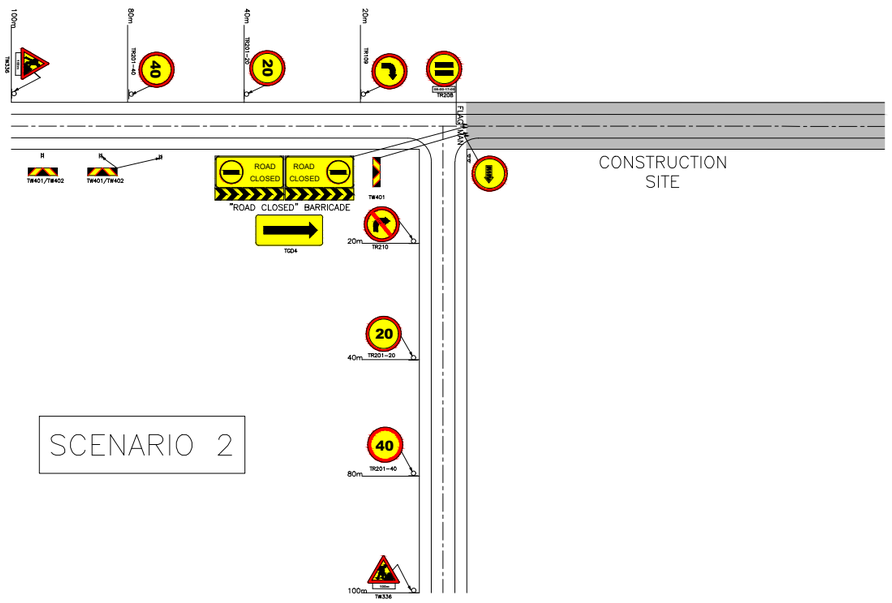
PROJECT ENGINEER:
INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE
INSPECTOR OF WORKS:
SIGNATURE | DATE

REMARKS:
ORIGINAL PAPER SIZE: A1

DRAWING NO: LP/TLM/2022/23-006
SHEET NO: 1 OF 1
REVISION: 0



SCENARIO 1



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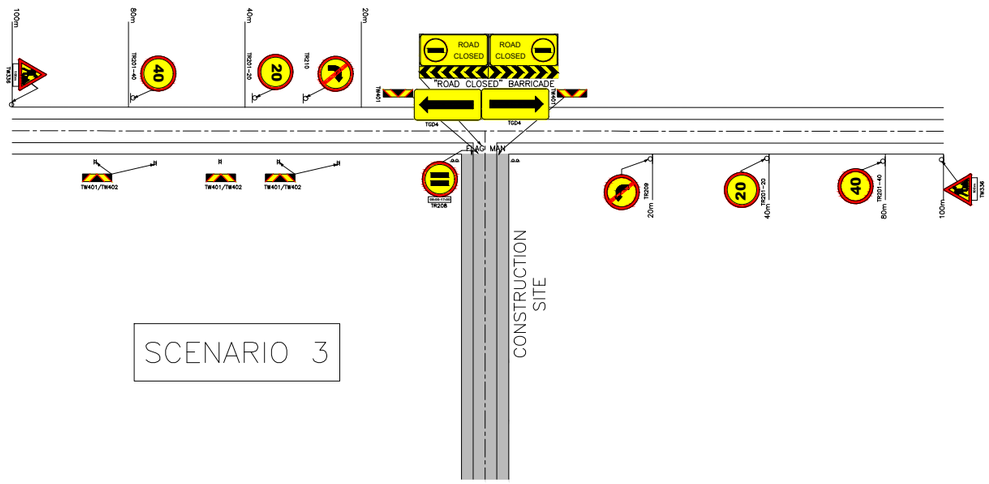

SCENARIO 3

NOTES

1) ALL CIRCULAR REGULATORY SIGNS TO BE 600mm DIAMETER.

2) ALL TRIANGULAR REGULATORY SIGNS TO BE 900mm (SIDE LENGTH).

3) ALL TRAFFIC SIGNS MUST BE IN ACCORDANCE WITH THE SOUTH AFRICAN ROAD TRAFFIC SIGNS MANUAL.

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

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2732

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APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT: FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT: REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

TYPICAL TRAFFIC ACCOMMODATION PLAN

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS: ○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER: INITIALS AND SURNAME / SIGNATURE & PR NUMBER / DATE

INSPECTOR OF WORKS: SIGNATURE / DATE

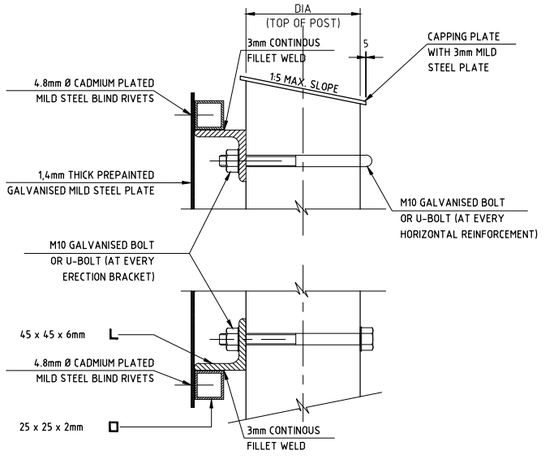
REMARKS:

ORIGINAL PAPER SIZE: A1

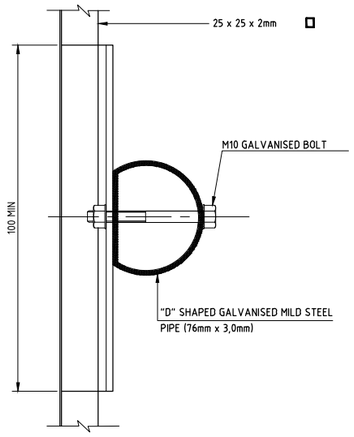
DRAWING NO: LP/TLM/2022/23-007

SHEET NO: 1 OF 1

REVISION: 0

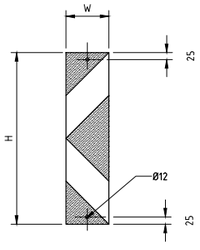


SIDE ELEVATION
SCALE 1 : 2.5



TYPICAL SECTION
SCALE 1 : 2

FIXING DETAILS FOR SMALL SIGNS



DANGER PLATE

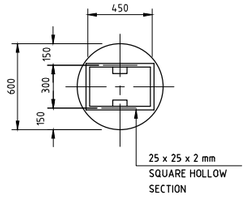
MOUNTING HOLES FOR HAZARD MARKER SIGNS WITHOUT FRAMEWORK
SCALE 1 : 10

HAZARD MARKER SIGNS		
	DANGER PLATE SIGN W401-RIGHT W402-LEFT	SHARP CURVE CHEVRON W405-RIGHT W406-LEFT
OPERATING SPEED (km/h)	SIZE H x W (mm)	SIZE H x W (mm)
120	800 x 200	600 x 600
100	800 x 200	600 x 600
80	600 x 150	450 x 450
60	600 x 150	450 x 450

NOTES :

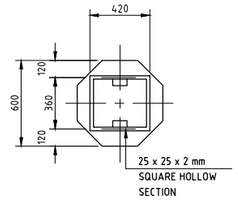
THE ROAD SIGN FACES SHALL BE MANUFACTURED AND ERECTED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS :

1. STRUCTURAL STEEL SECTIONS SHALL BE MILD STEEL CONFORMING TO THE REQUIREMENTS OF SANS 1431, GRADE 300W. RECTANGULAR HOLLOW SECTION AND SPECIAL CHANNEL PROFILES MAY BE COLD FORMED OF COMMERCIAL QUALITY MILD STEEL. ALL SECTIONS SHALL BE HOT-DIP GALVANISED IN ACCORDANCE WITH THE REQUIREMENTS OF SANS 121 : 2000 (ISO 1461 : 1999).
2. BOLTS, WASHERS AND NUTS SHALL COMPLY WITH THE REQUIREMENTS OF SANS 1700-5-1 AND SHALL BE GALVANISED IN ACCORDANCE WITH THE REQUIREMENTS OF SANS 121 : 2000 (ISO 1461 : 1999).
3. BLIND RIVETS SHALL BE 4.8mm DIA CADMIUM PLATED MILD STEEL.



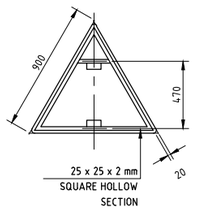
SINGLE SUPPORT

REINFORCEMENT FOR CIRCULAR ROAD SIGNS
SCALE 1 : 20



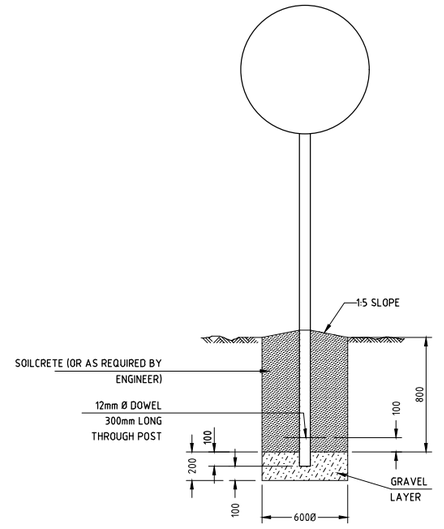
SINGLE SUPPORT

REINFORCEMENT FOR STOP SIGNS
SCALE 1 : 20

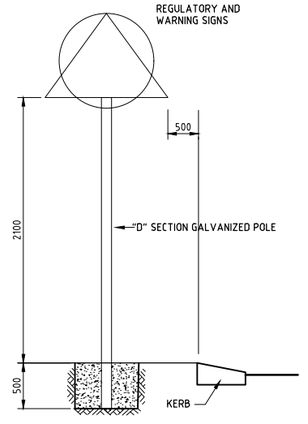


SINGLE SUPPORT

REINFORCEMENT FOR TRIANGULAR ROAD SIGNS
SCALE 1 : 20



FOUNDATION DETAIL
SCALE 1 : 20



INSTALLATION DETAIL

ISSUED FOR TENDER

AMENDMENTS

NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
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DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE ..... DATE .....

LOCATION OF PROJECT: FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT: REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

ROAD SIGNS & MARKINGS

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

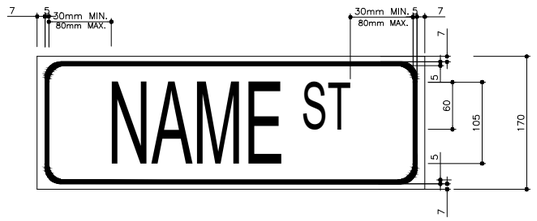
PROJECT STATUS
○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER: _____ _____ _____
INITIALS AND SURNAME SIGNATURE & PR NUMBER DATE

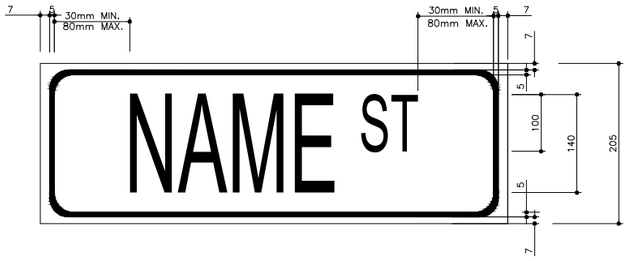
INSPECTOR OF WORKS: _____ _____
SIGNATURE DATE

REMARKS: ORIGINAL PAPER SIZE: A1

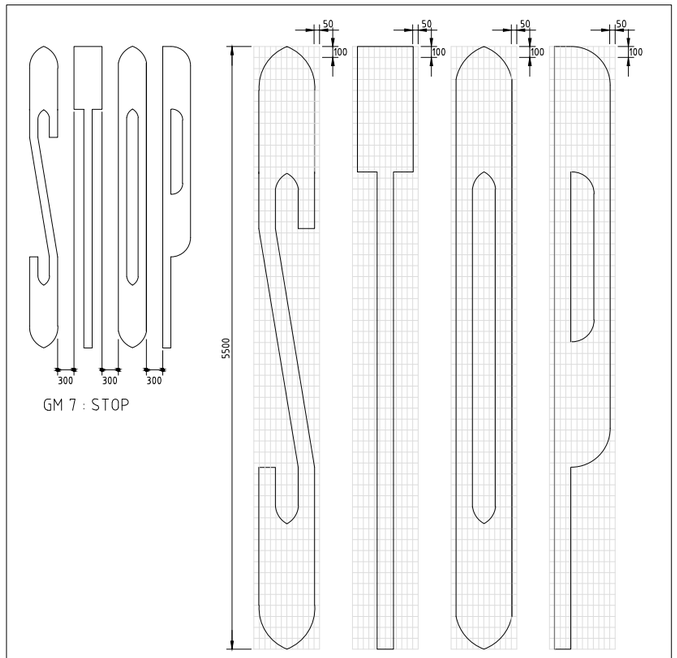
DRAWING NO.: LP/TLM/2022/23-008
SHEET NO.: 1 OF 2
REVISION



TYPICAL LAYOUT OF TYPE 1 STREET NAME LETTERING



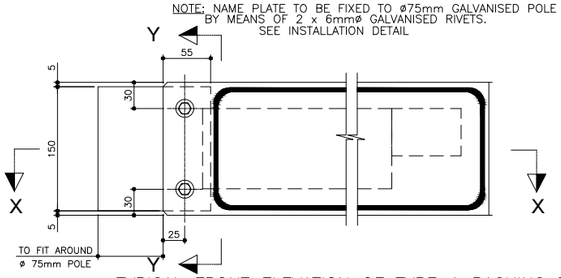
TYPICAL LAYOUT OF TYPE 2 STREET NAME LETTERING



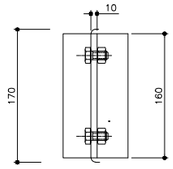
GM 7 : STOP

GM 7 : STOP
SCALE 1 : 25

NOTE: NAME PLATE TO BE FIXED TO ø75mm GALVANISED POLE BY MEANS OF 2 x 6mmø GALVANISED RIVETS. SEE INSTALLATION DETAIL

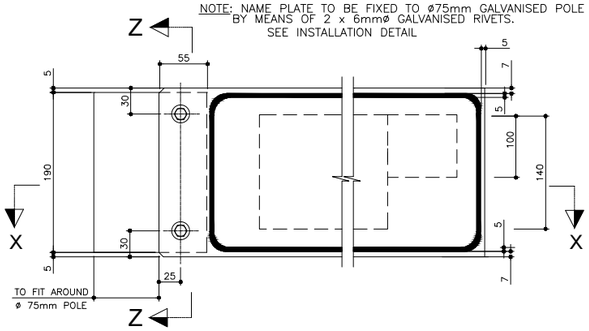


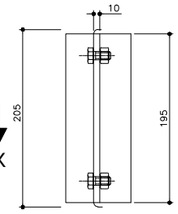
TYPICAL FRONT ELEVATION OF TYPE 1 BACKING PLATE DETAIL



SECTION Y–Y

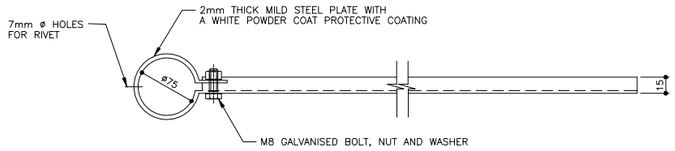
NOTE: NAME PLATE TO BE FIXED TO ø75mm GALVANISED POLE BY MEANS OF 2 x 6mmø GALVANISED RIVETS. SEE INSTALLATION DETAIL



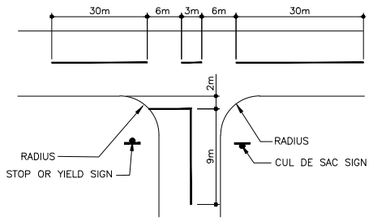


SECTION Z–Z

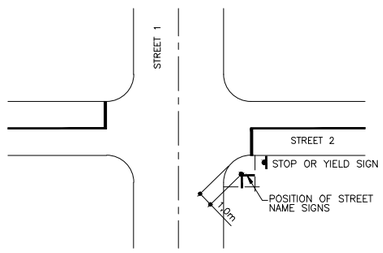
TYPICAL FRONT ELEVATION OF TYPE 2 BACKING PLATE DETAIL



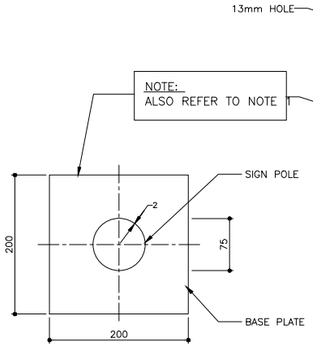
SECTION X–X (TYPE 1 AND 2 BACKING PLATE DETAIL)



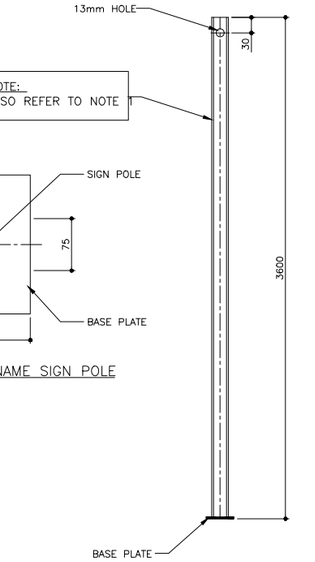
TYPICAL INTERSECTION DETAIL



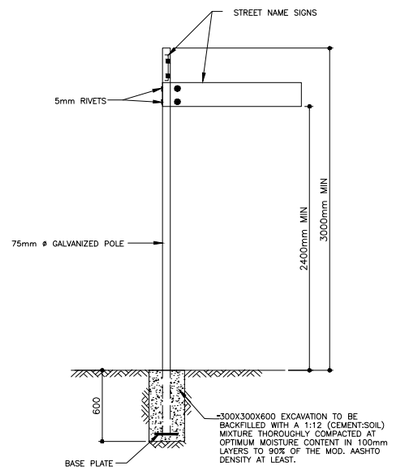
DETAIL OF INSTALLATION POSITION



PLAN OF STREET NAME SIGN POLE



ELEVATION OF STREET NAME SIGN POLE



INSTALLATION DETAIL

NOTES

STREET NAME SIGN POLE

1 THE POLE SHALL BE OF A ROUND SECTION OF 2mm WALL THICKNESS.

2 EACH POLE IS TO BE BLANKED–OFF AT THE TOP BY MEANS OF A MILD STEEL PLATE WITH THE SAME FORM AS THE ROUND SECTION AND AT LEAST 1,5mm THICK, WELDED TO THE TOP. THE WELDING JOINT MUST BE WATERTIGHT AND SMOOTHED OFF AFTER WELDING.

3 A BASE PLATE OF 3mm THICK MILD STEEL AND 200mm SQUARE IS TO BE WELDED TO THE THE BASE OF EACH POST BY MEANS OF 4 EVENLY SPACED WELDS, EACH NOT LESS THAN 20mm LONG.

4 ALSO REFER TO SECTION 612 OF THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, 3rd EDITION, 2005.

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

P.O. Box 24
Delareyville
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Tel: (053) 948 2787
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DESIGNED: M.M.
DRAWING CHECKED BY: M.H.
DRAWN: T.R.
APPROVED: L.M.
DRAWING APPROVED BY TLM
SIGNATURE: DATE:

LOCATION OF PROJECT: FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT: REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

ROAD SIGNS & MARKINGS

CONTRACT No.:	PROJECT No.:	SCALE:	DATE:
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS: ○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS-BUILT DRAWING

PROJECT ENGINEER: INITIALS AND SURNAME | SIGNATURE & PR NUMBER | DATE

INSPECTOR OF WORKS: SIGNATURE | DATE

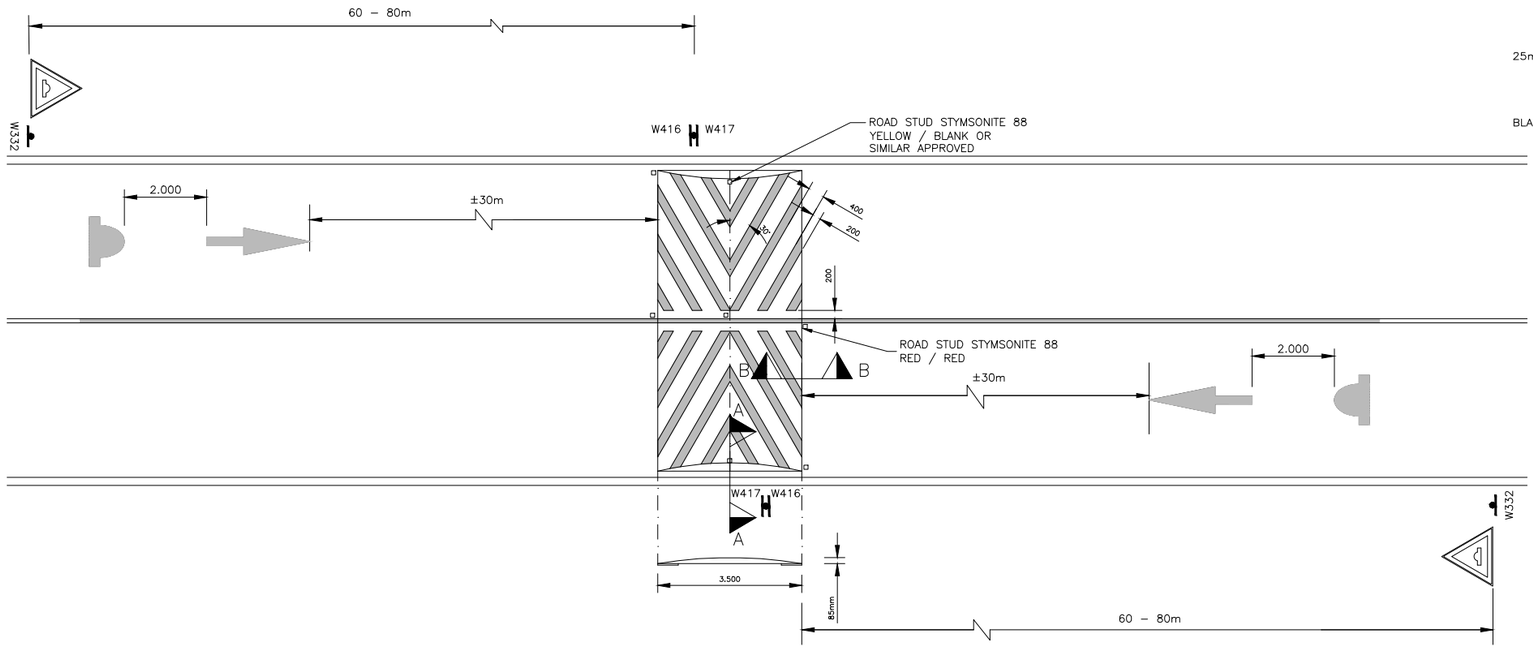
REMARKS:

ORIGINAL PAPER SIZE: A1

DRAWING NO.: LP/TLM/2022/23-008

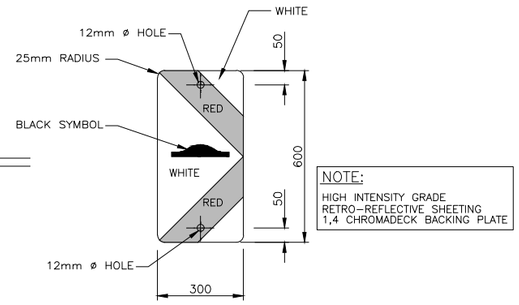
SHEET NO.: 2 OF 2

REVISION: 0



PLAN OF SPEED HUMP

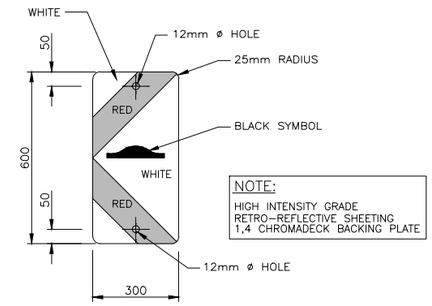
SCALE 1:100



DANGER PLATE SPEEDHUMP (LEFT)

W416

SCALE 1:10



DANGER PLATE SPEEDHUMP (RIGHT)

W417

SCALE 1:10

GENERAL NOTES AND SPECIFICATIONS

CONSTRUCTION METHOD:

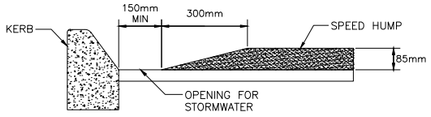
1. Setting out of hump - few days before construction.
2. Saw cuts one to two days before construction.

ON CONSTRUCTION DAY:

3. Remove 500 mm asphalt strips.
4. Start erecting road signs and paint warning road marking.
5. Place asphalt in strips and compact with two passes without vibrator.
6. Place templates - both sides of one lane at a time.
7. Place asphalt and rake till slightly higher than templates.
8. Shape asphalt with straight edge (channel section 6 m long).
9. Remove templates and compact without vibrator (three passes)
10. Measure profile and rectify if necessary.
11. Final compaction with three to four passes with vibrator.
12. Place road studs.
13. Paint speed hump the next day.

NOTE:

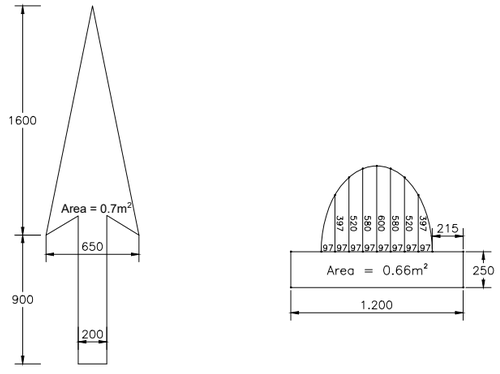
The Trafic Engineering and Operation section must always be consulted to assist with the setting out of speed humps.



SECTION A–A:

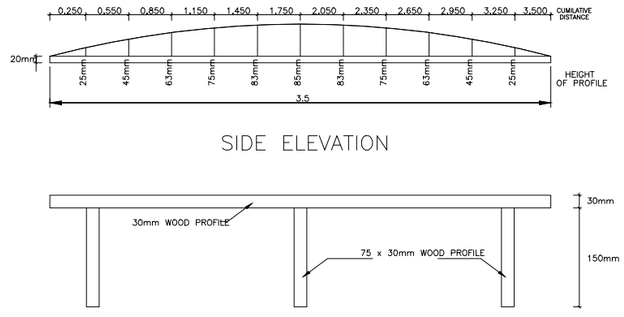
CONSTRUCTION DETAIL OF SPEED HUMP

SCALE 1: 100



DETAIL OF SPEED HUMP ROAD MARKING

SCALE 1: 20

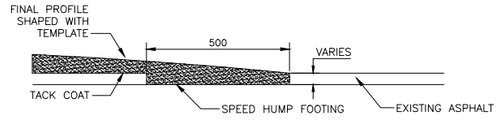


SIDE ELEVATION

PLAN

TEMPLATE DETAIL FOR CONSTRUCTION OF SPEED HUMP

SCALE 1: 20



SECTION B–B:

CONSTRUCTION DETAIL OF SPEED HUMP

ISSUED FOR TENDER

AMENDMENTS			
NR.	DATE	APPROVED	DESCRIPTION

TSWAING LOCAL MUNICIPALITY

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DESIGNED: M.M.

DRAWING CHECKED BY: M.H.

DRAWN: T.R.

APPROVED: L.M.

DRAWING APPROVED BY TLM

SIGNATURE ..... DATE .....

LOCATION OF PROJECT:

FRISCHEWAAGTE, TSWAING LM - NORTH WEST PROVINCE

DESCRIPTION OF PROJECT

REHABILITATION OF FRISCHEWAAGTE INTERNAL ROADS

TRAFFIC CALMING MEASURES

TYPICAL SPEED HUMP DETAIL

CONTRACT No. :	PROJECT No. :	SCALE :	DATE :
SCM005/2022/23	LP00008	AS SHOWN	17 / 06 / 2022

PROJECT STATUS

○ CONCEPT DRAWING ● TENDER DRAWING ○ APPROVED FOR CONSTRUCTION ○ AS BUILT DRAWING

PROJECT ENGINEER:

INITIALS AND SURNAME SIGNATURE & PR NUMBER DATE

INSPECTOR OF WORKS:

SIGNATURE DATE

REMARKS:

ORIGINAL PAPER SIZE: A1

DRAWING NO.: LP/TLM/2022/23-009

SHEET NO.: 1 OF 1

REVISION: 0