

TENDER NO. 64/2024 CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU	 LANGEBERG MUNISIPALITEIT MUNICIPALITY MASIPALA	
Approved by Supply Chain Manager	Version: 01	Page 1 of 271 (incl. BOQ Pages)

CONTRACT DOCUMENT

TENDER NO. 64/2024: CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

VOLUME 1: RETURNABLE DOCUMENT

NOTE:

- The Form of Offer and Acceptance (C1.1) is on **page 79** of this document
- Table 1: Preference Schedule (B-BBEE contribution) is on **page 74** of this document

29 NOVEMBER 2024

Name of Tenderer	
Address (Physical)	
Contact Person	
Contact Number	
Email Address	
Amount (15% VAT Included)	
B-BBEE Status	
Duration (weeks)	

Important Notice Regarding Fraudulent Activities

We would like to notify all bidders that there have been recent reports of scammers exploiting our management's information to solicit illegal bribes. It is imperative to note that such actions are unlawful and strictly forbidden. Should you be approached by individuals claiming to represent the Municipality or otherwise attempting to solicit bribes or engage in unethical practices, you are required to report these incidents immediately to the Municipality. Be aware that participation in illegal activities, including bribery, will have severe consequences. Companies involved in such practices, if exposed, will be blacklisted and barred from future participation in the Central Supplier Database (CSD). We urge all applicants to maintain the highest standards of integrity and to cooperate with us to ensure a fair and transparent tendering process. Langeberg Municipality.



TENDER NO. 64/2024

Tenders are hereby requested for the **TENDER NO. 64/2024: CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU**, as specified in the bid document. Completed Bids, in sealed envelopes, clearly marked **TENDER NO. 64/2024: CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU**, should be placed in the tender box, at the Langeberg Municipal Office, 28 Main Road, Ashton, not later than **12:00 on 24 January 2025** when the Bids will be opened in public. Late, faxed or e-mailed tenders will not be considered.

Tenderers must be registered with the CIDB in a class of construction works and have a grading designation equal to or higher than that determined in accordance with the sum tendered or a value determined in accordance with regulation 25 (7A) of the Construction Industry Development Regulations, 2004. It is estimated that tenderers will need a grading designation of 6CE OR HIGHER,

COMPULSORY CLARIFICATION MEETING:

A COMPULSORY CLARIFICATION MEETING WILL BE HELD ON THE 11th of December 2024 AT - 11H00, AT THE ASHTON LIBRARY, 23 FAURE STREET, ASHTON. NO BIDDER WILL BE ADMITTED AFTER 11H05.

PLEASE NOTE:

The official Bid document must be fully completed in black ink, all pages must be returned, and the document should preferably be stapled or bound. Supporting documents must be submitted separately and must be stapled or bound.

The lowest, or any tender, will not necessarily be accepted and council reserves the right to accept any tender. Tenders will be evaluated according to the Council's Supply Chain Management Policy and the 80/20 Preference Point system. The Supply Chain Management Policy can be viewed at Municipal Offices or www.langeberg.gov.za

A minimum functional assessment score of 70 points will apply to this contract

Bid documents are available from **29 November 2024**, on the Langeberg Municipal website: www.langeberg.gov.za

Please refer written enquiries to MR B De Waal bertie.dw@ixengineers.co.za

DP LUBBE
MUNICIPAL MANAGER
Private Bag X2,
Ashton, 6715

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

General Tender Information

TENDER ADVERTISED	:	29 November 2024
ESTIMATED CIDB CONTRACTOR GRADING DESIGNATION	:	6CE or higher
SITE VISIT/CLARIFICATION MEETING	:	11 th of December 2024 at 11h00
VENUE FOR SITE VISIT/ COMPULSORY CLARIFICATION MEETING	:	Ashton Library, 23 Faure Street, Ashton
CLOSING DATE	:	24 January 2025
CLOSING TIME	:	12h00
TENDER BOX & ADDRESS	:	The Bid Box, at the Entrance of Municipal Office, 28 Main Road, Ashton, LANGEBERG Municipality.
	:	The Tender Document (which includes the Form of Offer and Acceptance) completed in all respects, plus any additional supporting documents required, must be submitted in a sealed envelope with the name and address of the tenderer, the tender No. and title and the closing date indicated on the envelope. The sealed envelope must be inserted into the appropriate official tender box before closing time at 12h00.
		If the tender offer is too large to fit into the abovementioned box or the box is full, please enquire at the reception for alternative instructions. The onus remains with the tenderer to ensure that the tender is placed in either the original box or as alternatively instructed.

TENDERERS MUST NOTE THAT WHEREVER THIS DOCUMENT REFERS TO ANY PARTICULAR TRADEMARK, NAME, PATENT, DESIGN, TYPE, SPECIFIC ORIGIN OR PRODUCER, SUCH REFERENCE SHALL BE DEEMED TO BE ACCOMPANIED BY THE WORDS "OR EQUIVALENT"

**PART A (MBD1)
INVITATION TO BID**

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

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE LANGEBERG MUNICIPALITY					
BID NUMBER:	TENDER 64/2024	CLOSING DATE:	24 January 2025	CLOSING TIME:	12h00
DESCRIPTION:	CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM.					

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT:
ENTRANCE OF THE MUNICIPAL OFFICES 28 Main Road Ashton 6715

SUPPLIER INFORMATION			
NAME OF BIDDER			
POSTAL ADDRESS			
STREET ADDRESS			
TELEPHONE CODE & NUMBER			
CELL PHONE NUMBER			
FACSIMILE CODE & NUMBER			
E-MAIL ADDRESS			
VAT REGISTRATION NUMBER			
TAX PIN		TAX REFERENCE NUMBER	
CSD No			
ORIGINAL AND VALID TAX CLEARANCE CERTIFICATE / TSC PIN SUBMITTED? YES ☐ NO ☐			
A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BEE. NOTE A CERTIFIED COPY OR ORIGINAL IS COMPULSORY			
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE SUBMITTED? (MBD 6.1) YES ☐ NO ☐			
IF YES, WHO WAS THE CERTIFICATE ISSUED BY? (Tick applicable box)			
A VERIFICATION AGENCY ACCREDITED BY SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM (SANAS)			☐
or			
A SWORN AFFIDAVIT FOR EME'S AND QSE'S			☐
RECENT MUNICIPAL ACCOUNT OF COMPANY (NOT OLDER THAN 90 DAYS) <u>MUST</u> BE ATTACHED			
RECENT MUNICIPAL ACCOUNTS OF ALL THE DIRECTORS/ SHAREHOLDERS <u>MUST</u> BE ATTACHED			
IF LEASING/RENTING/LODGING – ATTACHED LATEST VALID COPY OF AGREEMENT IF NO PROPERTY REGISTERED IN YOUR NAME SUBMIT AN AFFIDAVIT CONFIRMING THIS.			

BID PRICE OFFERED	
NB: NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE (see definition on MBD 4 attached)	
TOTAL BID PRICE (INCL 15% VAT)	

ANY ENQUIRIES REGARDING THE BIDDING PROCEDURE MAY BE DIRECTED TO:

LANEBERG MUNICIPALITY

Contact Person: Mr C Posthumus

Tel: 023 615 8000

Fax: 023 615 1563

E-mail: cposthumus@langeberg.gov.za

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

YOURS FAITHFULLY,

**DP LUBBE
MUNICIPAL MANAGER
MUNICIPAL OFFICES
PRIVATE BAG X2
ASHTON
6715**

TEL: 023 626 8200

PART B (MBD 1)
TERMS AND CONDITIONS FOR BIDDING

1. BID SUBMISSION:										
1.1 BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION. 1.2 ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED – (NOT TO BE TYPED) OR ONLINE 1.3 THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.										
2. TAX COMPLIANCE REQUIREMENTS										
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS. 2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYERS PROFILE AND TAX STATUS. 2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA 2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PARAGRAPH 3 BELOW 2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID. 2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED; EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER. 2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.										
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS										
<table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">3.1 IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?</td> <td style="width: 30%; text-align: right;">☐ YES ☐ NO</td> </tr> <tr> <td>3.2 DOES THE ENTITY HAVE A BRANCH IN THE RSA?</td> <td style="text-align: right;">☐ YES ☐ NO</td> </tr> <tr> <td>3.3 DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?</td> <td style="text-align: right;">☐ YES ☐ NO</td> </tr> <tr> <td>3.4 DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?</td> <td style="text-align: right;">☐ YES ☐ NO</td> </tr> <tr> <td>3.5 IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?</td> <td style="text-align: right;">☐ YES ☐ NO</td> </tr> </table> IF THE ANSWER IS “NO” TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.	3.1 IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐ YES ☐ NO	3.2 DOES THE ENTITY HAVE A BRANCH IN THE RSA?	☐ YES ☐ NO	3.3 DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐ YES ☐ NO	3.4 DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐ YES ☐ NO	3.5 IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐ YES ☐ NO
3.1 IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	☐ YES ☐ NO									
3.2 DOES THE ENTITY HAVE A BRANCH IN THE RSA?	☐ YES ☐ NO									
3.3 DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	☐ YES ☐ NO									
3.4 DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	☐ YES ☐ NO									
3.5 IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	☐ YES ☐ NO									

**NB: FAILURE TO PROVIDE ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.
NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE**

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

CHECK LIST

This list is to assist all bidders to submit complete proposals. Bidders are to check the following points before the submission of their proposals:		
1	All pages of the document have been read by the contractor and initialled.	☐
2	Any discrepancy and/or misunderstanding is cleared with the relevant officials.	☐
3	All pages requiring information have been <u>completed in black ink.</u>	☐
4	The Schedule of Quantities has been checked for arithmetic correctness.	☐
5	Totals from each sub section of the Schedule of Quantities have been carried forward to the summary page and done so correctly.	☐
6	The total from the summary page has been carried forward to the Form of Offer.	☐
7	Surety details where applicable have been included in the proposal.	☐
8	All sections requiring information have been completed.	☐
9	Bidder ensured that all documents is properly completed and signed	☐
10	The contractor has complied with the proposal prerequisites.	☐
11	The document is submitted before 12h00 on the due date at the designated bid box of Langeberg Municipality.	☐

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

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LANGEBERG MUNICIPALITY

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LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

T1.1 Tender Notice and Invitation to Tender

LANGEBERG MUNICIPALITY | UMASIPALA | MUNISIPALITEIT
Private Bag X2, Ashton, 6715
☎ (023) 615 8000 📠 (023) 615 1563, cposthumus@langeberg.gov.za
🌐 www.langeberg.gov.za



TENDER NOTICE AND INVITATION TO BID			
DEPARTMENT INFRASTRUCTURE			
ADVERTISED IN	MUNICIPAL NOTICE BOARD, MUNICIPAL WEBSITE, DIE BURGER		
BID NO:	TENDER NO. 64/2024	PUBLISHED DATE:	29 NOVEMBER 2024
Bids are hereby invited for (Tender Description)	CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU		
Closing Time and Date	No later than 12H00	On the Date	24 JANUARY 2025
Compulsory Site Meeting	11 December 2024	CIDB GRADING: 6CE or higher	
Bids will be opened immediately thereafter, in public at the Council Chambers of LANGEBERG Municipality, 28 Main Road, Ashton.			
AVAILABILITY OF BID DOCUMENTS			
Tender Documents will be downloadable only form www.langeberg.gov.za			
Date Available	29 NOVEMBER 2024		
BID RULES			
a. Bids are to be completed in accordance with the conditions and bid rules contained in the bid document and supporting documents must be placed in a sealed envelope and externally endorsed WITH THE NAME AND ADDRESS OF THE TENDERER, THE TENDER NO. AND TITLE AND THE CLOSING DATE, and be deposited in the Bid Box, at the Supply Chain Management Unit, Langeberg Municipality, 28 Main Street, Ashton. b. Bids may only be submitted on the bid documentation issued by the Municipality. c. The Langeberg Municipality does not bind itself to accept the lowest or any tender and reserves the right to accept any tender, as it may deem expedient. Tenders will be evaluated according to the Council's Supply Chain Management Policy and the 80/20 Preference Point system. The Supply Chain Management Policy can be viewed at Municipal Offices or www.langeberg.gov.za d. Tenderers who are not yet registered are required to register on the Municipality's Accredited Supplier Database (CSD). Online registration to be completed on the CSD registration platform, website https://secure.csd.gov.za. e. Pre-qualification criteria for preferential procurement is applicable to the tender.			
Tenders shall be evaluated in terms of the latest Langeberg Municipality Supply Chain Management Policy and the Preferential Procurement Regulations.		Bidders may claim preference points in terms of their B-BBEE status level of contribution.	
Preferential Procurement Point System Applicable		80/20	Local Content Requirement
Compulsory site Meeting/ Information Session		Yes	Validity Period
			120 days
TECHNICAL ENQUIRIES: Mr B de Waal bertie.dw@ixengineers.co.za		BIDDING PROCEDURE REQUIREMENTS & ENQUIRIES: Mr S Ngcongolo SNgcongolo@langeberg.gov.za	
Consultant	iX engineers (Pty) Ltd.	Section	SUPPLY CHAIN MANAGEMENT
Contact Person	Mr Bertie de Waal	Contact Person	Mr S Ngcongolo -
Tel:	E-mail Enquiries Only	Tel:	E-mail Enquiries Only
E-mail	bertie.dw@ixengineers.co.za	E-mail	SNgcongolo@langeberg.gov.za

Authorised by:
DP LUBBE
MUNICIPAL MANAGER
NOTICE NR: T64/2024

Private Bag X2
ASHTON, 6715
TEL: 023 615 8000

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

T1.2 Tender Data

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of Government Gazette No. 42622 of 8 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (see www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of tenderers as an Annex to this Tender Data.

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

The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender:

Clause number	Tender Data
---------------	-------------

C.1	General
------------	----------------

C.1.1	Actions
-------	---------

C.1.1.1	<i>Add the following:</i> The parties agree that this tender, its evaluation and acceptance and any resulting contract shall also be subject to the Employer's Supply Chain Management Policy ('SCM Policy') that was applicable on the date the tender was advertised, save that if the Employer adopts a new SCM Policy which contemplates that any clause therein would apply to the contract emanating from this tender, such clause shall also be applicable to that contract. Please refer to this document contained on the Employer's website.
---------	---

Abuse of the supply chain management system is not permitted and may result in the tender being rejected, cancellation of the contract, restriction of the supplier, and/or the exercise by the Employer of any other rights and remedies available to it as described in the SCM Policy.

The Employer is the LANGEBERG MUNICIPALITY, represented by Mr C Posthumus.

The Employer's Agent is iX engineers (Pty) Ltd. represented by Mr B de Waal.

C.1.2	Tender Documents
-------	------------------

Add the following:

The following documents form part of this contract:

VOLUME 1: The Tender Document issued by the employer (this document), in which is bound:

THE TENDER

Part T1: Tendering Procedure

T1.1 Tender notice and invitation to tender

T1.2 Tender data

Part T2: Returnable Documents

T2.1 List of returnable documents

T2.2 Returnable schedules

THE CONTRACT

Part C1: Agreement and contract data

C1.1 Form of Offer and Acceptance

- C1.2 Contract Data (data provided by the Contractor) – Part 1
- C1.2 Contract Data (data provided by the Employer) – Part 2
- C1.3 Form of Performance Guarantee
- C1.4 Form of Advance Payment Guarantee
- C1.5 Occupational Health and Safety Agreement
- C1.6 Protection of the Environment Declaration
- C1.7 Insurance Broker's Warranty

Part C2: Pricing Data

- C2.1 Pricing Assumptions
- C2.2 Bills of Quantities

Part C3: Scope of Work

- C3.1 Description of the Works
- C3.2 Engineering/Design
- C3.3 Procurement
- C3.4 Construction

Part C4: Site information

- C4 Site information

Part C5: LANGEBERG Municipality Supply Chain Policy

- C5 Supply Chain Policy

Part C6: Health and Safety Specifications

- C6 Health and Safety Tender Specifications

Part C7: Drawings

- C7 Drawings

Volume 1 is deemed the "Returnable Document" which must be returned to the Employer in terms of submitting a tender offer.

In addition to the above, the following further documents are part of the tender:

VOLUME 2: The General Conditions of Contract for Construction Works, Third Edition, 2015, prepared by the South African Institution of Civil Engineering (SAICE). This publication is available, and tenderers must obtain copies at their own cost from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, e-mail: civilinfo@saice.org.za.

VOLUME 3: The SANS Standardised Specifications for Civil Engineering Construction prepared by Standards South Africa. These publications are available, and tenderers must obtain copies at their own cost from Standards South Africa, Private Bag X191, PRETORIA, 0001.

VOLUME 4: *Model Preambles for Trades (2008 Edition)*. This document is published by and is available from the Association of South African Quantity Surveyors, P.O. Box 3527, Halfway House, 1685. Telephone (011) 315 4140. E-mail: administration@asaqs.co.za

Volumes 2, 3 & 4 may also be inspected, by appointment, at the offices of the Employer's agent during normal office hours.

C.1.4 Communication and employer's agent

Delete the first sentence of the clause and replace with the following:

Verbal or any other form of communication, from the Employer, its employees, agents or advisors during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer, unless communicated by the Employer in writing to suppliers by its Municipal Supply Chain Manager or his nominee.

The Employer's agent is:

Company: iX engineers (Pty) Ltd.
Name: Bertie de Waal
Address: 31 Allen Drive, Loevenstein
BELLVILLE, 7530
Tel: (021) 912 3000
E-mail: Bertie.dw@ixengineers.co.za

C.1.5 Cancellation and Re-Invitation of Tenders

Remove C.1.5.1, C.1.5.2 & C.1.5.3 and replace with the following:

- C.1.5.4.1 In the event that, in the application of the 80/20 preference point system as stipulated in the tender documents, all tenders received exceed the estimated Rand value of R50 000 000, the tender invitation must be cancelled.
- C.1.5.4.2 In the event that, in the application of the 90/10 preference point system as stipulated in the tender documents, all tenders received are equal to, or below R50 000 000 the tender must be cancelled.
- C.1.5.4.3 An organ of state which has cancelled a tender invitation as contemplated in sub-regulations (1) and (2) must re-invite tenders and must, in the tender documents stipulate the preference point system to be applied.
- C.1.5.4.4 An organ of state may, prior to the award of a tender, cancel a tender if -
- a) due to changed circumstances, there is no longer need for the goods or services tendered for; or
 - b) funds are no longer available to cover the total envisaged expenditure; or
 - c) no acceptable tenders are received.
- C.1.6.2 Competitive negotiation procedure
Add the following between C.1.6.2 and C.1.6.2.1:
A competitive negotiation procedure will **not** be followed.
- C.1.6.3 Proposal procedure using the two-stage system
Add the following between C.1.6.3 and C.1.6.3.1:
A two-stage system will **not** be followed.
- Add the following Clauses (C.1.6.4, C1.7) after Clause C.1.6.3 and before clause C.2.*
- C.1.6.4 Objections, complaints, queries and disputes/ Appeals in terms of Section 62 of the Systems Act/ Access to court
- C.1.6.4.1 Disputes, objections, complaints, and queries
In terms of Regulations 49 and 50 of the Local Government: Municipal Finance Management Act, 56 of 2003 – Municipal Supply Chain Management Regulations (Board Notice 868 of 2005):
- a) Persons aggrieved by decisions or actions taken by the **Langeberg Municipality** in the implementation of its supply chain management system, may lodge within 14 days of the decision or action, a written objection or complaint or query or dispute against the decision or action.
- C.1.6.4.2 Appeals
- a) In terms of Section 62 of the Local Government: Municipal Systems Act, 32 of 2000 a person whose rights are affected by a decision taken by the **Langeberg Municipality**, may appeal against that decision by giving written notice of the appeal and reasons to the Municipal Manager within 21 days of the date of the notification of the decision.
 - b) An appeal must contain the following:
 - i) Must be in writing
 - ii) It must set out the reasons for the appeal
 - iii) It must state in which way the Appellant's rights were affected by the decision;
 - iv) It must state the remedy sought; and
 - v) It must be accompanied with a copy of the notification advising the person of the decision
 - c) The relevant **Langeberg Municipality** appeal authority must consider the appeal and **may confirm, vary or revoke** the decision that has been appealed, but no such revocation of a decision may detract from any rights that may have accrued as a result of the decision.

- C.1.6.4.3 Right to approach the courts and rights in terms of Promotion of Administrative Justice Act, 3 of 2000 and Promotion of Access to Information Act, 2 of 2000
The sub-clauses above do not influence any affected person's rights to approach the High Court at any time or its rights in terms of the Promotion of Administrative Justice Act and Promotion of Access to Information Act.
- C.1.6.4.4 All requests referring to sub clauses C.1.6.4.1; C.1.6.4.2 and C.1.6.4.3 must be submitted in writing to:
The Municipal Manager - Langeberg Municipal Offices
Via hand delivery at: Langeberg Municipality, 28 Main Street, Ashton
Via post at: Private Bag X2, Ashton, 6715
Via fax at: (023) 615 1563
Via email at: mm@langeberg.gov.za
- C.1.7 National Treasury Web Based Central Supplier Database (CSD) Registration
Tenderers are required to be registered on the National Treasury Web Based Central Supplier Database (CSD) as a service provider. Tenderers must register as such upon being requested to do so in writing and within the period contained in such a request, failing which no orders can be raised or payments processed from the resulting contract. In the case of Joint Venture partnerships this requirement will apply individually to each party of the Joint Venture.
- Tenderers who wish to register on the National Treasury Web Based Central Supplier Database (CSD) may do so via the web address **<https://secure.csd.gov.za>**.
- It is each tenderer's responsibility to keep all the information on the National Treasury Web Based Central Supplier Database (CSD) updated.

C.2 Tenderer's obligations

- C.2.1.1 *Delete the content of this clause and replace with the following:*
- Tenderers must submit a tender offer that complies in all aspects to the conditions as detailed in this document. Only those tenders that comply in all aspects with the tender conditions, specifications, pricing instructions and contract conditions will be declared responsive.
- Add the following clauses after C.2.1.2 and before C2.2:*
- C.2.1.3 Only those tender submissions from which it can be established that a clear and unambiguous offer has been made to Employer, by whom the offer has been made and what the offer constitutes, will be declared responsive.
- C.2.1.4 Only those tenders that satisfy the following criteria will be declared responsive:
- C.2.1.4.1 Construction Industry Development Board (CIDB) Registration
Only those tenderers who are registered with the CIDB, or capable of being so prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a CE or GB class of construction work, are eligible to have their tenders evaluated. Tenderers must obtain such active status upon being requested to do so in writing and within the period contained in such a request, failing which their tenders will be declared non-responsive.
- Joint Ventures are eligible to submit tenders provided that:
- every member of the joint venture is registered with an active status with the CIDB;
 - the lead partner has a contractor grading designation of not lower than one level below the required grading designation in the 6CE or higher class of construction work; and
 - the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a CE class of construction work or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations.

Contractor grading designations and associated parameters as follows:

Contractor Grading Designation	Tender Value Range designation	Maximum value of contract that a contractor is considered capable of performing (R)
1 (class of construction works)	1	500 000
2 (class of construction works)	2	1 000 000
3 (class of construction works)	3	3 000 000
4 (class of construction works)	4	6 000 000
5 (class of construction works)	5	10 000 000
6 (class of construction works)	6	20 000 000
7 (class of construction works)	7	60 000 000
8 (class of construction works)	8	200 000 000
9 (class of construction works)	9	No Limit

For more details on classes of construction work refer to the CIDB website.

C.2.1.4.2 Compliance with requirements of LANGEBERG MUNICIPALITY SCM Policy and procedures

Only those tenders that are compliant with the requirements below will be declared responsive:

- A completed **Compulsory Enterprise Questionnaire** to be provided (applicable schedule to be completed);
- A completed **Certificate of Authority for Companies/Partnerships/Joint Ventures/Consortiums** to be provided authorising the tender to be made and the signatory to sign the tender on the partnership /joint venture/consortium's behalf (applicable schedule to be completed);
- A copy of the partnership / joint venture / consortium agreement to be provided;
- A completed **Declaration of Interest – State Employees** to be provided and which does not indicate any non-compliance with the legal requirements relating to state employees (applicable schedule to be completed);
- A completed **Declaration – Conflict of Interest** and **Declaration of Bidder's past Supply Chain Management Practices** to be provided and which does not indicate any conflict or past practises that renders the tender non-responsive based on the conditions contained thereon (applicable schedules to be completed);
- A completed **Certificate of Independent Bid Determination** to be provided and which does not indicate any non-compliance with the requirements of the schedule (applicable schedule to be completed);
- The tenderer (including any of its directors or members), has not been restricted in terms of abuse of the Supply Chain Management Policy;
- The tenderer's tax matters with SARS are in order, or the tenderer is a foreign supplier that is not required to be registered for tax compliance with SARS;
- The tenderer is not an advisor or consultant contracted with the Employer whose prior or current obligations creates any conflict of interest or unfair advantage;
- The tenderer is not a person, advisor, corporate entity or a director of such corporate entity, involved with the bid specification committee;
- A completed Authorisation for the Deduction of Outstanding Amounts Owed to the Langeberg Municipality to be provided and which does not indicate any details that renders the tender non-responsive based on the conditions contained thereon (applicable schedules to be completed);
- The tenderer (including any of its directors or members), has not been found guilty of contravening the Competition Act 89 of 1998, as amended from time to time;
- The tenderer (including any of its directors or members), has not been found guilty on any other basis listed in the SCM Policy.

C.2.1.4.3 Minimum score for functionality based on a pre-qualification inspection

Please note that points scored for Quality (functionality) will not have an influence on the total tender evaluation points and will therefore not affect the ranking of the tenderers, it will only be regarded as a pre-qualification. The minimum points required to be eligible to tender is 70 out of a 100.

THE CRITERIA to be applied in evaluating the proposal is set out in the table below:

Calculate the points for functionality according to the following formula:

$$P_s = S_o/M_s \times A_p$$

Where P_s = Percentage scored for functionality by bid under consideration
 S_o = Total score of bid/proposal under consideration

M_s = Maximum possible score = 500
 A_p = percentage allocated for functionality = 100

Total points by bidder on functionality:

- i) $P_s(\text{Criterion 1})$ = (Indicator allocated/scored out of 5) x weight
 ii) $P_s(\text{Criterion 2})$ = (Indicator allocated/scored out of 5) x weight
 $P_s(\text{TOTAL})$ = $[(P_s(\text{Criterion 1}) + P_s(\text{Criterion 2})) / 5] \times 100$

Criteria can be amended to suit project complexity or omitted if not applicable.

Criterion	Weight
1) Relevant Experience (Returnable Schedule 14)	50%
2) Construction manager Experience (Returnable Schedule 15)	50%
Total	100%

EVALUATION CRITERION 1

Tenderers must have successfully **completed** (please note that current projects will not be included in the evaluation) at least 5 projects of a similar scope and nature in the last 10 years to score full marks on this criterion. Refer to the table below for a measurement of how points will be awarded against this criterion.

A detailed list of successfully completed projects must be completed in/attached to **Schedule 14**.

Projects of a similar scope and nature is regarded as:

Road Construction, layer works, brick paving, kerbing, laying of (water, sewer and stormwater) by trench excavations, bedding, backfilling and compaction of various materials, construction of various brick, mortar and concrete structures.

Please note that no tenderer will be contacted to clarify any experience or construction equipment, or plant submitted with this bid. If insufficient information is shown, the tenderer will **not** be contacted for clarification.

1. RELEVANT EXPERIENCE	
INDICATOR	Evaluation Criteria for Relevant Experience: (number of similar projects completed by the contractor in the last 10 years)
0	The tenderer has completed zero projects in the last 10 years
1	The tenderer has completed only 1 project in the last 10 years
2	The tenderer has completed exactly 2 projects in the last 10 years
3	The tenderer has completed exactly 3 projects in the last 10 years
4	The tenderer has completed exactly 4 projects in the last 10 years
5	The tenderer has completed 5 or more projects in the last 10 years

EVALUATION CRITERION 2

Detailed, project specific CV's to be included in **Schedule 15** of the Returnable Documents. Failure to do so during tender phase will lead to disqualification of tenderer.

Construction managers must have successfully **completed** (please note that current projects will not be included in the evaluation) at least 5 projects of a similar scope and nature in the last 10 years to score full marks on this criterion. Refer to the table below for a measurement of how points will be awarded against this criterion.

Projects of a similar scope and nature is regarded as:

Road Construction, layer works, brick paving, curbing, laying of pipes by trench excavations (water, sewer and stormwater), bedding, backfilling and compaction of various materials, construction of various brick, mortar and concrete structures.

Please note that no tenderer will be contacted to clarify any experience or construction equipment, or plant submitted with this bid. If insufficient information is shown, the tenderer will **not** be contacted for clarification.

If, during construction, the contractor wishes to replace the construction manager, the contractor will apply in writing to the Employer's Agent as per clause 4.12 of the GCC 2015. Only similarly experienced and competent construction managers will be considered.

2. CONSTRUCTION MANAGER	
INDICATOR	Evaluation Criteria for Construction manager: (number of similar projects completed by the Construction manager in the last 10 years)
0	The Construction manager has completed zero projects in the last 10 years
1	The Construction manager has completed only 1 project in the last 10 years
2	The Construction manager has completed exactly 2 projects in the last 10 years
3	The Construction manager has completed exactly 3 or more projects in the last 10 years
4	The Construction manager has completed exactly 4 or more projects in the last 10 years
5	The Construction manager has completed 5 or more projects in the last 10 years

The functionality proposal will be evaluated individually on score sheets, by a representative evaluation panel according to the evaluation criteria indicated above. All service providers who scored less than 70 out of 100 points for functionality will not be considered further. At least 3 evaluators will evaluate the quality schedules separately.

NB: Points scored for Quality (functionality) will not have an influence on the total tender evaluation points.

Where the entity tendering is a Joint Venture the tender must be accompanied by a statement describing exactly what aspects of the work will be undertaken by each party to the joint venture (appended to Schedule 3, Part T2.2: Returnable Schedules).

- C.2.1.4.4.3 A copy of the authorisation letter must be submitted together with the bid document at the closing date and time of the bid.
- C.2.1.4.5 Compulsory clarification meeting
Tenderers are required to attend a compulsory clarification meeting at which they may familiarise themselves with aspects of the proposed work, services or supply and pose questions.
Details of the meeting(s) are stated in the General Tender Information.
Only those tenders submitted by tenderers whose attendance at this meeting have been recorded, will be declared responsive.
- C.2.1.4.6 Good standing with Bargaining Council
Only those tenders submitted by tenderers who are in good standing with the **Bargaining Council for the Civil Engineering Industry (BCCEI)** at the time of the tender award will be declared responsive. Tenderers must attach such proof to the schedule titled **Declaration in Respect of Compliance with Labour Legislation** or obtain such upon being requested to do so in writing and within the period contained in such a request, failing which their tenders will be declared non-responsive.
- C.2.1.4.7 Good standing with SARS/Tax Clearance
Bidders are required to submit their unique personal identification number (pin) issued by SARS to enable the organ of state to view the taxpayer's profile and tax status. Application for the tax compliance status (TCS) certificate or pin may also be made via e-filing. In order to use this provision, taxpayers will need to register with SARS as e-filers through the website www.SARS.gov.za. Bidders may also submit a printed TCS certificate together with the bid (valid and original). In Bids where Consortia/Joint Venture/Sub-contractors are involved each party must submit a separate and Original Valid Tax Clearance Certificate.
- C.2.3 Check documents

Delete the clause content and replace with the following:
The Tenderer should check the tender documents on receipt for completeness, missing or duplicated pages, indistinct figures or writing and any obvious errors. The Tenderer must notify the Employer's agent at once of any such problems identified
- C.2.7 Clarification meeting

Add the following after the second sentence:
The arrangements for the site visit/clarification meeting are as stated on the General Tender Information page and in the Responsiveness Criteria (if applicable). Failure to provide proof of attendance of this clarification meeting will result in disqualification of the tender. The applicable schedule in the returnable documents must be signed by employer **or** employer's agent as proof of attendance or the signed (signed by attending tenderers) attendance register should be attached to this schedule.

Tenderers should be represented at the clarification meeting by a person who is suitably qualified and experienced to comprehend the implications of the work involved. The employer or employer's agent cannot

be held liable for any information discussed during the Clarification Meeting not correctly carried forward to the authorised person signing the tender document.

C.2.8 Seek Clarification

Add the following after the first sentence:

The tenderer warrants that it has:

- a) inspected the Specifications and read and fully understood the Conditions of Contract.
- b) read and fully understood the whole text of the Specifications and Price Schedule and thoroughly acquainted itself with the nature of the goods proposed and generally of all matters which may influence the Contract.
- c) visited the site(s) where delivery of the proposed works will take place, carefully examined existing conditions, the means of access to the site(s), the conditions under which the delivery is to be made, and acquainted itself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials, plant and construction equipment to and from the site(s) and made the necessary provisions for any additional costs involved thereby.
- d) requested the Employer to clarify the requirements contained in the Specifications and Price Schedule, the exact meaning or interpretation of which is not clearly intelligible to the tenderer.
- e) received any notices to the tender documents which have been issued in accordance with the Employer's SCM Policy.

The Employer will therefore not be liable for the payment of any extra costs resulting from any claim submitted by the tenderer arising from any alleged ambiguity or uncertainty contained in the tender document.

C.2.11 Alterations to documents

Delete the first sentence and replace with the following:

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer in writing, or necessary to correct errors made by the tenderer.

C.2.12 Alternative tender offers

C.2.12.1 *Add the following to C.2.12.1 at the end of the first sentence:*

If a tenderer wishes to submit an alternative tender offer, he shall do so as a separate offer on a separate set of tender documents. The alternative tender offer shall be submitted in a separate sealed envelope on a separate Form of Offer, both clearly marked "Alternative Tender" in order to distinguish it from the main tender offer.

While it is not necessary to duplicate all parts of the main tender offer, the alternative tender offer shall be supported by the following documents as applicable:

- a) the schedule that compares the alternative(s) offered with the requirements of the issued tender documents
- b) preliminary designs, calculations, drawings and all other pertinent technical information and characteristics must be submitted with the alternative tender offer, in order to enable the Employer to evaluate the efficacy of the alternatives proposed
- c) revised Bills of Quantities, or parts thereof, highlighting the changes made, together with a revised Summary, the total of which has been carried to the Form of Offer
- d) details of any proposed amendments to the Pricing Assumptions

An alternative of the highest ranked acceptable main tender offer that is priced higher than the main tender offer may be recommended for award, provided that the ranking of the alternative tender -offer is higher than the ranking of the next ranked acceptable main tender offer.

The Employer's costs in confirming the acceptability of the alternative offer will be, *inter alia*, considered in considering the alternative offer.

The Employer will not be bound to consider alternative tenders and shall have sole discretion in this regard.

If the alternative is accepted, the Contractor shall accept full responsibility that the alternative offer complies in all respects with the Employer's standards and requirements.

C.2.13 Submitting a tender offer

C.2.13.1 *Add the following to C.2.13.1 at the end of the first sentence:*

Where the tendering entity is a joint venture it is recommended that the standard CIDB Joint Venture Agreement be used.

C.2.13.2 *Delete the following word from C.2.13.2 and add the following sentence after the first sentence:*
Delete “either electronically (if they were issued in electronic format) or”. No electronic submissions will be accepted unless specifically requested by the Employer in writing.

C.2.13.3 *Add the following to C.2.13.3:*
Parts of each tender offer communicated on paper shall be submitted as an original, plus 0 (nil) copies.

C.2.13.4 *Add the following after the first sentence of C.2.13.4:*
The tender shall be signed by a person duly authorised to do so. Tenders submitted by joint ventures of two or more firms shall be accompanied by the document of formation of the joint venture, authenticated by a notary public or other official deputed to witness sworn statements, in which is defined precisely the conditions under which the joint venture will function, its period of duration, the persons authorised to represent and obligate it, the participation of the several firms forming the joint venture, and any other information necessary to permit a full appraisal of its functioning.

C.2.13.5 *Delete the clause and replace with the following.*
The tender submission details are all described on the General Tender Information page.

The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:

Location of tender box: Langeberg Municipal Office

Physical address: Langeberg Municipality, Main Street 28, Ashton

Identification details: TENDER NO. 64/2024

Title of tender: CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Sealed tenders with the name and address of the tenderer, the tender No. and title and the closing date indicated on the envelope, must be placed in the appropriate official tender box at the abovementioned address.

C.2.13.6 *Add the following to C.2.13.6:*
A two-envelope procedure will **not** be followed (C.3.5).

C.2.13.10 *Add the following new Clauses after C.2.13.9 and before C.2.14:*
By signing the offer part of C1.1 Form of Offer and Acceptance the tenderer declares that all information provided in the tender submission is true and correct.

C.2.13.11 The Employer shall not formally issue tender documents in electronic format and shall only issue tender documents in hardcopy. An electronic version of the issued tender documents, or elements thereof, may be made available to the tenderer at the Employer's discretion, upon written request in terms of this clause, subject to the following:

- a) No Electronic copies of the issued tender documents including BOQ, or parts thereof, will be provided to tenderers.
- b) The Employer shall not accept tenders submitted in electronic format. Only those tenders that have been completed on the issued hard copy tender document shall be considered.
- c) Where Addenda have been issued which amend the Bills of Quantities, then the printed Bills of Quantities shall take these into account. The pages of the issued Bills of Quantities should not be removed from the tender document.
- d) The Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. Tenderers are alerted to the fact that electronic versions of the tender documents may not reflect any notices or addenda that amend the tender document.
- e) Any non-compliance with these provisions, including effecting any unauthorised alterations to the tender documents as contemplated in C.2.11, shall render the tender non-responsive. The Employer reserves the right to take any action against such tenderer allowed in law including, in circumstances where the tender had already been awarded, the right to cancel the contract.

C.2.15 Closing time

C.2.15.1 *Add the following to C.2.15.1 after the first sentence:*
The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.

C.2.16 Tender offer validity

C.2.16.1 *Add the following to C.2.16.1 after the first sentence:*
The tender offer validity period is **120 days**.

C.2.16.2 *Delete the clause and replace with the following:*
Notwithstanding the period stated above, bids shall remain valid for acceptance for a period of twelve (12) months after the expiry of the original validity period, unless the Municipality is notified in writing of anything to the contrary by the bidder. The validity of bids may be further extended by a period of not more than six months subject to mutual agreement and administrative processes and upon approval by the Municipal Manager.

C.2.17 Clarification of tender offer after submission

Add the following to C.2.17 at the end of the third sentence:
A tender will be rejected as non-responsive if the tenderer fails to provide any clarification or supporting documents requested by the Employer within the time for submission stated in the Employer's written request for such clarification or documents.

C.2.18 Provide other material

C.2.18.1 *Delete the following word in C.2.18.1:*
"notarized"

Add the following to C.2.18.1 at the end of the first paragraph:
Provide, on written request by the Employer, where the transaction value (tendered amount) inclusive of VAT **exceeds R 10 million:**

- a) audited annual financial statement for the past 3 years, or for the period since establishment if established during the past 3 years, if required by law to prepare annual financial statements for auditing;
- b) a certificate signed by the tenderer certifying that the tenderer has no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days;
- c) particulars of any contracts awarded to the tenderer 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;
- d) a statement indicating whether any portion of the goods or services are expected to be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality or municipal entity is expected to be transferred out of the Republic.

Each party to a Consortium/Joint Venture shall submit separate certificates/statements in the above regard.

C.2.18.3 *Add the following Clauses after C.2.18.2 and before Clause C.2.19:*
Tenderers shall fully cooperate with the Employer's external service provider appointed to perform a due diligence review and risk assessment upon receipt of such written instruction from the Employer.

Failure to fully cooperate could result in a tender being declared as non-responsive.

C.2.18.4 Compliance with Occupational Health and Safety Act, 85 of 1993
Tenderers are to note the requirements of the Occupational Health and Safety Act, 85 of 1993 and the Construction Regulations, 2014 issued in terms of Section 43 of the Act. The Tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the Tenderer shall submit with his tender or upon request, appended to Schedule 21: Health and Safety Plan in T2.2: Returnable Schedules, a draft Health and Safety Plan in respect of the Works in sufficient detail to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act, Regulations and Health and Safety Specification in Part C6 in the Scope of Work.

Such Health and Safety Plan shall cover inter-alia the following details:

- (1) Management Structure, Site Supervision and Responsible Persons including a succession plan.
- (2) Contractor's induction training programme for employees, sub-contractors, and visitors to the site.

- (3) Health and safety precautions and procedures to be adhered to, to ensure compliance with the Act, Regulations and Safety Specifications.
- (4) Regular monitoring procedures to be performed.
- (5) Regular liaison, consultation, and review meetings with all parties.
- (6) Site security, welfare facilities and first aid.
- (7) Site rules and fire and emergency procedures.

Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The Contractor shall prepare and maintain a Health and Safety File in respect of the project, which shall always be available for inspection on Site and handed over to the Employer on Final Completion of the project.

The Contractor is required to submit to the Employer the Occupational Health and Safety Agreement (included in C1.5 of the Contract Document) and a letter of good standing from the Compensation Commissioner, or a licensed compensation insurer, within 14 days after the Commencement Date of the Contract.

C.2.23 Certificates

C.2.23.1 *Add the following after the first sentence:*

The tenderer is required to submit the following:

Evidence of tax compliance

Tenderers shall be registered with the South African Revenue Service (SARS) and their tax affairs must be in order and they must be tax compliant subject to the requirements of clause C.2.1.4.2.h. In this regard, it is the responsibility of the Tenderer to submit evidence in the form of a valid Tax Clearance Certificate issued by SARS to the Employer at the Supplier Management Unit located within the Supplier Management / Registration Office 28 Main Street, Ashton. (Tel 023 656 8200) or included with this tender. The tenderer must also provide its Tax Compliance Status PIN number on the **Compulsory Enterprise Questionnaire**

Each party to a Consortium/Joint Venture shall submit a separate Tax Clearance Certificate.

Before making an award, the Langeberg Municipality must verify the bidder's tax compliance status. Where the recommended bidder is not tax compliant, the bidder should be notified of the non-compliant status and be requested to submit to the Langeberg Municipality, within 7 working days, written proof from SARS that they have made arrangement to meet their outstanding tax obligations. The proof of tax compliance submitted by the bidder must be verified by the Langeberg Municipality via CSD or e-Filing. The Langeberg Municipality should reject a bid submitted by the bidder if such bidder fails to provide proof of tax compliance within the timeframe stated herein.

Only foreign suppliers who have answered "NO" to all the questions contained in the Questionnaire to Bidding Foreign Suppliers section on the **Details of Tenderer** pages of the tender submission, are not required to register for a tax compliance status with SARS.

C.2.23.2 Broad-Based Black Economic Empowerment Status Level Documentation

In order to qualify for preference points, it is the responsibility of the tenderer to submit documentary proof, either as certificates, sworn affidavits or any other requirement prescribed in terms of the B-BBEE Act, of its B-BBEE status level of contribution in accordance with the applicable Codes of good practise as issued by the Department of Trade and Industry, to the LANGEBERG MUNICIPALITY at the Supplier Management Unit located within the Supplier Management / Registration Office, 28 Main Street, Ashton. (Tel: 023 626 8200) or included with the tender submission.

Consortiums/Joint Ventures will qualify for preference points, provided that the **entity** submits the relevant certificate/scorecard in accordance with the applicable codes of good practise. Note that, in the case of unincorporated entities, a verified consolidated B-BBEE scorecard must be submitted in the form of a certificate with the tender.

Tenderers are further referred to the content of the **Preference Schedule** for the full terms and conditions applicable to the awarding of preference points.

The applicable code for this tender is the **Amended Codes for Measuring Broad-Based Black Economic Empowerment in the Construction Sector**.

The tenderer shall indicate in Section 25 of the **Preference Schedule** the Level of Contribution in respect of the enterprise status or structure of the tendering entity (the supplier).

C.2.24 *Add the following new clause after C.2.23.2*

Proposed Deviations and Qualifications

Where the tenderer cannot tender in all respects in accordance with the provisions contained in the tender documents, all deviations therefrom shall be clearly and separately listed in the schedule titled **Proposed Deviations and Qualifications by Tenderer** in T2.2 Returnable Schedules, or in a tenderer's covering letter expressly referenced in this schedule.

The tenderer accept that the Employer will examine such deviations in terms of clause C.3.8.2 and shall not be bound to accept any such deviations or qualifications.

It must be clearly stated by the tenderer whether the sum tendered in the Tender Offer includes for all such deviations or qualifications listed or referred to in the schedule titled **Proposed Deviations and Qualifications by Tenderer** or not.

C.3 The Employer's undertakings

C.3.2 Issue Addenda

Delete the first sentence and replace with:

If necessary, issue addenda in writing that may amend or amplify the tender documents to each tenderer during the period from the date the tender documents are available until one week before the tender closing time stated in the Tender Data. The Employer reserves its rights to issue addenda less than one week before the tender closing time in exceptional circumstances.

Add the following to C.3.2 at the end of the paragraph:

Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile, or registered post. It is therefore of great importance that the contact details provided during the compulsory clarification meeting is legible and contactable.

C3.4 Opening of tender submissions

Add the following to C.3.4.2 at the end of the paragraph:

The location for opening of the tender offers is the Tender Submission Office at the address as stated on the General Tender Information page.

C.3.8 Test for responsiveness

C.3.8.2 *Replace the final sentence of C.3.8.2 with the following:*

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

C.3.8.3 *Add the following after clause C.3.8.2*

The Employer reserves the right to accept a tender offer which does not, in the Employer's opinion, materially and/or substantially deviate from the terms, conditions, and specifications of the tender documents.

C.3.9 Arithmetical errors, omissions, and discrepancies

C.3.9.5 *Add the following after clause C.3.9.4*

In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it because they are not priced, either excessively low or high, or not in proper balance with other rates or lump sums, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.

The Tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the tender offer in accordance with this clause.

Should the Tenderer fail to amend his tender in a manner acceptable to and within the time stated by the Employer, the Employer may declare the tender as non-responsive.

C.3.10 Clarification of a tender offer

C3.10 *Delete the clause and replace with the following:*

The Employer may, after the closing date, request additional information or clarification from any tenderer, in writing on any matter affecting the evaluation of the tender offer or that could give rise to ambiguity in a contract arising from the tender offer, which written request and related response shall not change or affect their competitive position or the substance of the tenderer's offer.

C.3.11 Evaluation of tender offers

C.3.11.2 *Add the following Clauses after clause C.3.11.1 and before Clause C.3.12*

Where the scoring of functionality forms part of a bid process, each member of the Bid Evaluation Committee must individually score functionality. The individual scores must then be interrogated and calibrated if required where there are significant discrepancies. The individual scores must then be added together and averaged to determine the final score.

C.3.11.3 The tender will be evaluated in terms of the requirements of the Preferential Procurement Regulations of 2022 as follows:

C.3.11.3.1 The preference point system applicable to this tender is the 80/20 preference point system.

C.3.11.3.2 Price and specific goals will be scored, as relevant, to two decimal places.

C.3.11.3.3 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.

Points will be awarded to tenderers who are eligible for preferences in terms of the **Preference Schedule** (where preferences are granted in respect of B-BBEE contribution) which is included in T2.2 Returnable Schedules.

The terms and conditions of the **Preference Schedule** shall apply in all respects to the tender evaluation process and any subsequent contract.

In addition, the various deemed B-BBEE Status Level of Contributor in accordance with the relevant Codes can be attained and such tenderers must be awarded the appropriate number of points.

It should be noted that such Deemed B-BBEE Status Level of Contribution can be enhanced or discounted in accordance with the relevant clauses in the applicable Codes.

C.3.11.4 Risk Analysis

Notwithstanding compliance with regard to CIDB registration or any other requirements of the tender, the employer will perform a risk analysis in respect of the following:

- a) reasonableness of the financial offer
- b) reasonableness of unit rates and prices
- c) the tenderer's ability to fulfil its obligations in terms of the tender document, that is, that the tenderer can demonstrate that he/she/it possesses the necessary professional and technical qualifications, professional and technical competence, financial resources (Bank Ratings will be requested), equipment and other physical facilities, managerial capability, reliability, capacity, experience, reputation, personnel to perform the contract, etc.; the Employer reserves the right to consider a tenderer's existing contracts with the Employer in this regard
- d) any other matter relating to the submitted bid, the tendering entity, matters of compliance, verification of submitted information and documents.

The conclusions drawn from this risk analysis will be used by the Employer in determining the acceptability of the tender offer in terms of C.3.13.

C.3.13 Acceptance of tender offer

Delete first sentence of C.3.13 and replace with the following):

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

Delete C.3.13 a) and replace with the following):

- a) is not under restrictions, has any principals who are under restrictions, or is not currently a supplier to whom notice has been served for abuse of the supply chain management system, preventing participation in the employer's procurement;

Add the following below C.3.13 f)

If an award cannot be made in terms of anything contained herein, the Employer reserves the right to consider the next ranked tenderer(s). The Employer does not bind himself to accept the lowest priced tender, highest evaluation points tender or any tender offer. The Employer has the right to accept any part of a tender as he may deem expedient subject to negotiation with the successful tenderer for the whole tender.

- C.3.13.1 The Employer reserves the right not to make an award, or revoke an award already made, where the implementation of the contract may result in reputational risk or harm to the Langeberg Municipality as a result of (inter alia):
 - a) reports of poor governance and/or unethical behaviour;
 - b) association with known family of notorious individuals;
 - c) poor performance issues, known to the Langeberg Municipality;
 - d) negative social media reports; and
 - e) adverse assurance (e.g. due diligence) report outcomes.
- C.3.13.2 The Employer reserves the right to nominate an alternative bidder at the time when an award is made and in the event that a contract is terminated during the execution thereof, the LANGEBERG MUNICIPALITY may consider the award of the contract, or non-award, to the alternative bidder in terms of the procedures included its SCM Policy.
- C.3.13.3 The Employer shall notify the successful tenderer in writing of the decision of the Employer's Bid Adjudication Committee to award the tender to the successful tenderer. No rights shall accrue to the successful tenderer in terms of this notice.
- C.3.13.4 The Employer shall, at the same time as notifying the successful tenderer of the Bid Adjudication Committee's decision to award the tender to the successful tenderer, also give written notice to the other tenderers informing them that they have been unsuccessful.
- C.3.17 Provide copies of the contract

Add the following after the first sentence:

The number of paper copies of the signed contract to be provided by the Employer is one.

- C.3.19 *Add the following Clauses after C.3.18:*
Negotiations with preferred tenderers
The Employer may negotiate the final terms of a contract with tenderers identified through a competitive tendering process as preferred tenderers provided that such negotiation:
 - a) does not allow any preferred tenderer a second or unfair opportunity;
 - b) is not to the detriment of any other tenderer; and
 - c) does not lead to a higher price than the tender as submitted.

If negotiations fail to result in acceptable contract terms, the Municipal Manager (or his delegated authority) may terminate the negotiations and cancel the tender or invite the next ranked tenderer for negotiations. The original preferred tenderer should be informed of the reasons for termination of the negotiations. If the decision is to invite the next highest ranked tenderer for negotiations, the failed earlier negotiations may not be reopened by the LANGEBERG MUNICIPALITY.

Minutes of any such negotiations shall be kept for record purposes.

The provisions of this clause will be equally applicable to any invitation to negotiate with any other tenderers.

In terms of the PPPFA Regulations, 2017, tenders must be cancelled in the event that negotiations fail to achieve a market related price with any of the three highest scoring tenderers.

C.3.20

Claims arising after submission of tender

No claim for any extras arising out of any doubt or obscurity as to the true intent and meaning of anything shown on the Contract Drawings or contained in the Conditions of Contract, Scope of Work and Pricing Data, will be admitted by the Employer/Employer's Agent after the submission of any tender and the Tenderer shall be deemed to have:

- a) inspected the Contract Drawings and read and fully understood the Conditions of Contract.
- b) read and fully understood the whole text of the Scope of Work and Pricing Data and thoroughly acquainted himself with the nature of the works proposed and generally of all matters which may influence the Contract.
- c) visited the site of the proposed works, carefully examined existing conditions, the means of access to the site, the conditions under which the work is to be done and acquainted himself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials, plant and construction equipment to and from the site and made the necessary provisions for any additional costs involved thereby.
- d) requested the Employer or his duly authorised agent to make clear the actual requirements of anything shown on the Contract Drawings or anything contained in the Scope of Work and Pricing Data, the exact meaning or interpretation of which is not clearly intelligible to the Tenderer.
Before submission of any tender, the Tenderer should check the number of pages, and if any are found to be missing or duplicated, or the figures or writing indistinct, or if the Pricing Data contain any obvious errors, the tenderer must apply to the Employer/Employer's Agent at once to have the same rectified, as no liability will be admitted by the Employer/Employer's Agent in respect of errors in any tender due to the foregoing.
- e) received any Addenda to the tender documents which have been issued in accordance with the Employer's Supply Chain Management Policy.

C.3.21

General supply chain management conditions applicable to tenders

In terms of its Supply Chain Management Policy the Employer may not consider a tender unless the provider who submitted the tender:

- a) has furnished the Employer with that provider's:
 - full name;
 - identification number or company or other registration number; and
 - tax reference number and VAT registration number, if any;
- b) has indicated whether:
 - the provider is in the service of the state, or has been in the service of the state in the previous twelve months;
 - the provider is not a natural person, whether any of the directors, managers, principal shareholders or stakeholders is in the service of the state, or has been in the service of the state in the previous twelve months;
 - whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to above is in the service of the state, or has been in the service of the state in the previous twelve months; or
- c) irrespective of the procurement process followed, the Employer is prohibited from making an award to:
 - a person who is in the service of the state;
 - a juristic entity of which any director, manager, principal shareholder or stakeholder is in the service of the state;
 - an advisor or consultant contracted with the Employer, or
 - a person, advisor or corporate entity involved with the bid specification committee, or a director of such corporate entity.

The Contract Price shall not be subject to any contract price adjustment, the rates and prices tendered in the bills of quantities shall. In this regard, tenderers shall complete Schedule 1, Part T2.2: Returnable Schedules: Compulsory Enterprise Questionnaire. Failure to complete this Schedule may result in the tender not being considered.

C.3.22

Combating abuse of the Supply Chain Management Policy

In terms of the Municipality's Supply Chain Management Policy, the Employer may reject the tender of any tenderer if that tenderer or any of its directors has:

- a) failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months
- b) failed, during the last five years, to perform satisfactorily on a previous contract with the Municipality or any other organ of state after written notice was given to that tenderer that performance was unsatisfactory.

- c) abused the supply chain management system of the Employer or has committed any improper conduct in relation to this system.
- d) been convicted of fraud or corruption during the past five years.
- e) wilfully neglected, reneged on, or failed to comply with any government, municipal or other public sector contract during the past five years; or
- f) been listed with the Register of Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004) or has been listed on National Treasury's database as a person or juristic entity prohibited from doing business with the public sector.

In this regard, tenderers shall complete Part T2.2: Returnable Schedules: Declaration of Tenderer's Past Supply Chain Management Practices (in terms of the Municipal Finance Management Act). Failure to complete this Schedule may result in the tender not being considered.

C.3.23 UIF payments

The Tenderer shall submit to the Employer a letter from the Industrial Council indicating his good standing with regard to UIF payments upon being requested to do so.

C.3.24 Price variations

Tender document or part thereof. Only those tenders that have been completed on the issued hard copy tender final and binding throughout the period of the contract. However, price adjustments for variations in the costs of special materials may be applicable where the Employer/Employer's Agent specifies such materials and the relevant information in the Contract Data.

Notwithstanding the above, if, as a result of any extension of time granted, the duration of the contract period exceeds one year, the contract will automatically be subject to contract price adjustment for that period by which the extended contract period exceeds such one year.

Adjustment in rates or prices shall be subject to the provisions of Part C1.2: Contract Data.

C.3.25 Requests for contract documents, or parts thereof, in electronic format

The Employer shall not formally issue tender documents in electronic format as contemplated in C.2.13.2 and C.2.13.3 and shall only issue tender documents in hardcopy. An electronic version of the issued tender documents may be made available to the tenderer, upon written request in terms of this clause, subject to the following:

- a) Electronic copies of the contract document, or parts thereof, will only be provided to tenderers who have been issued with the tender documents as contemplated in C.1.2 in hardcopy.
- b) The electronic version shall not be regarded as a substitute for the issued tender documents.
- c) The Employer shall not accept tenders submitted in electronic format. Tenderers may **not** complete and submit a printed copy of the electronic version of the tender document.
- d) The Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. The Employer further does not guarantee that the electronic version corresponds with the issued tender documents in all respects. Tenderers are alerted to the fact that electronic versions of the tender documents may not reflect any notices or addenda that amend the tender document.
- e) Any non-compliance with these provisions, including effecting any unauthorised alterations to the tender document as contemplated in C.2.11, shall render the tender invalid. The Employer reserves the right to take any action against such tenderer allowed in law including, in circumstances where the tender had already been awarded, the right to cancel the contract.
- f) In requesting the electronic version of the tender document or parts thereof, the tenderer is deemed to have read, understood, and accepted all of the above conditions.

C.3.26 Bidders who do not submit B-BBEE Status Level Verification Certificates or are non-compliant contributors to B-BBEE do not qualify for preference points for B-BBEE but should not be disqualified from the bidding process. They will score points out of 80 for price only and zero (0) points out of 20 for B-BBEE. A trust, consortium or joint venture must submit a consolidated B-BBEE Status Level Verification Certificate for every separate bid

Annex C
(normative)

Standard Conditions of Tender

- C.1 General
- C.1.1 Actions
- C.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 C.2 and C.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.
- C.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.
- Note:*
- 1) *A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.*
- 2) *Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.*
- C.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.
- C.1.2 Tender Documents issued by the employer for the purpose of a tender offer are listed in the tender data.
- C.1.3 Interpretation
- C.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.
- C.1.3.2 These conditions of tender, the tender data and tender schedules which are required for tender evaluation purposes, shall form part of any contract arising from the invitation to tender.
- C.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 tenderer 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 tenderer who employs that employee.
 - b) comparative offer means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
 - c) corrupt practice means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;
 - d) fraudulent practice means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;
- C.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.
- C.1.5 Cancellation and Re-Invitation of Tenders
- C.1.5.1 An employer may, prior to the award of the tender, cancel a tender if-

- a) due to changed circumstances, there is no longer a need for the engineering and construction works specified in the invitation;
- b) funds are no longer available to cover the total envisaged expenditure; or
- c) no acceptable tenders are received.
- d) there is a material irregularity in the tender process.

C.1.5.2 The decision to cancel a tender invitation must be published in the same manner in which the original tender invitation was advertised

C.1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

C.1.6 Procurement procedures

C.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to C.3.13, be concluded with the tenderer who in terms of C.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.

C.1.6.2 Competitive negotiation procedure

C.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 C.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

C.1.6.2.2 All responsive tenderers or at least a minimum of not less than three responsive tenderers that are highest ranked in terms of the evaluation criteria stated in the tender data shall be invited to enter into competitive negotiations based on the principle of equal treatment, keeping confidential the proposed solutions and associated information.

Notwithstanding the provisions of C.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.

C.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to revise their 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.

C.1.6.2.4 The contract shall be awarded in accordance with the provisions of C.3.11 and C.3.13 after tenderers have been requested to submit their best and final offer.

C.1.6.3 Proposal procedure using the two stage-system

C.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.

C.1.6.3.2 Option 2

C.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.

C.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.

C.2 Tenderer's obligations

C.2.1 Eligibility

C.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.

- C.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.
- C.2.2 Cost of tendering
- C.2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.
- C.2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.
- C.2.3 Check documents
Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.
- C.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.
- C.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.
- C.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.
- C.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.
- C.2.8 Seek clarification
Request clarification of the tender documents, if necessary, by notifying the employer at least five (5) working days before the closing time stated in the tender data.
- C.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.
- C.2.10 Pricing the tender offer
- C.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 fourteen (14) days before the closing time stated in the tender data.
- C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.
- C.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.
- C.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.
- C.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.
- C.2.12 Alternative tender offers

- C.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.
- C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.
- C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.
- C.2.13 Submitting a tender offer
 - C.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.
 - C.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.
 - C.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.
 - C.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.
 - C.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
 - C.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.
 - C.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.
 - C.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.
 - C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.
- C.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.
- C.2.15 Closing time
 - C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.
 - C.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.
- C.2.16 Tender offer validity
 - C.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.
 - C.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.

- C.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. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).
- C.2.16.4 Where a tender submission is to be substituted, a tenderer must submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".
- C.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 C.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.*
- C.2.18 Provide other material
- C.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.
- C.2.18.2 Dispose of samples of materials provided for evaluation by the employer, where required.
- C.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.
- C.2.20 Submit securities, bonds, and policies
If requested, submit for the employer's acceptance before formation of the contract, all securities, bonds, guarantees, policies, and certificates of insurance required in terms of the conditions of contract identified in the contract data.
- C.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.
- C.2.22 Return of other tender documents
If so, instructed by the employer, return all retained tender documents within twenty-eight (28) days after the expiry of the validity period stated in the tender data.
- C.2.23 Certificates
Include in the tender submission or provide the employer with any certificates as stated in the tender data.
- C.3 The employer's undertakings
- C.3.1 Respond to requests from the tenderer
- C.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up to five (5) working days before the tender closing time stated in the Tender Data and notify all tenderers who collected tender documents.
- C.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:
- 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;
 - the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
 - in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.
- C.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 (3) working 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 collected tender documents.

- C.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.
- C.3.4 **Opening of tender submissions**
 - C.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.
 - C.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points claimed for its BBEE status level and time for completion for the main tender offer only.
 - C.3.4.3 Make available the record outlined in C.3.4.2 to all interested persons upon request.
- C.3.5 **Two-envelope system**
 - C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.
 - C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.
- C.3.6 **Non-disclosure**
Not disclose to tenderers, or to any other person not officially concerned with such processes, information relating to the evaluation and comparison of tender offers, the final evaluation price and recommendations for the award of a contract, until after the award of the contract to the successful tenderer.
- C.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.
- C.3.8 **Test for responsiveness**
 - C.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.
 - C.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 other tenderers presenting responsive tenders if it were to be rectified.

Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.
- C.3.9 **Arithmetical errors, omissions, and discrepancies**

- C.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.
- C.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 C.3.11 for:
- a) the gross misplacement of the decimal point in any unit rate;
 - b) omissions made in completing the pricing schedule or bills of quantities; or c) arithmetic errors in:
 - (i) line-item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - (ii) the summation of the prices.
- C.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.
- C.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.
 - 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.
- C.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.
- C.3.11 Evaluation of tender offers
The Standard Conditions of Tender standardize the procurement processes, methods, and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.

Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers. Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:	
Requirement	Qualitative interpretation of goal
Fair	The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.
Equitable	Terms and conditions for performing the work do not unfairly prejudice the interests of the parties.
Transparent	The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.
Competitive	The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.
Cost effective	The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.

The activities associated with evaluating tender offers are as follows:

- a) Open and record tender offers received
- b) Determine whether or not tender offers are complete
- c) Determine whether or not tender offers are responsive
- d) Evaluate tender offers
- e) Determine if there are any grounds for disqualification
- f) Determine acceptability of preferred tenderer
- g) Prepare a tender evaluation report
- h) Confirm the recommendation contained in the tender evaluation report

- C.3.11.1 **General**
The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.
- C.3.12 **Insurance provided by the employer**
If requested by the proposed successful tenderer, submit for the tenderer's information the policies and / or certificates of insurance which the conditions of contract identified in the contract data, require the employer to provide.
- C.3.13 **Acceptance of tender offer**
Accept the tender offer; if in the opinion of the employer, it does not present any risk and only if the tenderer:
- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
 - b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract;
 - c) has the legal capacity to enter into the contract;
 - d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her 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.
- C.3.14 **Prepare contract documents**
- C.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:
- a) addenda issued during the tender period,
 - b) inclusion of some of the returnable documents and
 - c) other revisions agreed between the employer and the successful tenderer.
- C.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.
- C.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.
- C.3.16 **Registration of the award**
An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the CIDB Register of Projects.
- C.3.17 **Provide copies of the contracts**
Provide to the successful tenderer the number of copies stated in the Tender Data of the signed copy of the contract as soon as possible after completion and signing of the form of offer and acceptance.
- C.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.

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T2.1 List of Returnable Documents

The tenderer must complete the following Returnable Documents in non-erasable **black ink**:

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T2.2 Returnable Schedules

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Schedule 1: 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 4a: National Treasury Central Supplier Database registration number:

Section 4b: SARS Tax Compliance Status PIN:

Section 5: 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 6: Particulars of companies and close corporations

Company registration number.....

Close corporation number.....

Tax reference number.....

Section 7: MBD4 – Attached to this document

Section 8: MBD6 – Attached to this document

Section 9: MBD8 – Attached to this document

Section 10: MBD9 – Attached to this document

Section 11: Foreign Bidding Suppliers	
Is tenderer the accredited representative in South Africa for the Goods / Services / Works offered?	☐ Yes ☐ No If yes, enclose proof
Is tenderer a foreign based supplier for the Goods / Services / Works offered?	☐ Yes ☐ No If yes, answer the Questionnaire to Bidding Foreign Suppliers (below)
Questionnaire to Bidding Foreign Suppliers	
a) Is the tenderer a resident of the Republic of South Africa or an entity registered in South Africa?	☐ Yes ☐ No
b) Is the tenderer a resident of the Republic of South Africa or an entity registered in South Africa?	☐ Yes ☐ No
c) Does the tenderer have a permanent establishment in the Republic of South Africa?	☐ Yes ☐ No
d) Does the tenderer have any source of income in the Republic of South Africa?	☐ Yes ☐ No
e) Is the tenderer liable in the Republic of South Africa for any form of taxation?	☐ Yes ☐ No
The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise: i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order; ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004 or Database of Restricted Suppliers; iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption; iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and 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 ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

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CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 2: Clarification meeting attendance certificate

Refer to tender conditions C.2.7 in section T1.2 Tender data

This is to certify that I/we,
(the representative(s))

representing (the tenderer)

of address

.....

.....

.....

Telephone and cellphone number

fax number

on (date)

attended the clarification meeting, have examined the Site of the Works and its surroundings for which I/we am/are submitting this Tender and have, so far as is practicable, familiarized myself/ourselves with all the information, risks, contingencies and other circumstances which may influence of affect my/our Tender.

Attendance of the above person(s) at the Clarification Meeting is confirmed by:

EMPLOYER'S AGENT / REPRESENTATIVE: (Name)

SIGNED BY EMPLOYER'S AGENT / REPRESENTATIVE:

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

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CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 3: Certificate of Independent Tender determination (MBD9)

I, the undersigned, in submitting this tender for TENDER NO. 64/2024: **CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU** in response to the invitation for the tender made by the Langeberg Municipality, 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 Tenderer)

1. I have read, and I understand the contents of this Certificate;
2. I understand that this tender will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the tenderer to sign this Certificate, and to submit this tender on behalf of the tenderer;
4. Each person whose signature appears on this tender has been authorized by the tenderer to determine the terms of, and to sign, the tender, on behalf of the tenderer;
5. For the purposes of this Certificate and this tender, I understand that the word "competitor" shall include any individual or organization, other than the tenderer, whether affiliated with the tenderer or not, who:
 - (a) has been requested to submit a tender in response to this invitation to tender;
 - (b) could potentially submit a tender in response to this invitation to tender, based on their qualifications, abilities, or experience; and
 - (c) provides the same goods and services as the tenderer and/or is in the same line of business as the tenderer;
6. The tenderer has arrived at this tender independently from, and without consultation, communication, agreement, or arrangement with any competitor. However, communication between partners in a joint venture or consortium¹ will not be construed as collusive tendering;
7. In particular (without limiting the generality of paragraph 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 tender;
 - (e) the submission of a tender which does not meet the specifications and conditions of the tender; or
 - (f) tendering with the intention not to win the tender;
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 invitation to tender relates;
9. The terms of this tender have not been, and will not be, disclosed by the tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender 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 tenders and contracts, tenders 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.

¹Joint 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 ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

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CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 4: Certificate of Authority (for Companies/Joint Ventures/etc.)

Assurance shall be given at the time of submission of the tender that the tender has been signed by someone properly authorised thereto by resolution of the Directors, Members or Partners. Tenderers shall submit with their tenders the following information:

Single Company, Close Corporation or Partnership

Signatories for companies shall confirm their authority by attaching to this form a copy of the relevant resolution of the board of directors, duly signed and dated.

By resolution of the board of directors taken on (Date)

Mr/Ms (Print Name)

has been duly authorized to sign all documents in connection with this tender / contract on behalf of

(Print Company Name).....

Signed on behalf of Company

In his/her capacity as.....

Date.....

Joint Ventures

We, the undersigned, are submitting this tender offer in joint venture and hereby authorize;

Mr/Ms, authorised signatory

of the company, close corporation, or partnership.....

acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

Date.....

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner		Signature, Name & Designation
		Signature, Name & Designation
		Signature, Name & Designation

Note: A copy of the Joint Venture Agreement, showing clearly the **percentage contribution of each partner** to the joint venture, shall be appended to this schedule. Lead partner need to be clearly stated.

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

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CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 5: Declaration of Tenderer's past Supply Chain Management practices (MBD8)

Where the entity tendering is a joint venture, each party to the joint venture must sign a declaration in terms of the Municipal Finance Management Act, 56 of 2003, and attach it to this schedule.

- 1 The tender offer of any tenderer may be rejected if that tenderer or any of its directors/members 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).

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

Item	Question	Yes	No
2.1	Is the Tenderer or any of its directors listed on the National Treasury's Database of Restricted Suppliers as a company or person prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied). The Database of Restricted Suppliers now resides on the National Treasury's website www.treasury.gov.za and can be accessed by clicking on its link at the bottom of the home page.	Yes ☐	No ☐
2.1.1	If so, furnish particulars:		
2.2	Is the Tenderer 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, 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 ☐
2.2.1	If so, furnish particulars:		
2.3	Was the Tenderer 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 ☐
2.3.1	If so, furnish particulars:		
2.4	Does the Tenderer 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 ☐

2.4.1	If so, furnish particulars:		
2.5	Was any contract between the Tenderer 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 ☐
2.5.1	If so, furnish particulars:		

I, _____, the undersigned,
(full name in block letters)

certify that the information furnished on this declaration form is true and correct, and accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

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CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 6: Declaration of interest – State Employees (MBD 4 amended)

- No bid will be accepted from:
 - 1.1 persons in the service of the state¹, or
 - 1.2 if the person is not a natural person, of which any director, manager or principal shareholder² or stakeholder is in the service of the state, or
 - 1.3 from persons, or entities of which any director, manager or principal shareholder or stakeholder, has been in the service of the Langeberg Municipality during the twelve (12) months after the Langeberg Municipality employee has left the employ of the Langeberg Municipality, or
 - 1.4 from an entity who has employed a former Langeberg Municipality employee who was at a level of T14 of higher at the time of leaving the LANGEBERG Municipality's employ and involved in any of the Langeberg Municipality's bid committees for the bid submitted, if:
 - 1.4.1 the Langeberg Municipality employee left the Langeberg Municipality's employment voluntarily, during a period of twelve (12) months after the Langeberg Municipality employee has left the employ of the Langeberg Municipality;
 - 1.4.2 the Langeberg Municipality employee left the Langeberg Municipality's employment whilst facing disciplinary action by the Langeberg Municipality, during a period of twenty-four (24) months after the Langeberg Municipality employee has left the employ of the Langeberg Municipality, or any other period prescribed by applicable legislative provisions, after having left the Langeberg Municipality's employ.
- Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the tenderer or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

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

- 3.1 Full Name of tenderer or his or her representative:.....
- 3.2 Identity Number:.....
- 3.3 Position occupied in the Company (director, trustee, shareholder²):.....
- 3.4 Company or Close Corporation Registration Number:.....
- 3.5 Tax Reference Number:.....
- 3.6 VAT Registration Number:.....
- 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
- 3.8 Are you presently in the service of the state? **YES / NO**
 - 3.8.1 If yes, furnish particulars:
.....
.....
.....
- 3.9 Have you been in the service of the state for the past twelve months? **YES / NO**
 - 3.9.1 If yes, furnish particulars:

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

3.10.1 If yes, furnish particulars:

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

3.11.1 If yes, furnish particulars

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

3.12.1 If yes, furnish particulars:

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

3.13.1 If yes, furnish particulars:

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

3.14.1 If yes, furnish particulars:

.....
.....
.....
3.15 Have you, or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company been in the service of the LANGEBERG Municipality in the past twelve months? **YES / NO**

3.15.1 If yes, furnish particulars:

- 3.16 Do you have any employee/s who was/were in the service of the LANGEBERG Municipality at a level of T14 or higher at the time they left the employ of the LANGEBERG Municipality, and who was involved in any of the LANGEBERG Municipality's bid committees for this bid? **YES / NO**

3.16.1 If yes, furnish particulars:

.....

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

Full Name	Identity Number	State Employee Number

If the above table does not sufficient to provide the details of all directors / trustees / shareholders, please append full details to the tender submission.

The tenderer hereby certifies that the information set out in this schedule and/or attached thereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract, restriction of the tenderer or the exercise by the employer of any other remedies available to it

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

(a) a member of –

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

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

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

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

(e) an executive 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.**

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 7: Authorisation for the deduction of outstanding amounts owed to the Langeberg Municipality

To: THE MUNICIPAL MANAGER, LANGEBERG MUNICIPALITY

From: _____
(Name of tenderer)

The tenderer:

- a) hereby acknowledges that according to SCM Regulation 38(1)(d)(i) the Municipal Manager may reject the tender of the tenderer if any municipal rates and taxes or municipal service charges owed by the tenderer (or any of its directors/members/partners) to the LANGEBERG MUNICIPALITY, or to any other municipality or municipal entity, are in arrears for more than 3 (three) months; and
- b) therefore hereby agrees and authorises the LANGEBERG MUNICIPALITY to deduct the full amount outstanding by the Tenderer or any of its directors/members/partners from any payment due to the tenderer; and
- c) confirms the information as set out in the tables below for the purpose of giving effect to b) above;
- d) The tenderer hereby certifies that the information set out in this schedule and/or attached hereto is true and correct, and acknowledges that failure to properly and truthfully complete this schedule may result in steps being taken against the tenderer, the tender being disqualified, and/or (in the event that the tenderer is successful) the cancellation of the contract and/or steps in terms of abuse of the Supply Chain Management Policy.

Physical Business address of the Tenderer	Municipal Account number(s)

If there is not enough space for all the names, please attach the additional details to the Tender Document

Name of Director / Member / Partner	Identity Number	Physical residential address of Director / Member / Partner	Municipal Account number(s)

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 8: Declaration in respect of compliance with labour legislation

Tenderers must be registered with the relevant Bargaining Council as contained in the tender conditions and must append to this schedule a certificate of compliance / letter of good standing in terms of the relevant Government Gazette that indicates compliance / validity at the time of tender award.

Each party to a Consortium/Joint Venture shall append separate certificates in the above regard.

Declaration in respect of labour legislation

The tenderer, by signing this schedule, declares that it will comply with all labour legislation, as may be applicable.

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 9: Declaration for procurement above R10 million (MBD5)

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

** Delete if not applicable*

CERTIFICATION:

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

CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT. I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 10: Confirmation of Central Supplier Database (CSD) registration

<u>CENTRAL</u> SUPPLIER DATABASE REGISTRATION		
COMPANY NAME	REGISTERED YES/NO	REGISTRATION NUMBER IF APPLICABLE

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 11:Tax Clearance Certificate

<u>SARS Tax Compliance Status PIN</u>	
COMPANY NAME	SARS Tax Compliance Status PIN

Bidders are required to submit their unique personal identification number (pin) issued by SARS to enable the organ of state to view the taxpayers' profile and tax status.

Application for the tax compliance status (TCS) certificate or pin may also be made via e-filing. In order to use this provision, taxpayers will need to register with SARS as e-filers through the website www.sars.gov.za.

Bidders may also submit a printed TCS certificate together with the bid (valid and original). In Bids where Consortia/Joint Venture/Sub-contractors are involved each party must submit a separate and Original Valid Tax Clearance Certificate.

Failure to submit proof of good standing with SARS (Tax Clearance Certificate) will result in the invalidation of the tender/bid.
Certified copies of the Tax clearance Certificate will not be acceptable.

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 12: Confirmation of Contractor Enterprise Registration

CIDB REGISTRATION

We hereby confirm our registration on Construction Industry Development Board (CIDB) Contractor Database:

COMPANY NAME	CIDB CONTRACTOR GRADING DESIGNATION	CRS REGISTRATION NUMBER AS APPLICABLE

I/We attach a printed copy of the Active Contractor's Listing off the CIDB website www.cidb.org.za as documentary proof of the Contractor's Registration issued by the Construction Industry Development Board (CIDB) to this schedule.

Where a tenderer satisfies CIDB Contractor grading designation requirements through joint venture formation, such tenderers must submit the Certificates of Contractor Registration in respect of each partner.

Failure to affix such documentation as proof of Contractor Enterprise registration as prescribed to this Schedule shall result in this tender not being further considered for the award of the Contract.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 13: Tenderer's banking details

Notes to tenderer:

1. The tenderer shall attach to this form a letter from the bank at which he declares he conducts his account. The contents of the bank's letter must state the credit rating that it, in addition to the information required below, accords to the tenderer for the business envisaged by this tender. The Employer will also do an independent Bank Rating investigation via the Employer's Agent's independent source.
2. The tenderer's banking details as they appear below shall be completed.
3. If the tenderer is a joint venture enterprise, details of all the members of the joint venture shall be similarly provided and attached to this form. The nominated bank account that will be used for this project need to be completed below. Only one bank account may be used, shown below.

The method used to obtain a bank rating is an online service provided by ABSA bank. If the tendered contract period is three months or more, an average 3-month cash flow for each tender submitted will be calculated and used as input into the online service. This process ensure that an equivalent method is used when determining the bank ratings of each tenderer. The Employer will obtain codes from the relevant independent financial institutions. The evaluation of your offer will be based on the Bank Rating received from our own independent investigation and not the Bank Rating attached by the tenderer himself. This is to ensure a fair and equal evaluation of bids.

Bidders must provide their banking details below.

The tenderer shall provide the following:

Name of Account Holder:

Account Number:

Bank name:

Branch Number:

Bank and branch contact details

.....

.....

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 14: Schedule of work experience of Tenderer

The tenderer shall insert in the spaces provided below a list of completed contracts and those currently being undertaken with a scope of similar nature. This information is deemed to be material to the award of the Contract.

Projects of a similar scope and nature is regarded as: Road Construction, layer works, brick paving, kerbing, laying of (water, sewer and stormwater) by trench excavations, bedding, backfilling and compaction of various materials, construction of various brick, mortar and concrete structures with a project value equal to or higher than the sum tendered.

Please note that no tenderer will be contacted to clarify any experience or construction equipment, or plant submitted with this bid. If insufficient information is shown, the tenderer will not be contacted for clarification.

The information provided in this schedule will be utilized to calculate the pre-qualification functionality scores. Tenderers must have successfully completed (please note that current incomplete projects will not be included in the evaluation) at least 5 projects of a similar scope and nature in the last 10 years to score full marks on this criterion.

A detailed list of successfully completed projects must be completed below (or attached to this schedule).

COMPLETED SIMILAR CONTRACTS				
EMPLOYER (NAME, TEL No AND FAX No)	CONSULTING ENGINEER (NAME, TEL No AND FAX No)	NATURE OF WORK	VALUE OF WORK R(m)	DATE COMPLETED

CURRENT SIMILAR PROJECTS				
EMPLOYER (NAME, TEL No AND FAX No)	CONSULTING ENGINEER (NAME, TEL No AND FAX No)	NATURE OF WORK	VALUE OF WORK R(m)	DATE COMPLETED

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 15: Details of qualifications and experience of staff

Tenderers shall set out in the Schedule hereunder details of the Construction Manager and General Foreman's experience in work of a similar nature to that for which their Tender is submitted. Detailed, project specific CV's to be included in this Schedule. Failure to do so during tender phase will lead to disqualification of tenderer.

Construction managers must have successfully **completed** (please note that current projects will not be included in the evaluation) at least 5 projects of a similar scope and nature in the last 10 years to score full marks on this criterion.

Projects of a similar scope and nature is regarded as: Road Construction, layer works, brick paving, kerbing, laying of (water, sewer and stormwater) by trench excavations, bedding, backfilling and compaction of various materials, construction of various brick, mortar and concrete structures with a project value equal to or higher than the sum tendered.

Please note that no tenderer will be contacted to clarify any experience or construction equipment, or plant submitted with this bid. If insufficient information is shown, the tenderer will not be contacted for clarification.

CONSTRUCTION MANAGER/SITE AGENT		NAME:			
CLIENT/CLIENT NAME AND DETAILS	AGENT'S CONTACT	NATURE OF WORK	POSITION HELD	VALUE WORK	OF YEAR COMPLETED

GENERAL FOREMAN/CONSTRUCTION SUPERVISOR CLIENT/CLIENT NAME AND CONTACT AGENT'S CONTACT DETAILS	NAME:			
	NATURE OF WORK	POSITION HELD	VALUE WORK	OF YEAR COMPLETED

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 16: Schedule of construction equipment

The tenderer shall state below what construction equipment will be available for this Contract. The tenderer shall differentiate, if applicable, between construction equipment immediately available and construction equipment which will become available by virtue of outstanding orders and indicate what further construction equipment will be acquired or hired for the work should he be awarded the Contract.

CONSTRUCTION EQUIPMENT IMMEDIATELY AVAILABLE

DESCRIPTION, SIZE, CAPACITY	NUMBER

CONSTRUCTION EQUIPMENT ON ORDER

(State details of arrangements made, with delivery dates)

DESCRIPTION, SIZE, CAPACITY	NUMBER

CONSTRUCTION EQUIPMENT THAT WILL BE ACQUIRED OR HIRED

(State details of delivery arrangements)

DESCRIPTION, SIZE, CAPACITY	NUMBER

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 17: Preliminary programme (for information purposes only)

The tenderer shall attach a preliminary programme, reflecting the proposed sequence and tempo of execution of the various activities comprising the work for the Contract, to this page.

This programme shall be in the form of a bar chart (Gantt chart) or similar acceptable time/activity form reflecting the proposed sequence and tempo of the various activities and the quantities that will be carried out every week under each of the elements, comprising the work for this contract. The programme shall also indicate the point where the tenderer intends to commence work operations and the direction in which the work will proceed. The working hours shall be indicated.

The tenderer shall also take into account the additional requirements stated in the Project Specifications when drawing up the programme.

Details of the preliminary programme shall be appended to this Schedule.

Number of sheets, appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 18: Proposed work plan

The tenderer shall append their proposed work plan to this Schedule.

It should be noted that while a programme may form part of the required work plan, more than a programme is expected in response to this requirement. The work plan must indicate the approach and methodology that the tenderer intends following to reach the required outcomes. The work plan must show that the tenderer has comprehended the Scope of Work and has good insight as to what actions or activities are required to comply with the Employer's objectives.

The proposed work plan must not exceed two A4 pages.

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 19: Schedule of estimated monthly expenditure

The tenderer shall state his estimated expenditure indicating the value of work done and materials not yet built into the Permanent Works for each month of the Contract period which he estimates will arise based on his preliminary programme and tendered rates, as set out in the table below. The total of the monthly amounts shall be equal to the tender sum.

MONTH	VALUE
1.	R
2.	R
3.	R
4.	R
5.	R
6.	R
7.	R
8.	R
SUBTOTAL	R
CONTINGENCIES (10%)	R
SUBTOTAL	R
VAT (15%)	R
TOTAL	R (INCLUDING VAT @ 15%)

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 20: Schedule of sub-contractors

We notify you that it is our intention to employ the following sub-contractors for work (excluding work covered by provisional sums and contingencies) in this contract.

Acceptance of this tender shall not be construed as approval of all or any of the listed sub-contractors. Should any of the sub-contractors not be approved subsequent to acceptance of the tender, this shall in no way invalidate the contract, and the tendered unit rates for the various items making up the work activities shall remain final and binding.

Local Sub-Contractors must be utilized.

SUB-CONTRACTORS		
Sub-contractor's name	Work activities to be undertaken by the Sub-contractor	Estimated value of work (Rand)

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 21: Health and Safety plan

Tenderers are referred to the requirements of Clause C.2.18.4 in Part T1.2 Tender Data and shall append the required draft Health and Safety Plan to this Schedule.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 22: Proposed deviations and qualifications by tenderer

The Tenderer should record any **proposed** deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such proposed deviations and qualifications in a covering letter attached to his tender and reference such letter in this schedule. Any proposed deviations or qualifications contained in a covering letter which is not referenced in this schedule will not be considered.

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

If no deviations or qualifications are proposed, the schedule hereunder is to be marked NIL and signed by the Tenderer.

PAGE	CLAUSE OR ITEM	PROPOSED DEVIATION OR QUALIFICATION

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 23: Functionality criteria

The Tenderer shall provide information for the functionality criteria listed in this Returnable Schedule.

The Tenderer's attention is drawn to clause C.2.1.4.3 in the Tender Data for a more detailed explanation of the functionality criteria given in the table below and how the score will be calculated (with applicable values).

Please note that points scored for Quality (functionality) will not have an influence on the total tender evaluation points and will therefore not affect the ranking of the tenderers, it will only be regarded as a pre-qualification. The minimum points required to be eligible to tender is 70 out of a 100.

THE CRITERIA to be applied in evaluating the proposal is set out in the table below:

Calculate the points for functionality according to the following formula:

$$P_s = S_o / M_s \times A_p$$

Where P_s = Percentage scored for functionality by bid under consideration
 S_o = Total score of bid/proposal under consideration
 M_s = Maximum possible score = 500
 A_p = percentage allocated for functionality = 100

Total points by bidder on functionality:

- i) $P_{s(\text{Criterion 1})}$ = (Indicator allocated/scored out of 5) x weight
- ii) $P_{s(\text{Criterion 2})}$ = (Indicator allocated/scored out of 5) x weight
- $P_{s(\text{TOTAL})}$ = $[(P_{s(\text{Criterion 1})} + P_{s(\text{Criterion 2})}) / 5] \times 100$

Criteria can be amended to suit project complexity or omitted if not applicable.

Criterion	Weight
1) Relevant Experience (Returnable Schedule 14)	50%
2) Construction manager Experience (Returnable Schedule 15)	50%
Total	100%

EVALUATION CRITERION 1

Tenderers must have successfully **completed** (please note that current projects will not be included in the evaluation) at least 5 projects of a similar scope and nature in the last 10 years to score full marks on this criterion. Refer to the table below for a measurement of how points will be awarded against this criterion.

A detailed list of successfully completed projects must be completed in/attached to **Schedule 14**.

Projects of a similar scope and nature is regarded as: Road Construction, layer works, brick paving, kerbing, laying of (water, sewer and stormwater) by trench excavations, bedding, backfilling and compaction of various materials, construction of various brick, mortar and concrete structures in build-up areas, and similar for municipal organisations with a project value equal to or higher than the sum tendered.

Please note that no tenderer will be contacted to clarify any experience or construction equipment, or plant submitted with this bid. If insufficient information is shown, the tenderer will not be contacted for clarification.

1. RELEVANT EXPERIENCE	
INDICATOR	Evaluation Criteria for Relevant Experience: (number of similar projects completed by the contractor in the last 10 years)
0	The tenderer has completed zero projects in the last 10 years
1	The tenderer has completed only 1 project in the last 10 years
2	The tenderer has completed exactly 2 projects in the last 10 years
3	The tenderer has completed exactly 3 projects in the last 10 years

4	The tenderer has completed exactly 4 projects in the last 10 years
5	The tenderer has completed 5 or more projects in the last 10 years

EVALUATION CRITERION 2

Detailed, project specific CV's to be included in **Schedule 15** of the Returnable Documents. Failure to do so during tender phase will lead to disqualification of tenderer.

Construction managers must have successfully **completed** (please note that current projects will not be included in the evaluation) at least 5 projects of a similar scope and nature in the last 10 years to score full marks on this criterion. Refer to the table below for a measurement of how points will be awarded against this criterion.

Projects of a similar scope and nature is regarded as: Road Construction, layer works, brick paving, kerbing, laying of (water, sewer and stormwater) by trench excavations, bedding, backfilling and compaction of various materials, construction of various brick, mortar and concrete structures in build-up areas, and similar for municipal organisations with a project value equal to or higher than the sum tendered.

Please note that no tenderer will be contacted to clarify any experience or construction equipment, or plant submitted with this bid. If insufficient information is shown, the tenderer will not be contacted for clarification.

If, during construction, the contractor wishes to replace the construction manager, the contractor will apply in writing to the Employer's Agent as per clause 4.12 of the GCC 2015. Only similarly experienced and competent construction managers will be considered.

2. CONSTRUCTION MANAGER	
INDICATOR	Evaluation Criteria for Construction manager: (number of similar projects completed by the Construction manager in the last 10 years)
0	The Construction manager has completed zero projects in the last 10 years
1	The Construction manager has completed only 1 project in the last 10 years
2	The Construction manager has completed exactly 2 projects in the last 10 years
3	The Construction manager has completed exactly 3 or more projects in the last 10 years
4	The Construction manager has completed exactly 4 or more projects in the last 10 years
5	The Construction manager has completed 5 or more projects in the last 10 years

The functionality proposal will be evaluated individually on score sheets, by a representative evaluation panel according to the evaluation criteria indicated above. All service providers who scored less than 70 out of 100 points for functionality will not be considered further. At least 3 evaluators will evaluate the quality schedules separately.

NB: Points scored for Quality (functionality) will not have an influence on the total tender evaluation points.

Where the entity tendering is a Joint Venture the tender must be accompanied by a statement describing exactly what aspects of the work will be undertaken by each party to the joint venture (appended to Schedule 4, Part T2.2: Returnable Schedules).

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

Schedule 24:Preference Schedule: Measuring B-BBEE in the construction sector

PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022
MBD 6.1

This preference form must form part of all the tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

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

1.2 **To be completed by the organ of state**

- a) The applicable preference point system for this tender is the 80/20 preference point system.
- b) The 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULA FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 Application of preference point system

3.1.1.1 The Municipality will, in the tender documents, stipulate —

- (a) the preference point system applicable; and
- (b) any specific goal as envisaged in section 2(1)(d) and (e) of the Preferential Procurement Act.

3.1.1.2 If it is unclear whether the 80/20 or 90/10 preference point system applies—

- (a) in the case of a tender to generate income or to dispose of or lease assets, the highest acceptable tender; or
- (b) in the case of any other tender, the lowest acceptable tender, must be used to determine the applicable preference point system.

3.1.2 Points for Price: 80/20 preference point system for acquisition of goods or services with Rand value equal to or above R30 000 and up to R50 million

3.1.2.1 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:

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

Where-

Ps = Points scored for price of tender under consideration;

Pt = Price of tender under consideration; and

Pmin = Price of lowest acceptable tender.

3.1.2.2 A maximum of 20 points may be awarded to a tenderer for the specified goals envisaged in section 2(1)(d) and (e) of the Act.

3.1.2.3 The points scored must be rounded off to the nearest two decimal places.

3.1.2.4 The contract must be awarded to the tenderer scoring the highest points.

3.1.3 . Points for price: 90/10 preference point system for acquisition of goods or services with Rand value above R50 million

3.1.3.1 The following formula must be used to calculate the points out 90 for price in respect of a tender with a Rand value above R50 million, inclusive of all applicable taxes:

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

Where-

Ps = Points scored for price of tender under consideration;

Pt = Price of tender under consideration; and

Pmin = Price of lowest acceptable tender.

3.1.3.2 A maximum of 10 points may be awarded to a tenderer for the specified goals envisaged in section 2(1)(d) and (e) of the Act.

3.1.3.3 The points scored must be rounded off to the nearest 2 decimal places.

3.1.3.4 The contract must be awarded to the tenderer scoring the highest points.

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

The following formula must be used to calculate the points for price in respect of a tender to generate income or to dispose of or lease assets, with a Rand value equal to, or above R 30 000 and up to a Rand value of R50 million, inclusive of all applicable taxes:

$$P_s = 80 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right)$$

Where-

P_s = Points scored for price of tender under consideration;

P_t = Price of tender under consideration; and

P_{max} = Price of highest acceptable tender.

3.2.1 A maximum of 20 points may be awarded to a tenderer for the specified goals envisaged in section 2(1)(d) and (e) of the Act.

3.2.2 The points scored must be rounded off to the nearest 2 decimal places.

3.2.3 The contract must be awarded to the tenderer scoring the highest points.

3.3.4 Points for price:90/10 preference point system for tenders to generate income or to dispose of or lease assets with Rand value equal to or above R50 million

3.3.5 The following formula must be used to calculate the points for price in respect of a tender to generate income or to dispose of or lease assets, with a Rand value above R50 million, inclusive of all applicable taxes:

$$P_s = 90 \left(1 + \frac{P_t - P_{max}}{P_{max}} \right)$$

Where-

P_s = Points scored for price of tender under consideration;

P_t = Price of tender under consideration; and

P_{max} = Price of highest acceptable tender.

3.3.6 A maximum of 10 points may be awarded to a tenderer for the specified goals envisaged in section 2(1)(d) and (e) of the Act.

3.3.7 The points scored must be rounded off to the nearest 2 decimal places.

3.3.8 The contract must be awarded to the tenderer scoring the highest points.

- 4 **POINTS AWARDED FOR SPECIFIC GOALS** The tendering conditions will stipulate the specific goals, as contemplated in section 2(1)(d)(ii) of the Preferential Procurement Act, be attained.
- 4.2 A maximum of 20 points (80/20 preference points system) or 10 (90/10) preference points system), will be allocated for specific goals. These goals are:
- (a) contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender or disability (BBBEE);
 - (b) Promotion of enterprises located in the municipal area.
- 4.3 Regarding par 4.2 (a) 50% of the 20/10 points will be allocated to promote this goal and points will be allocated in terms of the BBBEE scorecard as follows:

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

- 4.4 A tenderer must submit proof of its BBBEE status level contributor [scorecard].
- 4.5 A tenderer failing to submit proof of BBBEE status level of contributor –
- 4.5.1 may only score in terms of the 80/90-point formula for price; and
 - 4.5.2 scores 0 points out of 10/5 BBBEE status level of contributor, which is in line with section 2 (1) (d) (i) of the Act, where the supplier or service provider did not provide proof thereof.

- 4.6 Regarding par 4.2 (b) 50% of the **20/10 points** will be allocated to promote this goal. Points will be allocated as follows.

Locality of supplier	Points
Within the boundaries of the municipality	10/5
Outside of the boundaries of the municipality	0

- 4.7 The policy should not include Pre-qualification goals.
- 4.8 Any specific goal for which a point may be awarded, must be clearly specified in the invitation to submit a tender.
- 4.9 A tenderer failing to submit proof of required evidence to claim preferences for other specified goals, which is in line with section 2 (1) (d) (ii) of the Act.
- 4.9.1 may only score in terms of the 80/90-point formula for price; and
- 4.9.2 scores 0 points out of 10/5 of the relevant specific goals where the supplier or service provider did not stipulate.
- 4.10 The preference points scored by a tenderer must be added to the points scored for price.
- 4.11 The points scored must be rounded off to the nearest two decimal places.
- 4.12 The contract must be awarded to the tenderer scoring the highest procurement points.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
BBBEE preference points system	05	10		
Promotion of enterprises located in the municipal area	05	10		

4. DECLARATION WITH REGARD TO COMPANY/FIRM

Name of company/firm.....

4.1. Company registration number:

4.2. TYPE OF COMPANY/ FIRM

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Public Company
- ☐ Personal Liability Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company
- ☐ State Owned Company

[TICK APPLICABLE BOX]

4.3. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –
 - (a) disqualify the person from the tendering process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution, if deemed necessary.

SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

.....

.....

.....

.....

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Schedule 25: Record of addenda to tender documents

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

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

Attach additional pages if more space is required.

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

Part C1: Agreements and Contract Data

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LANGE BERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

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:

TENDER NO. 64/2024: CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

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

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

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

Rand.....

.....(in words);

R.....(in figures)

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

Signature(s):

Name(s):

Capacity:

Name of organization/tenderer:

Address of organization/tenderer:

Name and signature of witness: Date:

For official use.		
INITIALS OF MUN. OFFICIALS AT TENDER OPENING		
1.	2.	3.

Acceptance

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

The terms of the contract are contained in:

- Part C1: Agreements and contract data (which includes this agreement)
- Part C2: Pricing data
- Part C3: Scope of work
- Part C4: Site information

and drawings and documents or parts thereof, which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the tender data and any addenda thereto as listed in the returnable 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 form of offer and acceptance. No amendments to or deviations from said documents are valid unless contained in this schedule.

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the parties have signed the table below and confirms receipt from the employer of one fully completed original copy of this agreement, including the schedule of deviations (if any). The tenderer (now contractor) shall within five working days of the agreement coming into effect notify the employer in writing of any reason why he cannot accept the contents of this agreement as a complete and accurate memorandum thereof, failing which the agreement presented to the contractor shall constitute the binding contract between the parties.

The Parties	Employer	Contractor
Business Name		
Business Registration		
Tax number (VAT)		
Physical Address		
Accepted contract sum (incl. tax)		
Accepted contract duration		
Signed (who by signature hereto warrants authority)		
Name of signatory		
Signed: Date		
Signed: Location		
Signed: Witness		
Name of Witness		

Schedule of Deviations

Notes:

1. The extent of deviations from the tender documents issued by the employer before the tender closing date is limited to those permitted in terms of the conditions of tender.
2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract.

1 Subject

Details

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.....

.....

2 Subject

Details

.....

.....

.....

3 Subject

Details

.....

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.....

4 Subject

Details

.....

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.....

By the duly authorised representatives signing this agreement, 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 returnable schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

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

C1.2 Contract Data (Part 1)

Part 1: Contract Data provided by the Employer

GENERAL CONDITIONS OF CONTRACT

The following standardised General Conditions of Contract:

General Conditions of Contract for Construction Works, Third Edition, 2015

Prepared by the South African Institution of Civil Engineering (SAICE) shall apply to and from the General Conditions of Contract for this contract. Copies of these conditions of contract are obtainable from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, e-mail: civilinfo@saice.org.za.

Prepared by the South African Institution of Civil Employer's Agenting (SAICE) shall apply to and from the General Conditions of Contract for this Contract. Copies of these conditions of contract are obtainable from the South African Institution of Civil Employer's Agenting (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, e-mail: civilinfo@saice.org.za.

Copies of the General Conditions of Contract are available for inspection and scrutiny at the offices of the Employer. The General Conditions of Contract make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the General Conditions of Contract. Each item of data given below is cross-referenced to the clause in the General Conditions of Contract to which it mainly applies.

The General Conditions of Contract shall be read in conjunction with the variations, amendments and additions set out in the Special Conditions of Contract below.

In the event of any discrepancy and/or ambiguity in the Contract, the following precedence will govern (priority in order from highest to lowest):

1. Contract Data
2. Project Specifications
3. Drawings
4. Bill of Quantities
5. SANS 1200

SPECIAL CONDITIONS OF CONTRACT

In this regard, the Standard Conditions of Contract – GCC 2015 is amended by the numbered clauses set out below, as follows:

- (i) where the Standard Conditions of Contract – GCC 2015 contains no provision with the corresponding clause number, the clause set out herein is inserted into the Contract; and
- (ii) where the Standard Conditions of Contract – GCC 2015 contains a provision with the corresponding clause number, it is amended, as set out herein.

Save as amended in terms of this document, the provisions of the Standard Conditions of Contract – GCC 2015 shall remain unchanged.

1.1 Definitions

- 1.1.1.1 "agreed" means agreed by the Employer and the Contractor; or the Employer's Agent and the Contractor expressly authorised in terms of the Contract, unless specifically stated otherwise.
- 1.1.1.5 "Commencement Date" means the date that the Contract, made in terms of the Form of Offer and Acceptance, comes into effect by signing the Acceptance part and returning one fully completed original copy of this document, the Contract Agreement.
- 1.1.1.7 "Contract" means the documentation of the agreement between the parties in terms of the Form of Offer and Acceptance, and such written amendments or additions to the Contract as may be agreed and signed by both parties.
- 1.1.1.13 "Defects Liability Period" means the period stated in the Contract Data, commencing from the issue of the Certificate of Completion or Certificates of Completion in the event of more than one Certificate of Completion having been issued for different portions of the Works, during which the Contractor has both the right and the obligation to make good defects in the materials, Plant and workmanship covered by the Contract.
- 1.1.1.16 "Employer's Agent" means the person named as the Employers' Agent in the Contract Data, or any other person appointed from time to time by the Employer, and of whom the Contractors is notified, in writing, to act as the Employers Agent for the purposes of the Contract as substitute for the Employer's Agent so named. In terms of this Contract the term "Employers Agent" will mean to be "Engineer" and vice versa.
- 1.1.1.14 "Due Completion Date" means the date or dates of the expiry of the time stated in the Contract Data for achieving Practical Completion for the whole or portions of the Works, calculated from the Commencement Date and as adjusted by such extensions of time or acceleration as may be allowed or agreed in terms of Contract.
- 1.1.1.20 "Form of Offer and Acceptance" means the document defined as the Contract Agreement that formalises the legal process of offer and acceptance and gives rise to the Contract.
- 1.1.1.35 "parties" means the Contractor and the Employer.
- 1.1.1.36 "approved programme" means the latest programme submitted by the Contractor and approved by the Employer's Agent. The latest programme approved by the Employer's Agent supersedes previous approved programmes.

1.2 Interpretations

- 1.2.1 Any written communication between the parties shall have been duly delivered if:
 - 1.2.1.1 Handed to the addressee or to his duly authorised agent; or
 - 1.2.1.2 Delivered at the address of the addressee as stated in the Contract Data, including an e-mail address; and
 - 1.2.1.3 Any notice or claim required in accordance with this Contract shall be communicated separately from other communications, on a separate cover with specific reference to the clause in terms of which the communication was made provided that the Employer, Employer's Agent and Contractor shall be entitled, by written notice to each other, to change their said addresses.
- 1.2.6 Any act or communication, including but not limited to "accept, agree, appoint, approve, certify, decide, delegate, dispute, elect, grant, inform, instruct, issue, notice, object, order, record, refuse, request, require, state, dispute, call for" and their derivatives indicate an act to be carried out in writing.

1.4 Non-Variation Clause

- 1.4.1 This Contract is the entire contract between the parties regarding the matters addressed in this Contract. No representations, terms, conditions or warranties not contained in this Contract shall be binding on the parties. No agreement or addendum varying, adding to, deleting or terminating this Contract including this clause shall be effective unless reduced to writing and signed by both parties.

2.4 Ambiguity or discrepancy

- 2.4.2 If compliance with any such instruction shall result in delay to Practical Completion and/or the incurrence of proven additional cost the Contractor shall be entitled to make a claim in accordance with Clause 10.1 as read with Clause 6.3.

2.5 Assignment

- 2.5.1 Neither the Contractor nor the Employer shall, without the written consent of the other, assign the Contract or any part thereof, or any obligation under the Contract, or cede any right or benefit thereunder. Such assignment or cession shall be null and void without the other party's consent.

3.1 Qualifications of the Employer's Agent

- 3.1.1 The natural person appointed by the Employer to administer the Contract shall be a registered professional in a built environment profession that is appropriate to the Scope of Work.

3.2 Functions of the Employer's Agent

- 3.2.1 The function of the Employer's Agent is to administer the Contract in accordance with the provisions of the Contract.

4.1 Extent of obligations and liability

- 4.1.1 The Contractor shall, save insofar as it is legally or physically impossible, design (to the extent provided in the Contract Data), execute and complete the Works and obligations remedy any defects therein in accordance with the provisions of the Contract.
- 4.1.2 Where the Contract Data provides that part of the Works shall be designed by the Contractor,
- 4.1.2.1 the relevant part of the Works shall be fit for such purposes for which it is intended as are specified in the Contract, and
 - 4.1.2.2 the Contractor shall, notwithstanding approval by the Employer's Agent, be liable for any error or deficiency in any drawing or document supplied by him for that part of the Works, and for any loss or damage arising out of such error or deficiency.
 - 4.1.2.3 the Contractor shall submit to the Employer's Agent the "as-built" documents and operation and maintenance manuals in accordance with the Scope of Works and in sufficient detail for the Employer to operate, maintain, dismantle, reassemble, adjust and repair this part of the Works. Such part shall not be considered to be completed for the purposes of issuing a Certificate of Practical Completion in terms of Clause 5.14.1 as read with the relevant Contract data until these documents and manuals have been submitted to the Employer's Agent.
- 4.1.4 The Contractor indemnifies the Employer against any liability for any breach of the provisions of Clause 4.1.

4.2 Employer's Agent's instructions

- 4.2.3 Should the Contractor fail to proceed with due diligence with any Employer's Agent's instruction, the Employer's Agent may notify the Contractor to proceed within 7 days from receipt of such notice. Without further notice, on default by the Contractor, the Employer may employ other parties or use its own resources to give effect to such instruction in addition to any other rights that the Employer may have inter alia in terms of Clause 9.2.1.3.6. The Employer may recover such costs from the Contractor resulting from same.

4.3 Legal provisions

- 4.3.3 The Employer and the Contractor shall enter into an agreement required for the construction of the Works in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act 85 of 1993) and the latest Construction Regulations promulgated thereunder.

4.12 Contractors Superintendence

- 4.12.2 The Contractor, or a competent and authorized agent or representative approved in writing by the Employers Agent (which approval may at any time be withdrawn in writing), hereinafter called the Construction Manager, shall be on site at all times when work is being performed, or when the Employers Agent shall, with reason, require his presence. The Construction Manager must be in possession of the following:
- a) NQF level 5 for labour-intensive construction methods.
 - b) Completed at least 5 projects by means of labour-intensive construction.
 - c) Minimum ND Civil qualification.

5.3 Commencement of the Works

- 5.3.1 Upon the Employer's Agent's instruction the Contractor shall, save as may be otherwise provided in the Contract or be legally or physically impossible, commence executing the Works. Such instruction shall be subject to the submission by the Contractor, and approval by the Employer, of documentation required before commencement with Works execution, as set out in the Contract Data.
- 5.3.3 If the Employer's Agent's instruction to commence executing the Works, or to resubmit documentation with reasons after having found to be unacceptable by the Employer, is not received by the Contractor within 7 days from the actual date of the submission of all the documentation referred to in Clause 5.3.1, commencement of the Works shall be taken to be on the expiry of such 7 days. However, deemed commencement of the Works shall not be construed as approval of the documentation submitted.

5.4 Access to Site

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

5.6 Programme

- 5.6.1 The Contractor shall deliver to the Employer's Agent as part the documentation required before commencement with Works execution in accordance with Clause 5.3.1, an initial programme and method statement for carrying out the Works in order to meet the Due Completion Date.
- 5.6.2 The initial programme and all subsequent adjusted programmes shall show and, when relevant, describe in method statements, the entire scope of the Works to be performed including but not limited to:
- 5.6.2.1 The Commencement Date, commencement of the Works, Due Completion Date(s) or revisions thereof, and the planned date(s) of Practical Completion for the Works as a whole or in respect of different portions of the Works.
- 5.6.2.8 Health and safety requirements
- 5.6.2.9 Critical path including the links between all predecessors and successors for activities on the critical path
- 5.6.3 The Employer's Agent shall, within 7 days after the Contractor has submitted an initial or adjusted programme, approve such programme or rejecting same with reasons and instruct the Contractor to amend such programme. Reasons for rejecting a programme are *inter alia* that it is not in accordance with the Contract or is not reflecting the actual progress. The Employer's Agents failure to approve or reject with reasons the submitted programme,
- 5.6.3.1 in the event of the submitted programme being an adjusted programme, shall be considered to be the approved programme; and
- 5.6.3.2 in the event of the submitted programme being an initial programme, shall not be considered to be the approved programme. However, the Contractor shall have the right to suspend the Works in terms of Clause 5.11.1.3 and if the Contractor suffers delay to Practical Completion and/or incurs proven additional cost from such suspension, the Contractor shall be entitled to make a claim in accordance with Clause 10.1.
- 5.6.4 The programme, method statement and the cash flow forecast shall be subject to updates and review on a monthly basis. The Contractor shall deliver to the Employer's Agent an adjusted programme reflecting actual progress and updated dates in accordance with Clause 5.6.2, even though it may reflect that the planned date(s) of Practical Completion will be later than the corresponding Due Completion Date(s), every month, and in addition;
- 5.6.4.1 when instructed by the Employer's Agent,
- 5.6.4.2 when it no longer reflects the actual progress,
- 5.6.4.3 when a specific event, circumstance, act or omission may delay the execution of the Works, or
- 5.6.4.4 with each extension of time claim
- 5.6.5 The submission to and approval by the Employer's Agent of any programme, method statement and/or cash flow forecast or its adjustments, or the delivery of any other relevant particulars, shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

5.7 Progress of the Works

- 5.7.3 The Employer's Agent may request the Contractor to submit, or the Contractor may submit to the Employer's Agent, a revised programme and cost determined in accordance with Clause 6.4 for accelerating the rate of progress to achieve Practical Completion before the Due Completion Date. If accepted by the Employer, the adjusted Due Completion Date and the conditions for payment of cost shall be agreed in writing and signed by the parties.

5.9 Instructions

- 5.9.3 The Contractor shall give adequate written notice to the Employer's Agent of any instructions or drawings, which the Contractor may require for the execution of the Works and the Employer's Agent shall deliver such instructions and/or drawings to the Contractor. The notice shall include details of the necessary drawing or instruction, details of by when it should be issued, and details of the nature and amount of the delay likely to be suffered if it is late.

5.11 Suspension of the Works

- 5.11.1 The Contractor may, after giving fourteen (14) days written notice to the Employer, with a copy to the Employer's Agent, (with specific reference to this Clause) suspend the progress of the Works where the Employer has failed in terms of Clause 6.10.4 to:

5.11.1.1 Deliver a payment certificate, or

5.11.1.2 Make full payment of the amount certified in the payment certificate without prejudice to the Contractor's other rights under this Contract or by law, or

5.11.1.3 Failed to approve an initial programme in terms of Clause 5.6.3.2

5.12 Extension of the time for Practical Completion

- 5.12.1 If circumstances of any kind whatsoever which occurred be such as fairly entitle the Contractor to an extension of time and will actually delay Practical Completion of the Works beyond the Due Completion Date, the Contractor shall claim in accordance with Clause 10.1 such extension of time as is appropriate. Such extension of time shall take into account any special non-working days and all relevant circumstances, including concurrent delays or savings of time which might apply in respect of such claim and the Due Completion Date will be revised accordingly.

- 5.12.2.2 No extension of time will be granted in respect of any delays attributed to normal climatic conditions. Normal climatic conditions shall be deemed to include normal rainfall and associated wet conditions and materials, strong winds and extremes of temperature. However, in the event that delays to critical activities exceed the number of working days listed below cumulatively for the construction period, then abnormal climatic conditions shall be deemed to exist, and an extension of time may be claimed in accordance with the provisions of Clause 5.12.

The cumulative days for normal climatic conditions must be indicated on the initial programme as a single bar item/activity and as the immediate predecessor to Practical Completion and on the critical path of the programme. The normal climatic conditions will be recorded on the specific days, as and when they occur. Should the days listed below for normal climatic conditions not be used, the days, will become float in terms of Clause 5.6.2 of the GCC 2015 (3rd Edition). The float shall belong to the project and shall only be taken up on prior approval by the Employers Agent.

The number of days quoted below shall be regarded as a fair estimate of the delays to be anticipated and allowed for under normal climatic conditions where inclement weather prevents or disrupts critical work.

January	2 days
February	3 days
March	4 days
April	4 days
May	4 days
June	5 days
July	5 days
August	4 days
September	4 days
October	3 days
November	2 days
December	2 days

Claims for delays for abnormal climatic conditions shall be accompanied by substantiating facts and evidence, which shall be submitted timeously as each day or half-day delay is experienced.

It shall be further noted that where the critical path is not affected, no extension of time for abnormal climatic conditions or for any other reason will be entertained.

- 5.12.2.5 Any delay, impediment, or prevention caused by or attributable to the Employer, Employer's Agent, the Employer's personnel or the Employer's other contractors on the Site.

- 5.12.4 Instead of granting extension of time, if feasible, the Employer's Agent may request the Contractor to accelerate the rate of progress to achieve Practical Completion without extension of time and agree the cost for payment of such acceleration in accordance with Clause 5.7.3.

5.13 Penalties for delay

5.13.2.1 Refer to 1.2.2 Contract specific data.

5.14 Completion

5.14.1 Save as otherwise provided in the Contract, the Contractor shall be entitled to receive a Certificate of Practical Completion when the Works have reached Practical Completion.

When the Works are about to reach the said stage, the Contractor shall, in writing, request a Certificate of Practical Completion and the Employer's Agent shall, within 14 days after receiving such request, either where the Works;

5.14.1.1 has reached Practical Completion issue a Certificate of Practical Completion to the Contractor and to the Employer or

5.14.1.2 has not reached Practical Completion, issue a written list to the Contractor defining the incomplete work and defects to be rectified to achieve Practical Completion.

Should the Employer's Agent not issue a Certificate of Practical Completion or such a list within the 14 days, Practical Completion shall be considered to have been achieved on the expiry of the 14 days of the written request in terms of Clause 5.14.1.

5.14.2 As soon as the work referred to in the list issued in terms of Clause 5.14.1 has been duly completed and defects that manifested after the list was issued rectified, the Employer's Agent shall deliver to the Contractor and to the Employer a Certificate of Practical Completion together with a further written list setting out the work to be completed to justify the issuing of a Certificate of Completion.

5.14.6 The Employer need not occupy the Works before the Due Completion Date

5.14.7 If, in terms of the Contract Data stated for Clause 1.1.1.14, different times for achieving Practical Completion are specified in respect of different portions of the Works, the provisions for the Works as a whole shall apply with necessary adjustment in respect of such portions.

6.2 Security

6.2.1 The Contractor shall deliver to the Employer, as part of the documentation required before commencement with Works execution in accordance with Clause 5.3.1, at his cost, the type of security for the due performance of the Contract, as selected in the Contract Data.

6.2.2 If the Contractor fails to provide or maintain the security as selected in the Contract Data within the time period stated in Clause 5.3.2 or if the performance guarantee is not in accordance with the relevant pro forma performance guarantee, the Employer, in his sole discretion, may either

6.2.2.1 Hand over the Site to the Contractor and withhold payment from the Contractor until the amount withheld is equal to ten per cent (10%) of the Contract Price. Such amount shall be reduced to five per cent (5%) of the Contract Price when the Employer's Agent has issued a Certificate of Completion [5.14.4] and to zero per cent (0%) in the Final Payment Certificate [6.10.9] or

6.2.2.2 Terminate this Contract in terms of Clause 5.3.2 as read with Clause 9.2.1.3.2.

6.2.3 If the Contractor is to provide a performance guarantee as security, he shall ensure that it remains valid and enforceable until the Final Approval Certificate is issued. The performance guarantee shall specify an expiry date, and if the Contractor has not become entitled to receive the Final Approval Certificate of the Works by the date 28 days prior to the expiry date, the Contractor shall extend the validity of the performance guarantee until such time that work have been completed and any defects have been remedied.

6.7 Measurement of the Works

6.7.3.1 The Construction Manager identified in terms of Clause 4.12.2 will attend to assist the Employer's Agent in making such measurement, or to make such measurement in the presence of the Employer's Agent. Should the Construction Manager fail to attend, Clause 6.7.4.2 will apply.

6.8 Adjustment in rates and/or prices

6.8.2 The Contract Price shall **not** be subject to any contract price adjustment and the rates and prices tendered in the bill of quantities shall be final and binding throughout the period of the Contract.

Notwithstanding the above, if special materials are specified in the Contract Data, then the provisions of Clause 6.8.3 of the General Conditions of Contract shall apply to such special materials.

Furthermore if, as a result of any extension of time granted, the duration of the contract period exceeds one year, the contract will automatically be subject to contract price adjustment for that period by which the extended contract period exceeds such one year.

Where applicable, in terms of the foregoing, the value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values:

The value of "x" is 0,15.

The values of the coefficients are:

a = 0,20 b = 0,25 c = 0,50 d = 0,05

The base month is the eleventh month after the Commencement Date of the Contract.

In addition, the Contract Price Adjustment Schedule shall be amended as follows:

"L" is the "Labour Index" and shall be the Consumer Price Index (CPI per Province) for the National Province wherein the larger part of the Site is located, as published in the Statistical News Release, P0141 Table A of Statistics South Africa.

"P" is the "Plant Index" and shall be the Producer Price Index for Civil engineering plant as published in the Statistical News Release P0151.1, Table 4 of Statistics South Africa.

"M" is the "Materials Index" and shall be the Producer Price Index for materials for Building and construction – Civil engineering as published in the Statistical News Release P0151.1, Table 6 of Statistics South Africa.

"F" is the "Fuel Index" and shall be the Producer Price Index for Diesel at wholesale level – Coast as published in the Statistical News Release P0142.1, Table 1 of Statistics South Africa.

6.10 Payment

6.10.1 With regard to all amounts that become due to the Contractor in respect of the matters set out in Clauses 6.10.1.1, 6.10.1.2, 6.10.1.3, 6.10.1.4, and 6.10.1.5 below, the Contractor shall deliver to the Employer's Agent a monthly statement for payment of all amounts he considers to be due to him (in such form and on such date as may be agreed between the Contractor and the Employer's Agent, or failing agreement, as the Employer's Agent may require) and the Employer's Agent shall, by signed payment certificates issued to the Employer and the Contractor, certify the amount he considers to be due to the Contractor or the Employer, taking into account the following:

6.10.1.5 The value up to the percentage limit stated in the Contract Data of Plant and materials referred to in Clause 6.9.1 not yet built into the Permanent Works. No payment will be made for any Plant and/or materials off site, except if expressly agreed otherwise;

Provided that the Contractor has produced documentary evidence of ownership of such Plant and/or materials and has delivered to the Employer an indemnity, approved in writing by the Employer, against any claim to or in respect of such Plant and/or materials by reason of the Contractor's sequestration or liquidation, or of any defect in the Contractor's title to the Plant and/or materials.

6.10.4 The Employer's Agent shall deliver to the Employer and the Contractor the payment certificate referred to in Clause 6.10.1 within 7 days of the receipt by the Employer's Agent of the Contractor's said statement. The Employer's Agent shall not be relieved from its responsibility to issue a payment certificate whether or not the Contractor submits the said statement. Any dissatisfaction in respect of such payment certificate shall be dealt with in terms of Clause 10.2. The Employer or the Contractor, as the case may be, shall pay the amount due to the other within 28 days of receipt by the Employer and the Contractor of the payment certificate signed by the Employer's Agent. Payment shall be subject to the Contractor or the Employer, as the case may be submitting a tax invoice, if required by law, to the other party for the amount due.

6.10.8 Within 14 days of the date of the Certificate of Completion, the Contractor shall deliver to the Employer's Agent a completion statement showing the value of work done in respect of which a Certificate of Completion has been issued and shall supply such further information as the Employer's Agent may reasonably require. The Contractor shall not be entitled to any payment in respect of any matter which has not been included in such completion statement save as provided for in Clauses 5.14, 7.7 and 7.8 in respect of work executed during the Defects Liability Period and/or Clauses 10.3 to 10.11 in respect of any dispute. The Employer's Agent shall deliver to the Employer and the Contractor the payment certificate in respect of the completion referred to above within 14 days of the receipt by the Employer's Agent of the Contractor's said statement, and the Employer or the Contractor, as the case may be, shall pay the amount due to the other party within 28 days after receipt by the Employer and the Contractor of the payment certificate signed by the Employer's Agent.

- 6.10.9 Within 14 days of the date of final approval as stated in the Final Approval Certificate, the Contractor shall deliver to the Employer's Agent a final statement claiming final settlement of all monies due to him (save in respect of matters in dispute, in terms of Clauses 10.3 to 10.11, and not yet resolved). The Employer's Agent shall within 14 days issue to the Employer and the Contractor a Final Payment Certificate, the amount of which shall be paid to the Contractor or the Employer, as the case may be, within 28 days of the date of such certificate, after which no further payments shall be due to the Contractor (save in respect of matters in dispute, in terms of Clauses 10.3 to 10.11 and not yet resolved).

8.6 Insurances

- 8.6.1.5 In addition to the insurances required in terms of General Conditions of Contract Clauses 8.6.1.1 to 8.6.1.4 the following insurance is also required:
- (a) Insurance of Construction Equipment (including tools, offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.
 - (b) Insurance in terms of the provisions of the Compensation for Occupational injuries and Diseases Act No. 130 of 1993.
 - (c) Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability Indemnity.
 - (d) Where the contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the Site, the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication then such interest shall be noted by endorsement to the Contractor's Policies of Insurance.

9.2 Termination by Employer

- 9.2.1.3.2 Has failed, in terms of Clause 5.3.2, to submit documentation in time, or to submit acceptable documentation, or to maintain and extend the validity of the performance guarantee until the Certificate of Completion; or
- 9.2.1.3.6 Is not executing the Works in accordance with the Contract, or is neglecting or failing to carry out his obligations under the Contract, *inter alia* to comply with any instruction under Clause 4.2; or

10.1 Contractor's Claim

- 10.1.1 The following provisions shall apply to any claim by the Contractor for an extension of time for Practical Completion of the Works in terms of Clause 5.12, or in terms of any Clause that refers to Clause 10.1 for additional payment or compensation:
- 10.1.1.1 The Contractor shall within 28 days after the commencement of each circumstance, event, act or omission giving rise to such a claim, deliver to the Employer's Agent a written claim, referring to this Clause and setting out:
- 10.1.1.1.1 The particulars of the circumstance, event, act or omission giving rise to the claim concerned,
 - 10.1.1.1.2 The provisions of the Contract on which he bases the claim
 - 10.1.1.1.3 The length of the extension of time, if any, claimed and the basis of the calculation by incorporating the effects of each circumstance, event, act or omission on the critical path of an Approved Programme, indicating the delay on Practical Completion, and
 - 10.1.1.1.4 The amount of money claimed and the basis of calculation thereof.
- 10.1.1.2 If, by reason of the nature and circumstances of the claim, the Contractor cannot reasonably comply with all or any of the provisions of Clause 10.1.1.1.1 to 10.1.1.1.4 to deliver a claim within the said period of 28 days, he shall:
- 10.1.1.2.1 within the said period of 28 days issue a further notice referring to the relevant notice in terms of Clause 10.1.2 and confirming his intention to make the claim and comply with such of the requirements of Clause 10.1.1.1.1 to 10.1.1.1.4 as he reasonably can, and
 - 10.1.1.2.2 As soon as practicable, comply with such of the requirements of Clause 10.1.1.1.1 to 10.1.1.1.4 as have not yet been complied with.
- 10.1.1.3 If the circumstance, event, act or omission relating to the claim are of an ongoing nature:
- 10.1.1.3.1 the Contractor shall, within 14 days after the commencement of each circumstance, event, act or omission giving rise to such a claim, deliver to the Employer's Agent a written notice of his intention to submit a claim, referring to this Clause and setting out the particulars of the circumstance, event, act or omission.

Provided that the additional payment or compensation or delay that occurred before 14 days prior the date on which the notice in terms of this clause was delivered, shall be deemed to be covered by the rates and/or prices set out in the Pricing Data and the time stated in the Contract Data relating to Clause 5.5.1

10.1.1.3.2 The Contractor shall, in addition to delivering the said further notice within 28 days in terms of Clause 10.1.1.2.1, each month deliver to the Employer's Agent, in writing, updated particulars required in terms of Clause 10.1.1.1.1 to 10.1.1.1.4 and, within 28 days after the end of the circumstance, event, act or omission deliver his final claim.

10.1.2 The Contractor shall issue an early warning notifying to the Employer's Agent as soon as he becomes aware of any circumstance, event, act or omission which could:

10.1.2.1 Increase the Contract Prices,

10.1.2.2 Delay Practical Completion, or

10.1.2.3 Impact on the quality or

10.1.2.4 Impair the performance of the Works in use

10.1.3.6 The Employer, the Employer's Agent and the Contractor shall not in any proceedings in accordance with Clauses 10.3 to 10.11 be entitled to give or lead evidence of or rely on any fact or circumstance not recorded in terms of this Clause.

10.1.4 If, in respect of any claim to which this Clause refers, the Contractor fails to deliver his claim within the 28 day claim period in terms of Clause 10.1.1.1 or does not deliver a further notice within the period of 28 days in terms of Clause 10.1.1.2.1 or does not deliver his final claim within 28 days after the circumstance, event, act or omission ceased in terms of Clause 10.1.1.3.2, the Due Completion Date shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged all liability in connection with the claim.

Provided that failure by the Contractor to give an early warning notice in terms of Clause 10.1.2 which an experienced Contractor could have given, the claim shall be assessed by the Employer's Agent and the ruling in terms of Clause 10.1.5 shall be taken into account the lack of mitigation measures employed due the lack of such early warning notice.

10.1.5 Unless otherwise provided in the Contract, the Employer's Agent shall within 28 days after the Contractor has delivered his claim in terms of Clause 10.1.1, give effect to Clause 3.1.2 and deliver to the Contractor and the Employer his written and adequately reasoned ruling on the claim referring specifically to this Clause. The amount thereof, if any, allowed by the Employer's Agent shall be included to the credit of the Contractor the next payment certificate. Where the Employer's Agent fails to make a ruling within such 28 days the claim shall be deemed to be refused;

Provided that:

10.1.5.1 The said period of 28 days may be extended if so, agreed between the Contractor and the Employer's Agent prior to the expiry of such 28 days, and

10.1.5.2 Any amount that has been established to the satisfaction of the Employer's Agent, before his ruling on the whole claim, shall be included to the credit of the Contractor in the next payment certificate.

10.3.1 Any dispute of whatsoever nature arising out of this Contract concerning any of the rights and/or obligations of any party thereto, either during the currency of the Contract or after the completion thereof, including any dispute as to the validity of the Contract, shall be referred to adjudication in terms of Clause 10.5. The Contractor or the Employer, hereinafter referred to as "the parties", may deliver to the other a written notice, hereinafter referred to as a "Dispute Notice", of any dispute arising out of or in connection with the Contract;

10.10.1 Nothing herein contained shall deprive the Contractor or the Employer of either party's right to institute immediate court proceedings in respect of failure by the Employer or the Contractor, as the case may be, to pay the amount of a payment certificate on its due date, or to pay any amount of retention money on its due date for payment.

10.10.3 The Adjudication Board, arbitrator and the court shall have full power to open up, review and revise any ruling, decision, order, instruction, certificate or valuation of the Employer's Agent. The Arbitrator and the court shall have full power to and to reconsider any decision by the Adjudication Board relevant to the matter in dispute, and neither party shall be limited in such proceedings before such arbitrator or court to the evidence or arguments put before the Employer's Agent for the purpose of obtaining his ruling, or the Adjudication Board for the purpose of obtaining a decision.

1.2.2 CONTRACT SPECIFIC DATA

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

	CL No	
Defects liability period	1.1.1.13	12 calendar months
Time for achieving practical completion	1.1.1.14	4 months – inclusive of the 14-day period referred to in Clause 5.3.2 and inclusive of non-working days referred to in Clause 5.8.1, but exclusive of special non-working days.
Name of Employer	1.1.1.15	Langeberg Municipality
Name of Employers Agent	1.1.1.16	iX engineers (Pty) Ltd.
Address, telephone and fax number of Employers Agent	1.2.1.2	31 Allen Drive, Loevenstein, BELLVILLE, 7530 (tel) 021 912 3000
Address, telephone and fax number of Employer	1.2.1.2	28 Main Road, Ashton, (tel) 023 615 8000, (fax) 023 615 1563
The Pricing Strategy	1.1.1.26	Re-measurement Contract
Health and Safety Plan	5.3.1	Within 14 days after Commencement Date
Initial programme	5.3.1	Within 14 days after Commencement Date
The agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (no. 85 of 1993) and the Construction Regulations Promulgated there under must be signed	5.3.1	Within 14 days after Commencement Date
Time within which Performance Guarantee (Security) must be provided	5.3.1	Within 14 days after Commencement Date
Time within which Insurance must be provided	5.3.1	Within 14 days after Commencement Date
Letter of Good Standing from the Compensation Commissioner	5.3.1	Within 14 days after Commencement Date
Time to submit documentation before commencement of the Works is	5.3.2	14 days
Non-working days	5.8.1	The special non-working days are: (1) All gazetted public holidays falling outside the year end break. (2) The year end break commencing as published by SAFCEC The following conditions apply: a) No work allowed after 18:00 on weekdays. b) Working times for Saturdays are 08:00 - 14:00. c) No work allowed on Sundays, Public Holidays and year end break as published by SAFCEC. d) Approval for work outside of normal working hours to be obtained from Employer. Penalty for the transgression of above conditions is R 2 000/transgression.

Special non-working hours/days	5.8.1	The SAFCEC published industry shutdown period in December and January. All statutory holidays.
Amount of penalty for delay	5.13.1	R 2 000 per day
The requirements for achieving Practical Completions are	5.14.1	All payment items in the bill of quantities must be incorporated into the Works or as determined by the Employer's Agent.
Latent defect period beyond the date of final Approval Certificate	5.16.3	10 Years
The Security provided by the Contractor	6.2.1	Performance guarantee of 10% of the Contract Sum plus Retention of 10% of the value of the Works
The percentage allowance on the net cost of materials actually used in the completed works is	6.5.1.2.3	5%
Percentage advance on materials not yet built into the Permanent Works is	6.10.1.5	80% of value of materials on site or value of the MOS Guarantee submitted and approved, whichever is the lesser amount. Proof of payment for material must be submitted (before the MOS will be certified) of alternative a MOS guarantee may be provided (at the Contractors cost).
Limit of retention money	6.10.3	Ten percent (10%) of the contract sum
The value of Plant and materials supplied by the Employer to be included in the insurance sum is	8.6.1.1.2	Not Required
The amount to cover professional fees for the repairing damage and loss to be included in the Insurance sum	8.6.1.1.3	15% of the Contract Sum
Limit of indemnity or liability insurance required	8.6.1.3	R 10 000 000-00 for any single claim and the number of claims to be unlimited during the construction defects liability period
Dispute resolution	10.5.1	Ad Hoc Adjudication
The number of Adjudication Board Members to be appointed is	10.5.3	One

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

C1.2 Contract Data (Part 2)

Data provided by the Contractor

The name of the Contractor is

The address of the Contractor is

Physical : Postal :
Address
.....
.....
.....
.....

Telephone : Fax:

email :

CONTRACTOR'S ANNUAL HOLIDAY PERIODS DURING CONSTRUCTION PERIOD

Year 1 contractor's annual holiday period	Start date		End date
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LANGEBERG MUNICIPALITY

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CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

C1.3 Form of Performance Guarantee

PERFORMANCE GUARANTEE

For use with the Conditions of Contract as described in C1.2: Contract Data Part 1: Contract Data provided by the Employer

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

"Physical address:

"Employer" means: The Langeberg Municipality, DIRECTORATE – CIVIL ENGINEERING SERVICES.

"Contractor" means:

"Employer's Agent" means: iX engineers (Pty) Ltd.

"Works" means: "TENDER NO. 64/2024": **CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU**

"Site" means: The site as defined in the Contract Data.

"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: The date of issue by the Employer's Agent of the Certificate of Completion of the Works.

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate of Completion of the Works as defined in the Contract.

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 payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.

3. 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 Employer's Agent 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 receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
 - 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
 - 5.2 a provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
 - 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. 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.
10. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
11. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
12. 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.

13. 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)

ANNEXURE

LIST OF APPROVED FINANCIAL INSTITUTIONS

The following financial institutions are currently (as at 18 October 2016) approved for issue of contract guarantees to the LANGEBERG Municipality:

National Banks:

ABSA Bank Ltd.
FirstRand Bank Ltd.
Investec Bank Ltd.
Nedbank Ltd.
Standard Bank of SA Ltd.

International Banks (with branches in SA):

Barclays Bank plc.
Citibank n.a.
Credit Agricole Corporate and Investment Bank
HSBC Bank plc.
JP Morgan Chase Bank
Societe Generale
Standard Chartered Bank

Insurance companies:

ABSA Insurance
Coface s.a.
Compass Insurance Co.
Constantia Insurance Co.
Credit Guarantee Insurance Co.
Guardrisk Insurance Co.
Hollard Insurance Company Ltd.
Infiniti Insurance Limited
Lombard Insurance
New National Assurance Co.
Regent Insurance Co.
Renasa Insurance Company Ltd.
Santam Limited
Zurich Insurance Co.

LANGEBERG MUNICIPALITY

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CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

C1.4 Form of Advance Payment Guarantee

ADVANCE PAYMENT GUARANTEE

For use with the Conditions of Contract as described in C1.2: Contract Data Part 1: Contract Data provided by the Employer

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

"Physical address:

"Employer" means: The Langeberg Municipality, DIRECTORATE – CIVIL ENGINEERING SERVICES.

"Contractor" means:

"Employer's Agent" means: iX engineers (Pty) Ltd.....

"Works" means: TENDER NO. 64/2024 - **CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU**

"Site" means: The site as defined in the Contract Data.

"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.

"Plant and materials" means: The Plant and materials stored at places other than the Site, or in respect of which an advance payment prior to manufacture is required, which the Employer has agreed may be subject to advance payment, such Plant and materials being listed in the Schedule of Plant and materials.

"Schedule of Plant and materials" means: A list of Plant and materials which shows the value thereof to be included in the Guaranteed Advance Payment Sum.

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

Amount in words:

"Expiry Date" means: The date of the payment certificate wherein the Plant and materials have been certified by the Employer's Agent as having been built into the Permanent Works.

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates and Final Payment Certificate.

ADVANCE PAYMENT GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Advance Payment Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Advance Payment Guarantee and up to and including the Expiry Date or the date of payment in full of the Guaranteed Advanced Payment Sum, whichever occurs first.

3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Advance Payment 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 Advance Payment 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 Employer's Agent 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) calendar 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 Advance Payment Sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Advance Payment Guarantee, such demand stating that:
 - 5.1 the Contract has been terminated due to the Contractor's default and that this Advance Payment 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 Advance Payment Guarantee is called up in terms of 5; and
 - 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. 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 Advance Payment Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
10. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
11. This Advance Payment Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
12. This Advance Payment 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.

13. 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)

.

Schedule of Plant and materials

For use with Advance Payment Guarantees on contracts using the General Conditions of Contract for Construction Works, Third Edition, 2015.

Employer The Langeberg Municipality, DIRECTORATE – CIVIL ENGINEERING SERVICES

Contractor

Works Contract No. and Title.....

Payment Certificate No.

Advance payment is requested in respect of the following items of Plant and materials, which have been manufactured and are stored at places other than the Site, or in respect of which a deposit with order is required from the Contractor by a manufacturer/supplier:

Bill of Quantities item no.	Description of Plant and materials	Deposit with order required (Y/N)	Place of storage (or manufacture, if deposit with order is required)	Unit	Quantity	Unit price R c	Total Price R c
Total Value of Plant and materials to be included in Guaranteed Advance Payment Sum							R c

Signed at on theday of.....20.....

.....
for the Contractor

.....
As witness

.....
Approved by Employer's Agent

LANEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

C1.5 Occupational Health and Safety Agreement

AGREEMENT MADE AND ENTERED INTO BETWEEN THE LANE BERG MUNICIPALITY (HEREINAFTER CALLED THE "EMPLOYER") AND

.....
(Contractor/Mandatar y/Company/CC Name)

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, 85 OF 1993 AS AMENDED.

I,, representing

....., as an employer in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work will be performed, and all construction equipment, machinery or plant used in such a manner as to comply with the provisions of the Occupational Health and Safety Act (OHSA) and the Regulations promulgated thereunder.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all registration and assessment monies due to the Compensation Commissioner have been fully paid or that I/We are insured with an approved licensed compensation insurer.

C OI D ACT Registration Number:

OR Compensation Insurer: Policy No.:

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements of OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA and Regulations as well as the Council's Special Conditions of Contract, Way Leave, Lock-Out and Work Permit Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any subcontractors employed by me will enter into an occupational health and safety agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the Occupational Health and Safety Specifications contained in this tender and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan submitted and approved in terms thereof.

Signed aton the.....day of.....20.....

Witness

Mandatar y

Signed aton the.....day of.....20.....

Witness

for and on behalf of LANE BERG Municipality

LANEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

C1.6 Insurance Broker's Warranty

Pro Forma

Logo

Letterhead of Contractor's Insurance Broker

Date _____

LANEBERG MUNICIPALITY
Municipal Manager
PRIVATE BAG X2
ASHTON
6715
TEL: 023 626 8200

Dear Sir

TENDERT NO.: 64/2024

CONTRACT TITLE:
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

NAME OF CONTRACTOR: _____

I, the undersigned, do hereby confirm and warrant that all the insurances required in terms of the abovementioned contract have been issued and/or in the case of blanket/umbrella policies, have been endorsed to reflect the interests of the LANEGERG MUNICIPALITY with regard to the abovementioned contract, and that all the insurances and endorsements, etc., are all in accordance with the requirements of the contract.

I furthermore confirm that all premiums in the above regard have been paid.

Yours faithfully

Signed: _____

For: _____

Part C2: Pricing Data

PART C2:	PRICING DATA	104
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C2.1 Pricing Assumptions

Pricing Assumptions mean the criteria as set out below, read together with all Parts of this contract document, which it will be assumed in the contract, that the tenderer has taken into account when developing his prices.

1. The method of measurement published by the South African Bureau of Standards in clause 8 of the Standardised Specifications for Civil Engineering Construction is applicable, subject to the variations and amendments contained in the section "Applicable SANS 1200 standardised specifications".
2. Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Schedule, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.
3. The measurement and payment clauses in a specification in which further information regarding the scheduled items is given, are referenced under "Item" (pay items) in the Bills of Quantities. The referenced clauses are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the digits which follow SANS in the SANS 1200 series of specifications, e.g. G for SANS 1200 G.
4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
5. The quantities set out in the Bills of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Employer's Agent from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
6. The prices and rates to be inserted in the Bills of Quantities are to be the full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
7. A price or rate should be entered against each item in the Bills of Quantities, whether the quantities are stated or not. **An item against which no rate is/are entered, or if anything other than a rate or a nil rate (for example, a zero, a dash or the word "included" or abbreviations thereof) is entered against an item, it will also be regarded as a nil rate having been entered against that item, i.e. that there is no charge for that item.** The Tenderer may be requested to clarify nil rates, or items regarded as having nil rates; and the Employer may also perform a risk analysis with regard to the reasonableness of such rates.
8. Except where rates only are required, insert all amounts to be included in the total tendered price in the "Amount" column and show the corresponding total tendered price.
9. The Tenderer shall fill in rates for all items where the words "rate only" appear in the "Total" column. "Rate Only" items have been included where:
 - (a) an alternative item or material is contemplated;
 - (b) variations of specified components in the make-up of a pay item may be expected; and
 - (c) no work under the item is foreseen at the tender stage but the possibility that such work may be required is not excluded.

For “Rate Only” items no quantities are given in the “Quantity” column, but the quoted rate shall apply in the event of work under this item being required. The Tenderer shall however note that in terms of the Tender Data the Tenderer may be asked to reconsider any such rates which the Purchaser may regard as unbalanced.

10. Where Provisional sums or Prime Cost sums are provided for items in the Bill of Quantities, payment for the work done under such items will be made in accordance with the Contract Specifications. The Purchaser reserves the right, during the execution of the works, to adjust the stated amounts upwards or downwards according to the work actually done under the item, or the item may be omitted altogether, without affecting the validity of the Contract.

The Tenderer shall not under any circumstance whatsoever delete or amend any of the sums inserted in the “Amount” column of the Bill of Quantities and in the Summary of the Bill of Quantities unless ordered or authorized in writing by the Purchaser before closure of tenders. Unauthorized changes made by the Tenderer to provisional items in the Bill of Quantities, or to the stated provisional percentages and sums in the Summary of the Bill of Quantities, will not be tolerated.

11. Arithmetical errors found in the Bill of Quantities as a result of faulty multiplication of addition, will be corrected by the Purchaser’s Agent at the tender evaluation stage, as set out in the Condition of Tender and the Tender Data
12. Incorrect entries shall not be erased or obliterated with correction fluid but must be crossed out neatly. The correct figures must be entered above or adjacent to the deleted entry, and the alteration must be initialled by the Tenderer.
13. The units of measurement described in the Bills of Quantities are metric units. Abbreviations which may be used in these Bills of Quantities are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1000 kg)
m2	=	square metre	No.	=	number
m2 pass	=		square metre-pass	sum	= lump sum
ha	=	hectare	MN	=	meganewton
m3	=	cubic metre	MN.m	=	meganewton-metre
m3.km	=	cubic metre-kilometre	P C sum	=	Prime Cost sum
l	=	litre	Prov sum	=	Provisional sum
kl	=	kilolitre	%	=	per cent
MPa	=	megapascal	kW	=	kilowatt

14. **Where fractions of a cent occur in calculations of prices and amounts, they shall be rounded up/down to the nearest whole cent.**
15. The Tenderer is referred to C.2.24 in Part T1.2 Tender Data regarding the pricing of Deviations and/or Qualifications.
16. All descriptions or clauses where trade names or proprietary products are specified, are deemed to include the phrase “or equal approved”
17. Tenderers are referred to Clause 6.8.2 in Part C1.2 Contract Data regarding contract price adjustment.

The following bills in Part C2.2 Bills of Quantities are deemed applicable to the following categories for the purposes of Contract Price Adjustment:

NO.	BILL	CPA CATEGORY
1.	NONE	

C2.2 Bills of Quantities

Bid specifications may not make any reference to any particular trademark, name, patent, design, type, specific origin or producer, unless there is no other sufficiently precise or intelligible way of describing the characteristics of the work, in which case such reference must be accompanied by the words "or equivalent".

TENDERERS MUST NOTE THAT WHEREVER THIS DOCUMENT REFERS TO ANY PARTICULAR TRADEMARK, NAME, PATENT, DESIGN, TYPE, SPECIFIC ORIGIN OR PRODUCER, SUCH REFERENCE SHALL BE DEEMED TO BE ACCOMPANIED BY THE WORDS 'OR EQUIVALENT'

LANEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE A: PRELIMINARY & GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
A	SANS 1200A	<u>SCHEDULE A: PRELIMINARY & GENERAL</u>					
A.1	8.3	FIXED-CHARGED ITEMS					
A.1.1	8.3.1	Contractual Requirements	Sum	1			
	8.3.2	Establish Facilities on the site					
	8.3.2.1	Facilities for Engineer (SANS 1200 AB)					
A.1.2		(c) Nameboards	No.	2			
	8.3.2.2	Facilities for Contractor					
A.1.3		(a) Offices and Storage sheds	Sum	1			
A.1.4		(b) Workshops	Sum	1			
A.1.5		(c) Laboratories	Sum	1			
A.1.6		(d) Living accommodation	Sum	1			
A.1.7		(e) Ablution and latrine facilities	Sum	1			
A.1.8		(f) Tools and Equipment	Sum	1			
A.1.9		(g) Water supplies, Electrical power, Communication facilities	Sum	1			
A.1.10		(h) Dealing with water	Sum	1			
A.1.11		(i) Access to and on site	Sum	1			
A.1.12		(j) Plant	Sum	1			
A.1.13	8.3.3	Other fixed-charge obligations (Specify)	Sum	1			
A.1.14	8.3.4	Removal of site establishment on completion of works	Sum	1			
A.1.15		Implementation and adherence to the occupational health and safety act					
	PS A 8.9.1	Health and Safety Requirements	Sum	1			
	PS A 8.9.2	Health and Safety Plan	Sum	1			
	PS A 8.9.3	Health and Safety file	Sum	1			
A.1.16	PS A 8.10	Environmental Control as per the environmental specification	Sum	1			
Total Carried Forward							

LANGEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE A: PRELIMINARY & GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
A.2	8.4	TIME-RELATED ITEMS					
A.2.1	8.4.1	Contractual requirements					
	8.4.2	Operate and maintainance of facilities on site	Sum	1			
	8.4.2.1	Facilities for Engineer for duration of Contract (SANS 1200 AB)					
A.2.2		(c) Nameboards	No.	4			
	8.4.2.2	Facilities for Contractor for duration of Contract					
A.2.3		(a) Offices and Storage sheds	Sum	1			
A.2.4		(b) Workshops	Sum	1			
A.2.5		(c) Laboratories	Sum	1			
A.2.6		(d) Living accommodation	Sum	1			
A.2.7		(e) Ablution and latrine facilities	Sum	1			
A.2.8		(f) Tools and equipment	Sum	1			
A.2.9		(g) Water supplies, Electrical power, Communication facilities	Sum	1			
A.2.10		(h) Dealing with water	Sum	1			
A.2.11		(i) Access to and on site	Sum	1			
A.2.12		(j) Plant	Sum	1			
A.2.13	8.4.3	Supervision for Duration of Construction	Sum	1			
A.2.14	8.4.3	Supervision for handling and dealing with Sub-Contractors for Duration of Construction	Sum	1			
A.2.15	8.4.4	Company and Head office Overhead Costs for the Duration of the Contract	Sum	1			
A.2.16	8.4.5	Other time-related obligations (Specify).....	Sum	1			
A.2.17		Implementation and adherence to the occupational health and safety act					
	PS A 8.9.1	Health and Safety Requirements	Sum	1			
	PS A 8.9.2	Health and Safety Plan	Sum	1			
	PS A 8.9.3	Health and Safety file	Sum	1			
A.2.18	PS A 8.10	Environmental Control as per the environmental specification	Sum	1			
Total Carried Forward							

LANEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE A: PRELIMINARY & GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
A.3	PSA 8.5	SUMS STATED PROVISIONALLY BY THE ENGINEER					
A.3.1	PS A 8.5.1	a) For work to be executed by the Contractor (raising, lowering or moving of existing services)	Prov Sum	1			
A.3.2		b) Handling costs and profit in respect of subitem above	%	50,000.00			
A.3.3	PS A 8.5.2	a) Works Executed by Nominated Sub-contractors	Prov Sum	1			
A.3.4		b) Overheads, Charges and Profit on Item (a) above	%	50,000.0			
A.3.5		c) Material testing by commercial laboratories if required by the Engineer	Prov Sum	1			
A.3.6		d) Handling costs and profit in respect of subitem above	%	50,000.00			
A.4	PS A 8.7	DAYWORK					
		Labour					
A.4.1	PS A 8.7	a) Unskilled labour	hours	24			
A.4.2	PS A 8.7	b) Semi skilled labour	hours	24			
A.4.3	PS A 8.7	c) Skilled labour	hours	24			
		Plant					
A.4.4	PS A 8.7	d) Excavators	hours	24			
A.4.5	PS A 8.7	e) Graders	hours	24			
A.4.6	PS A 8.7	f) Front-end loaders	hours	24			
A.4.7	PS A 8.7	g) Rollers	hours	24			
A.4.8	PS A 8.7	h) TLB	hours	24			
A.4.9	PS A 8.7	i) Trucks (10m3)	hours	24			
A.4.10	PS A 8.7	j) Water Truck	hours	24			
A.4.11	PS A 8.7	k) Plate Compactor/Rammer Compactor	hours	24			
A.5		STANDING TIME COSTS					
A.5.1		(a) Equipment	Days	1			
A.5.2		(b) Labour	Days	1			
Total Carried Forward							

LANGEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE A: PRELIMINARY & GENERAL

[illegible]

LANGEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE B: SITE CLEARANCE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
B	SANS 1200C	<u>SCHEDULE B: SITE CLEARANCE</u>					
B.1	PS C 8.2.1	Clear and grub in:					
B.1.1		(a) Stormwater pipe route (3m wide)	m	1,100			
B.1.2		(b) Road Reserve (Width Varies)	m	3,117			
B.2	PS C 8.2.11	Remove from site and dispose of rubble and undesirable material at a site to be identified by the Contractor	m ³	350			
B.2	PS C 8.2.7	Dismantle and remove pipelines, electricity transmission lines, cables, etc					
B.2.1		a) Existing water pipelines up to 75 mm dia.	m			Rate Only	
B.2.2		b) Existing sewer pipelines up to 200 mm dia.	m			Rate Only	
B.2.3		c) Existing stormwater pipelines up to 375 mm dia.	m			Rate Only	
B.3	PS C 8.2.12	Saw cutting of asphalt or cemented pavement layers:					
B.3.1		a) Saw cutting Asphalt (Up to 75mm)	m	2,242			
B.3.2		b) Saw cutting Concrete Driveways (Up to 150mm)	m			Rate Only	
B.4	PS C 8.2.13	Break up and remove existing asphalt wearing course and dispose of material at a site to be identified by the Contractor	m ²	7,880			
B.5	PS C 8.2.14	Break up and remove existing concrete driveway and dispose of material at a site to be identified by the Contractor	m ²			Rate Only	
B.6	PS C 8.2.15	Remove existing paving and stockpile at a site to be identified by the Contractor	m ²	420			
B.7	PS C 8.2.16	Remove existing kerbs, channels, combination kerbs and edge restraints and stockpile at a site to be identified by the Contractor	m	1,030			
B.8	PS C 8.2.17	Demolish existing stormwater grid inlet and dispose at a site to be identified by the contractor	No.	2			
B.9	PS C 8.2.18	Remove, stockpile and reinstate existing fencing in road reserve	m	10			
B.10	PS C 8.2.19	Remove, stockpile and reinstate existing road traffic signs in road reserve	No.	0			
B.11	PS C 8.2.20	Demolish existing stormwater manhole and dispose at a site to be identified by the contractor	No.	2			
B.12	PS C 8.2.21	Remove existing stormwater pipe and dispose at a site to be identified by the contractor	m	230			
Total Carried Forward							

LANGEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE B: SITE CLEARANCE

[illegible]

LANEGERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE C: BULK EARTHWORKS

[illegible]

LANGEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE D: STORMWATER DRAINAGE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
D	SANS 1200 LE	<u>SCHEDULE D: STORMWATER DRAINAGE</u>					
D.1	SANS 1200 DB	EARTHWORKS (PIPE TRENCHES)					
	PS DB 8.3.2 (a)	Trench excavations in all materials, backfilling, compacting and removal of surplus material for pipes with a nominal diameters greater than 300mm up to 600mm for the following depths:					
D.1.1		(a) 0,00 - 1,00 m	m			Rate Only	
D.1.2		(b) 1,01 - 1,50 m	m	600			
D.1.3		(c) 1,51 - 2,00 m	m	450			
D.1.4		(d) 2.01 - 2,50 m	m	350			
	PS DB 8.3.2(a)	Trench excavations in all materials, backfilling, compacting and removal of surplus material for pipes with a nominal diameters greater than 600mm up to 1050mm for the following depths:					
D.1.5		(a) 1,01 - 1,50 m	m			Rate Only	
D.1.6		(b) 1,51 - 2,00 m	m			Rate Only	
D.1.7		(c) 2.01 - 2,50 m	m			Rate Only	
		Extra over for Items D.1.1 to D.1.7 for excavation in:					
D.2	8.3.2(b)	Hard rock excavation	m ³	50			
D.3	PS DB 8.3.2(c)	Excavate and dispose of unsuitable material from the trench bottom	m ³	75			
D.4	PS DB 8.3.2(d)	Excavate by hand to expose existing services as instructed	m ³	25			
	SANS 1200 DB	EXCAVATIONS ANCILLARIES					
D.5	8.3.3.1	Make up deficiency in backfill material from:					
D.5.1	8.3.3.1(c)	(a) commercial sources	m ³	1,290			
D.5.2	8.3.3.1(c)	(b) G5 natural gravel material, stabilized with 2% cement by volume, from commercial sources, compacted to 95% MOD AASHTO Density (100% for sand)	m ³	75			
D.6	PS DB 8.3.8	Handling of ground water in trenches					
D.6.1		(a) Supply and place 19 mm crushed stone from commercial sources	m ³	25			
D.6.2		(b) Supply and place geotextile	m ²	250			
	SANS 1200 DB	EXISTING SERVICES					
Total Carried Forward							

LANGEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
BILL OF QUANTITIES

SCHEDULE D: STORMWATER DRAINAGE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
D.7	PS DB 8.3.5(a)	Services that intersect a trench					
D.7.1		a) Watermains	No.	10			
D.7.2		b) Stormwater pipes	No.	5			
D.7.3		c) Sewer pipes	No.	10			
D.7.4		d) Telkom cables/sleeves underground	No.	5			
D.7.5		e) Electrical cables underground	No.	5			
D.7.6		f) Electrical cables overhead	No.	10			
D.7.7		g) Fence or boundary wall	No.	2			
D.8	PS DB 8.3.5(b)	Services that adjoin a trench					
D.8.1		a) Watermains	m	250			
D.8.2		b) Stormwater pipes	m	5			
D.8.3		c) Sewer pipes	m	250			
D.8.4		d) Telkom cables/sleeves underground	m	20			
D.8.5		e) Electrical cables underground	m	20			
D.8.6		f) Electrical cables overhead	m	20			
D.8.7		g) Fence or boundary wall	m	100			
D.9	PS DB 8.3.6.1	Reinstatement of road surfaces, complete with all courses:					
D.9.1		(a) Premix Roads- 40mm Medium continuously graded premix- 150mm G4 base coarse- 150mm G5 subbase- 150mm G7 upper selected- 150mm G9 lower selected	m²	400			
D.9.2		(b) 25mm Premix Driveways- 25mm Medium continuously graded premix- 100mm G5 basecourse	m²	100			
D.9.3		(c) 50mm Paving Driveways- 50mm Concrete Interlocking Paving- 20mm Sand layer	m²	100			
D.9.4		(d) Concrete Driveways150mm 25MPa Concrete with Ref.617 mesh	m²	100			
	SANS 1200 LB	BEDDING (PIPES)					
D.10	8.2.2.3	Supply and compact bedding to 100% MOD AASHTO-density with material from commercial sources:					
D.10.1		(a) Bedding	m³	290			
Total Carried Forward							

LANGEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
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SCHEDULE D: STORMWATER DRAINAGE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
D.10.2		(b) Blanket	m³	890			
	8.2.1	Supply and compact bedding to 100% MOD AASHTO-density with material from trench excavations:					
D.10.3		(a) Bedding	m³			Rate Only	
D.10.4		(b) Blanket	m³			Rate Only	
	SANS 1200 LE	PIPEWORK					
D.11	PS LE 8.2.1	Supply, handle, lay and bed (Class C bedding) the following pipes:					
D.11.1		(a) Ø 300mm concrete 100D	m	55			
D.11.2		(b) Ø 375mm concrete 100D	m	1,000			
D.11.3		(c) Ø 525mm concrete 100D	m			Rate Only	
D.11.4		(d) Ø 600mm concrete 100D	m	345			
D.11.5		(e) Ø 750mm concrete 100D	m			Rate Only	
D.11.6		(f) Ø 900mm concrete 100D	m			Rate Only	
D.12	PS LE 8.2.4	Extra over Item 8.2.1 for cutting ends of pipe on site for the following dia:					
D.12.1		(a) Ø 300mm concrete 100D	No.	23			
D.12.2		(b) Ø 375mm concrete 100D	No.	20			
D.12.3		(c) Ø 525mm concrete 100D	No.			Rate Only	
D.12.4		(d) Ø 600mm concrete 100D	No.	10			
D.12.5		(e) Ø 750mm concrete 100D	No.			Rate Only	
D.12.6		(f) Ø 900mm concrete 100D	No.			Rate Only	
	SANS 1200 LE	MANHOLES					
D.13	PS LE 8.2.8	Supply and install complete as per detail drawing P10065-00-CIV-DRD-002 manholes with heavy duty ductile iron EN124-D400 hinged cover and frame for the following depth categories:					
D.13.1		(i) 0,51 m - 1,00 m	No.			Rate Only	
D.13.2		(i) 1,01 m - 1,50 m	No.	11			
D.13.3		(iii) 1,51 m - 2,00 m	No.	13			
D.13.4		(iv) 2,01 m - 2,50 m	No.	3			
Total Carried Forward							

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SCHEDULE D: STORMWATER DRAINAGE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
	PS LE 8.2.8	Supply and install complete as per detail drawing P10065-00-CIV-DRD-002 manholes with heavy duty ductile iron EN124-D400 hinged cover and frame for the following depth catagories:					
D.13.5		(i) 1,01 m - 1,50 m	No.			Rate Only	
D.13.6		(iii) 1,51 m - 2,00 m	No.			Rate Only	
D.13.7		(iv) 2,01 m - 2,50 m	No.			Rate Only	
	SANS 1200 LE	STRUCTURES					
D.14	PS LE 8.2.8	Construct new kerb inlet structures complete as per detail on drawing no. P10065-00-CIV-DRD-002 for:					
D.14.1		(a) Ø 300mm stormwater pipe	No.	23			
D.14.2		(b) Ø 375mm concrete 100D	No.			Rate Only	
D.15	PS LE 8.2.8	Construct new grid inlet structure as per detail on drawing no. P10065-00-CIV-DRD-002 for:					
D.15.1		(a) Ø 375mm stormwater pipe	No.			Rate Only	
D.15.2		(b) Ø 600mm concrete 100D	No.			Rate Only	
D.15.3		(c) Ø 750mm concrete 100D	No.			Rate Only	
D.16		Headwall structure complete to detail drawing P10065-00-CIV-DRD-002 for the following pipes sizes:					
D.16.1		(a) Ø 525mm stormwater pipe	No.			Rate Only	
D.16.2		(b) Ø 600mm concrete 100D	No.	4			
D.16.3		(c) Ø 750mm concrete 100D	No.			Rate Only	
D.16.4		(d) Ø 900mm concrete 100D	No.			Rate Only	
D.16.5	PS 8.2.14 LE	Break into and connect to existing structures and make good the benching	No.	10			
Total Carried Forward To Summary							

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SCHEDULE E: ROADWORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
E		<u>SCHEDULE E: ROADWORKS</u>					
E.1	SANS 1200 DM	EARTHWORKS (ROADS, SUBGRADE)					
	8.3.3	Treatment of roadbed					
E.1.1		Road-bed preparation and compaction of material to minimum of 95% of MAASHTO density (100% for sand)	m ³	2,000			
E.2		EARTHWORKS					
	PS DM 8.3.4	Cut to fill, compacted to 90% of MAASHTO density (100% for sand) in:					
E.2.1		Road prism	m ³	1,500			
		Selected layers					
	PS DM 8.3.5	Selected layer (G7) compacted to 93% of MAASHTO density (100% for sand)					
E.2.2		From site	m ³	1,450			
E.2.3		From commercial sources	m ³	880			
	PS DM 8.3.7	Cut to spoil from:					
E.2.4		Soft excavation	m ³	250			
E.2.5		Intermediate excavation	m ³	250			
E.3		SUNDRIES					
E.3.1	PS DM 8.3.17	Trim, shape and compact road reserves	m ²	8,000			
E.3.2	PS DM 8.3.18	Trial holes	No	10			
	PS DM 8.3.19	Extra-over item PS DM 8.3.7 for the removal of unsuitable material below road-bed for areas:					
E.3.3		0 m ² - 100 m ²	m ³			Rate Only	
E.3.4		100 m ² - 300 m ²	m ³			Rate Only	
E.4	SANS 1200 ME	SUBBASE					
	8.3.3	Construct subbase with material from commercial sources compacted to 95% MAASHTO density					
		a) Gravel material					
E.4.1		150 mm (G5 material)	m ³	1,740			
E.5	SANS 1200 MF	BASE					
Total Carried Forward							

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SCHEDULE E: ROADWORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
	8.3.3	Construct base with material from commercial sources compacted to 98% MAASHTO density using					
		a) Gravel material					
E.5.1		150 mm (G4 material)	m³	2,200			
E.5.2		a) Gravel base (chemically stabilised material). Material to be stabilised will be a natural gravel and the properties will be such that max 2.5% cement will be required to modify the material to a C4	m³	440			
	8.3.5	Process base material by the following processes, as relevant					
E.5.3		d) Stabilization	m³	440			
	8.3.8	Stabilizing agent					
E.5.4		b) Portland Cement	t	20			
E.6	SANS 1200 MH	ASPHALT BASE AND SURFACING					
	8.5.1	Prime coat:					
E.6.1		Prime coat using MC-30 Cutback bitumen medium curing applied at a rate of 0,7 l/m² of net bitumen.	m²	18,550			
	8.5.4	Asphalt Surfacing:					
E.6.2		i) Continuous graded medium mix using 50/70 penetration grade bitumen	m²	18,550			
E.7		PATCHING AND EDGE BREAK REPAIRS					
	PS MH 8.5.9	Excavation in existing pavements for patching (non-milling)					
		Other layers (Gravel Materials)					
E.7.1		Not exceeding 10 m² including for edge repairs wider than 250 mm	m³	350			
	PS MH 8.5.10	Backfilling of excavations for patching with:					
		Chemically stabilised material (material to be stabilised will be a natural gravel and the properties will be such that max 2.5% cement will be required to modify the material to a C4) for a patch with a surface area:					
E.7.2		Not exceeding 10 m² including for edge repairs wider than 250 mm	m³	350			
E.8	SANS 1200 MJ	SEGMENTED PAVING					
Total Carried Forward							

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SCHEDULE E: ROADWORKS

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LANGEBERG MUNICIPALITY - CONTRACT NO. T64/2024
CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU
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SCHEDULE F: KERBING AND CHANNELLING

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
F	SANS 1200 MK	<u>SCHEDULE F: KERBING AND CHANNELLING</u>					
F.1	PS MK 8.2.1	Precast concrete combination kerb (CK5-type) on concrete bedding complete with benching (25MPa) according to detail:					
F.1.1		(a) Radius to 20 m	m	408			
F.1.2		(b) Radius greater than 20 m and straight	m	2,038			
F.2	PS MK 8.2.1	Precast concrete mountable kerb (MK10-type) on concrete bedding complete with benching (25MPa) according to detail:					
F.2.1		(a) Radius to 20 m	m	358			
F.2.2		(b) Radius greater than 20 m and straight	m	1,993			
F.3	PS MK 8.2.2	Precast concrete barrier kerb and channel (BK2 & C1) on concrete bedding complete with benching (25MPa) according to detail:					
F.3.1		(a) Radius to 20 m	m	400			
F.3.2		(b) Radius greater than 20 m and straight	m	1,670			
F.4	PS MK 8.2.1	Precast concrete barrier kerb (BK2) on concrete bedding complete with benching (25MPa) according to detail:					
F.4.1		(a) Radius to 20 m	m	20			
F.4.2		(b) Radius greater than 20 m and straight	m	1,540			
F.5	PS MK 8.2.1	Precast concrete edging kerb (E1) on concrete bedding complete with benching (25MPa) according to detail:					
F.5.1		(a) Radius to 20 m	m			Rate Only	
F.5.2		(b) Radius greater than 20 m and straight	m			Rate Only	
F.6	PS MK 8.2.1	Precast concrete edging kerb (E3) on concrete bedding complete with benching (25MPa) according to detail:					
F.6.1		(a) Radius to 20 m	m			Rate Only	
F.6.2		(b) Radius greater than 20 m and straight	m			Rate Only	
F.7	PS MK 8.2.1	Precast concrete channel kerb (C1) on concrete bedding complete with benching (25MPa) according to detail:					
F.7.1		(a) Radius to 20 m	m			Rate Only	
F.7.2		(b) Radius greater than 20 m and straight	m			Rate Only	
F.8	PS MK 8.2.2	Precast concrete combination channel kerb (C1 + C1) on concrete bedding complete with benching (25MPa) according to detail:					
Total Carried Forward							

LANEBERG MUNICIPALITY - CONTRACT NO. T64/2024
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SCHEDULE F: KERBING AND CHANNELLING

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
Brought Forward							
F.8.1		(a) Radius to 20 m	m			Rate Only	
F.8.2		(b) Radius greater than 20 m and straight	m	50			
		ANCILLARIES					
F.9	PS 8.2.14	MK	Transition kerbs complete as per detail:				
F.9.1			(a) CK5 to BK2+C1	No.	18		
F.9.2			(b) BK2 to MK10	No.	7		
F.9.3			(c) CK5 to MK10	No.	7		
F.9.4			(d) CK5 to C1+C1	No.	4		
F.9.5			(e) BK2+C1 to C1+C1	No.	4		
F.10	PS 8.2.15	MK	Dropped kerbs complete as per detail:				
F.10.1			(a) BK2	No.	18		
F.10.2			(b) BK2+C1	No.	7		
F.10.3			Reinstate existing kerbs removed/stockpiled	m		Rate Only	
F.11			Supply and install concrete bollards 1000 x 300 mm Ø (Cape Concrete or similar)	No.	50		

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SCHEDULE G: ANCILLARY ROADWORKS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
						R	c
G	SANS 1200 MM	<u>SCHEDULE G: ANCILLARY ROADWORKS</u>					
G.1		PERMANENT ROAD SIGNS					
	8.3.6	Statutory signs supplied and erected complete on 80mm diameter galvanised steel supports in concrete bases:					
G.1.1		i) 600mm Type R1.4 Stop Sign	No	30			
G.1.2		ii) 600mm Type W306 Sign	No	18			
G.1.3		iii) 600mm Type W332 and IN11.3 Combined	No	18			
G.2		ROAD MARKINGS					
		Non-reflectorized paint applied at nominal rate of 0,42 l/m2 for:					
	PS MM 8.4.1	a) White lines (broken or unbroken)					
G.2.1		i) 100mm wide	m	300			
G.2.2		ii) 200mm wide	m			Rate Only	
G.2.3		iii) 300mm wide	m	100			
		b) Yellow lines (broken or unbroken)					
G.2.4		i) 100mm wide	m	250			
G.2.5		c) White characters and symbols	m ²	25			
G.2.6		d) Yellow characters and symbols	m ²	25			
Total Carried Forward To Summary							

LANGEBERG MUNICIPALITY - CONTRACT No.: T64/2024**CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU****BILL OF QUANTITIES**

SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT R
A	SECTION A: PRELIMINARY AND GENERAL	
B	SECTION B: SITE CLEARANCE	
C	SECTION C: BULK EARTHWORKS	
D	SECTION D: STORMWATER DRAINAGE	
E	SECTION E: KERBING AND CHANNELLING	
F	SECTION F: ANCILLARY ROADWORKS	
G	Sub-total (TOTAL SECTION A – F)	
H	10% Contingencies (The sum provided is under the direct control of the Engineer And may be partially or totally excluded) (10% of above Sub-Total)	
I	Sub-total (SECTION G + H above)	
J	15% VAT	
CONTRACT PRICE CARRIED FORWARD TO C1.1 FORM OF OFFER (I + J above)		

I/We, the undersigned, do hereby declare that these are the properly priced Bill / Schedules of Quantities forming part of this Contract Document containing Pages in consecutive order upon which my/our Tender for **TENDER NO. 64/2024 – CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU** has been based.

My/our total Contract Price for these work and above items (Total I) is (in words):

.....
.....

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

DECLARATION (In respect of completeness of Tender)

Langeberg Municipality
28 Main Street,
Ashton

I/we, the undersigned, do hereby declare that these are the properly priced Bills of Quantities forming Part C2.2 of this Contract Document containing 253 pages plus 18 BOQ pages in consecutive order upon which my/our tender for **TENDER NO. 64/2024 – CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU** has been based. If I/we have submitted a printed version of the Bills of Quantities, I/we warrant that no amendments have been made to it from the original, other than amendments issued in any Addenda in terms of Clause C.3.2 in Part T1.2 Tender Data.

SIGNED ON BEHALF OF TENDERER:	
NAME, SURNAME & POSITION	
DATE	

Part C3: Scope of Work

PART C3:	SCOPE OF WORK	127
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Status

Should any requirement or provision in the parts of the Scope of Work conflict with any requirement of any Standardised Specification, particular specification or any drawings, the order of precedence, unless otherwise specified, is:

- Scope of Work (Parts C3.1, C3.4 and C3.5)
- Particular Specifications
- SANS Standardised Specifications
- Drawings

C3.1 Description of the Works

CONTENTS

- 3.1.1 EMPLOYER'S OBJECTIVES
- 3.1.2 OVERVIEW OF THE WORKS
- 3.1.3 EXTENT OF THE WORKS
- 3.1.4 LOCATION OF THE WORKS
- 3.1.5 TEMPORARY WORKS
- 3.1.6 CONSTRUCTION TIME PERIOD
- 3.1.7 CONTRACTOR'S CAMP SITE, POWER SUPPLY AND SERVICES
- 3.1.8 CONSTRUCTION IN CONFINED AREAS
- 3.1.9 WATER FOR CONSTRUCTION PURPOSES
- 3.1.10 FEATURES REQUIRING SPECIAL ATTENTION
- 3.1.11 ENVIRONMENTAL REQUIREMENTS
- 3.1.12 MONTHLY STATEMENT AND PAYMENT CERTIFICATE
- 3.1.13 LIMITED FUNDS

3.1.1 EMPLOYER'S OBJECTIVES

The Employers objective is to upgrade several roads and associated stormwater infrastructure in the Ashton and Montagu area.

The sites are located at the following locations:

1. Aalwyn Street in Ashton - 20°03'0.56"E 33°49'54.51"S
2. Industrial Road in Ashton - 20°04'28.20"E 33°50'10.24"S
3. Several Streets in Zolani, Ashton - 20°05'17.09"E 33°50'20.04"S, and
4. Two sections of Barlinka Street in Montagu - 20°08'06.51"E 33°46'32.26"S and 20°07'59.02"E 33°46'45.59"S

Upgrade existing roads to formalized roads by adding kerbing and channels and installing associated stormwater infrastructure in areas prone to flooding where no formal minor/major stormwater networks are not available. The upgraded intersections will include new signage and pedestrian crossings.

The description of the project contained in the Scope of Work is merely an outline of the Contract Works and shall not limit the work to be carried out by the Contractor under this Contract. Details of some of the major items are given in this section and approximate detailed quantities for each type of work to be carried out in accordance with the Contract Documents are included in the Bill of Quantities.

3.1.2 OVERVIEW OF THE WORKS

3.1.2.1 General Description

Work items under this tender shall include any one or more of the following:

- i) Establishment on site
- ii) Site Clearance
- iii) Earthworks
- iv) Stormwater Drainage
- v) Roadworks
- vi) Kerbing and Channeling
- vii) Ancillary Roadworks

3.1.2.2 Work Areas

The location of the works envisaged for the Project will be shown on the drawings bound into C5 of the Project document.

3.1.2.3 Boundaries of the site

The site will be confined to the areas of construction, including the site camp of the contractor.

3.1.2.3 Occupation of the site

Access to the site of the works will be given to the Contractor on the Commencement Date.

3.1.3 EXTENT OF THE WORKS

The work that is to be carried out under the contract is as provided for in the schedule of quantities. However, if during the course of construction conditions are found to differ from those anticipated, the Employer's Agent reserves the right to modify the scope of the work to suit the prevailing conditions and circumstances. Variations introduced in this manner will be measured and paid for at the rates tendered for appropriate items listed elsewhere in the schedule of quantities or in the absence of such rates, as extra work.

3.1.5 TEMPORARY WORKS

The provision of temporary access to the different sites, temporary shoring, formwork, etc.

3.1.6 CONSTRUCTION TIME PERIOD

The time period specified for completion by the Employer's Agent, as stated in the Contract Data in terms of Clause 1.1.1.14 of the Conditions of Contract, is determined by the contractor and should be inclusive of all special non-working days and year end break (builder's holidays). The Contractor shall plan and programme his construction sequence for completion within the time period specified.

3.1.6.1 Construction work programme

The Contractor shall take note of various factors contained in the specifications, which will have a significant influence on the compilation of the construction work programme. Prominent items are those which might require a lead time for ordering the equipment or which might entail a special manufacturing period.

The Contractor shall take the above into consideration when drawing up his programme and no claims will be entertained in this regard.

3.1.7 CONTRACTOR'S CAMP SITE, POWER SUPPLY AND OTHER SERVICES

The Contractor will be permitted to use the area on or near the site for the establishment of a camp site and office accommodation for his construction personnel. The choice of all sites for the establishment of camps is subject to the approval of the Employer's Agent.

The Contractor shall, however, make his own arrangements concerning the provision of water, electricity and other services for the campsite and office facilities. All Municipal rates shall apply.

No direct payment will be made for the provision of electrical and other services. The cost thereof shall be deemed to be included in the rates and amounts tendered for the various items of work for which these services are required.

3.1.8 CONSTRUCTION IN CONFINED AREAS

It will be necessary for the Contractor to work within confined and restricted areas. The method of construction in these confined areas largely depends on the contractor's constructional plant.

Regardless, measurement and payment will be in accordance with the specified cross-sections and dimensions only, irrespective of the method used for achieving these cross-sections and dimensions. It is deemed that the rates tendered in the Pricing Schedule / Priced Bill / Schedule of Quantities include full compensation for all special equipment and construction methods and for all difficulties encountered when working in confined areas and narrow widths, and at or around obstructions. **No additional payment will be made nor will any claim for payment be considered for work done in such confined areas, despite indications to the contrary in the Standard Specifications.**

The environment needs to be respected during the construction stage. The footprint must be discussed before the start of construction and no construction or movement of vehicles should take place outside these allocated areas.

3.1.9 WATER FOR CONSTRUCTION PURPOSES

The Contractor must make adequate provision in his tender for all negotiations and procurement of water for construction activities and all related costs will be deemed to be included in his tendered rates. The raw borehole water cannot be used for concrete mixing purposes, only treated borehole water will be accepted.

3.1.10 FEATURES REQUIRING SPECIAL ATTENTION

3.1.10.1 Existing Services

Any work requiring the excavation of existing road pavements, sidewalks and verges will require the necessary wayleaves be obtained from the relevant service authorities (including DFA, Neotel, Telkom, Electrical Department / Eskom, Roads & Stormwater Department, Waterworks Department and Drainage & Sewerage Department etc).

Prior to commencing work, the Contractor shall confer with all Authorities and Departments concerned and obtain the necessary wayleaves for both overhead and underground services affected by the Works and shall satisfy himself that he has obtained all the relevant information required to complete the Contract. The Contractor will be liable for obtaining all the necessary wayleaves and work permits from the relevant service authorities prior to the commencement of work within the road reserve.

The Contractor shall carry out the works with the minimum interference to existing services and it shall be clearly understood that obtaining the necessary wayleaves, will be at his own cost. The cost of repairing any damage to services, due to miscalculations or negligence on the part of the Contractor or his failure to carry out the duties set out in this Clause, shall be borne by the Contractor.

The Contractor shall comply with the requirements of the Project Specifications in Part B of C3.4.

The contractor needs to walk through the erf with the owner or authorised person, take photographs of the condition before work. Upon completion, the erven need to be handed back to the owner or authorised person in a similar or better state.

3.1.10.2 Health and Safety Plan

Prior to commencing work, the Contractor shall submit a Health and Safety Plan, compiled in accordance with the Health and Safety Specifications in Part C of the Works Specifications to the Employer's Agent for approval. The Contractor may not commence construction without the Employer's Agent's approval of the Health and Safety Plan.

3.1.10.3 Standard of Materials, Workmanship, Testing and Performance

The attention of Tenderers is particularly drawn to the high standard of materials, workmanship, testing and performance applicable to his Contract as a whole and he shall convey this requirement to his proposed Sub-Contractors.

The Contractor will carry out control testing of materials and workmanship as required in terms of the specifications. Where necessary, the Employer's Agent may carry out acceptance control testing. The Employer will not pay claims or grant extension of time for delays to the works resulting from the awaiting of test results. Testing as required by the Employer's Agent will be effected as promptly as possible but it is in the Contractors own interest to submit material samples and other components of workmanship for testing in good time to assist in avoiding or minimising delays.

3.1.10.4 Weatherproof Protection for Workers

All staff required to continue working during rain shall be provided with oilskins and rubber knee boots, or other approved protective clothing and footwear.

3.1.10.5 Night Work and Work on Public Holidays

Where the Contractor requires staff to work overtime, he shall make the necessary arrangements with the Employer's Agent and obtain written approval from the Employer's Agent. The Contractor shall bear the cost of his overtime work.

The following conditions apply:

- a) No work allowed after 18:00 on weekdays.
- b) Working times for Saturdays are 08:00 - 14:00.
- c) No work allowed on Sundays, Public Holidays and year end break as published by SAFCEC.
- d) Approval for work outside of normal working hours to be obtained from Employer.

Penalty for the transgression of above conditions is R5 000 per transgression.

3.1.11 ENVIRONMENTAL REQUIREMENTS

The Contractor shall take particular note of the environmental requirements contained in the Works Specifications.

The Contractor shall take every precaution to avoid damage to vegetation within that area which falls outside the designated work area is indicated on the drawings. Any damage caused is to be repaired at the Contractor's expense.

Storage and stockpiling of materials will not be permitted without the written consent of the Employer's Agent. Excess material from excavations and waste material shall be spoiled off site at suitable locations.

3.1.12 MONTHLY STATEMENTS AND PAYMENT CERTIFICATES

The statement to be submitted by the Contractor in terms of Clause 6.10 of the Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Employer's Agent, in digital electronic computer format.

For the purposes of the Employer's Agent's payment certificate, the Contractor shall subsequently be responsible, at his own cost, for making such adjustments to his statement as may be required by the Employer's Agent for the purposes of accurately reflecting the actual quantities and amounts which the Employer's Agent deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Employer's Agent within three (3) normal working days from the date on which the Employer's Agent communicated to the Contractor the adjustments required.

Any delay by the Contractor in making the said adjustments and submitting to the Employer's Agent the requisite copies of the adjusted statement for the purposes of the Employer's Agent's payment certificate will be added to the times allowed to the Employer's Agent in terms of Subclause 6.10.4 of the Conditions of Contract to submit the signed payment certificate to the Employer and the Contractor. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

3.1.13 LIMITED FUNDS

Limited funds are available for this project and certain portions of the works as detailed in the scope of works may be omitted depending on the tendered rates and tender amounts received. The Employer reserves the right to amend, limit or omit certain portions / parts of the works without thereby invalidating the contract.

The Contractor shall take cognisance of these additional requirements in the finalisation of his tendered rates and programme of work. No claims will be considered on account of these restrictions.

C3.2 Engineering / Design

CONTENTS

3.2.1 DRAWINGS

3.2.2 DESIGN PROCEDURES

The drawings listed below are attached in order to give an overview of the project. Additional construction drawings will, in terms of the General Conditions of Contract, be issued to the Contractor by the Employer's Agent/Employer on the commencement date and from time to time as required.

The Works shall be carried out in accordance with the drawings listed in C5 of the tender documents and included in Volume 4: Drawings and form part of the contract documents.

The reduced drawings that form part of the tender documents shall be used for tender purposes only.

The Contractor will be supplied with 3 unreduced paper prints of each of the drawings required for construction. These copies are issued free of charge and the Contractor shall make any additional copies he may require at his own cost.

Only figured dimensions shall be used and drawings shall not be scaled unless otherwise instructed.

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

All information in the possession of the Contractor, which the Employer's Agent requires to complete his record drawings shall be supplied to the Employer's Agent's Representative before a certificate of completion will be issued.

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

3.2.2 DESIGN PROCEDURES

The only design responsibility assigned to the Contractor under this contract is for the design work related temporary works and support of excavations. There is no requirement to submit these designs to the Employer or the Employer's agent for approval. Temporary works will however be inspected by the appointed Occupation Health and Safety Client Agent to ensure compliance with recognized industry norms and standards.

It is assumed that all temporary works designed and constructed by the Contractor has been designed and supervised by a competent person with the necessary qualifications and experience. It is also assumed the Contractor has the necessary indemnity insurance in place to cover for any liability that may occur as a result of the failure of such temporary works.

C3.3 Procurement

CONTENTS

- 3.3.1 TARGETED CONSTRUCTION PROCUREMENT
- 3.3.2 SUB-CONTRACTING
- 3.3.3 TARGETED CONSTRUCTION PROCUREMENT SPECIFICATIONS

3.3.1. TARGETED CONSTRUCTION PROCUREMENT

3.3.1.1 Objective

The Employer applies and promotes the principles of Targeted Construction Procurement. In terms of Employer's current procurement policy this project provides for the following objectives to be actively pursued:

- the provision of opportunities for Small, Medium and Micro- Business Enterprises (SMMEs).
- the provision of work opportunities for local labour.
- the maximising of job creation by adopting labour-intensive construction methods wherever physically feasible and economically justifiable.

3.3.1.2 Contract requirements

The Targeted Construction Procurement: Participation of Targeted Enterprises and Targeted Labour Standard Specifications is included in Part 3.3.3 of this section C3.3 of the Scope of Works and shall apply as additional Works Specifications to this contract.

For this contract, the Employer has set minimum contract participation goals, calculated as a percentage of the net amount (as defined in clause 3.2.14 below).

3.3.1.3 Labour workforce

On this contract, it is the intention that work is provided during the execution of the works for targeted labour residing in the target area (Montagu) as defined and which would normally be the local or nearest communities. Labourers of the local or nearest communities required by the contractor shall be targeted, recruited and employed for work to enable the contractor to comply with the minimum contract participation goals for targeted labour set by the employer for the contract.

3.3.2. SUBCONTRACTING

3.3.2.1 General

The Contractor may subcontract portions of the Works included in the Contract. Clause 4.4 of the General Conditions of Contract makes provision for subcontracting.

Subcontract work provides opportunities for small or specialist businesses and can also be used to secure contract participation goal credits for HDI participation or other specific goals, where applicable.

Where participation credits are claimed by the Contractor in respect of subcontractors, suppliers, manufacturers and/or service providers, the Contractor shall ensure that all such are registered and verified on the Western Cape Supplier Database. The Employer shall not accept any claim for participation in respect of subcontractors, etc. unless they are registered and verified.

Notwithstanding the above, contract participation goal credits may not be claimed for work undertaken in respect of provisional sums and prime cost items.

Where monetary allowances for provisional sums or prime costs items have been allowed and the monetary allowance is less than R200 000, the Contractor shall invite three quotations from suitably qualified subcontractors, etc. for the required scope of works. The selection of the Subcontractors, etc. shall be approved by the Employer's Agent.

Where monetary allowances for provisional sums or prime cost items have been allowed and the monetary allowance is greater than R200 000, an open tender process will have to be followed in respect of a subcontractor for this work. In such cases the tender will be issued by the Employer's Agent on behalf of the Contractor.

3.3.2.2 Selected Subcontractors

With reference to subcontractors selected by the Contractor in consultation with the Employer, Clause 4.4.3 (GCC 2015) of the General Conditions of Contract states that this shall be done in accordance with the requirements of "a procedure set out in the Scope of Work."

The procedure for Selected Sub-contractors as referred to in Subclause 4.4.3 (GCC 2015) of the General Conditions of Contract and Contract Data shall be:

All specialist merchants, tradesmen and others executing any work or supplying any goods for which provisional or prime cost sums are provided in the Bill / Schedule of Quantities and who are selected for this purpose by the Contractor as specified hereafter, shall in the execution of such work be subcontractors of the Contractor and are herein referred to as "Selected Subcontractors".

Unless another procedure is specified, Selected Subcontractors are chosen and appointed as follows. The Employer and the Contractor shall compile a list of firms or persons acceptable to both and who will be invited to submit tenders for certain work or goods to be supplied by Selected Subcontractors. Before the closing date of such tenders the Contractor shall furnish the Employer with a sealed list in which is indicated the price increase required by the Contractor regarding the handling and appointment of every tenderer as Selected Subcontractor. No price increase requested by the Contractor in such list may be higher than the percentage or amount the Contractor has tendered in the main Contract against the provisional or prime cost item concerned. The list is then opened with the tenders and on the basis thereof the Employer shall indicate which tender he wishes to accept. The Contractor shall accept the tenderer and appoint him as Selected Subcontractor.

The Contractor shall incorporate in the subcontract provisions that:

- (a) In respect of the work or the goods that are the subject of the subcontract the Selected Subcontractor undertakes to the Contractor mutatis mutandis the obligations and liabilities as are imposed upon the Contractor to the Employer in terms of the Contract, and holds the Contractor harmless from and indemnifies him against the same and in respect of all claims, demands, lawsuits, damages, costs, charges and expenses whatsoever arising out of or in connection therewith, or arising out of or in connection with any failure to perform such obligations or to fulfil such liabilities, and,
- (b) The Selected Subcontractor holds the Contractor harmless and indemnifies him against:
 - (i) Shortcomings in the subcontract works if and where the works were designed by the Selected Subcontractor;
 - (ii) defects in the goods if and where the goods were manufactured and/or supplied by the Selected Subcontractor;
 - (iii) any negligence by the Selected Subcontractor, his agents, workmen and servants;
 - (iv) any misuse by the Selected Subcontractor of any Constructional Plant, Temporary Works or materials provided by the Contractor for the purposes of the Contract;
 - (v) any claims as aforesaid.

3.3.2.3 Appointment of targeted enterprise subcontractors

The Contractor is required to appoint domestic subcontractors in order to meet the participation goal for targeted enterprises and local labour.

The Contractor will be allowed to subcontract any portion of work that he wants to count towards his participation goal and make an award on a domestic subcontract basis, subject to the requirements of Clause 6 of the General Conditions of Contract. The Contractor may procure these subcontractors using his own subcontract selection methodology.

Prior to the appointment of any domestic subcontractor, whose work is to contribute to the participation goal, the Contractor shall submit to the Employer details of the scope of the work subcontracted including the relevant items in the Bill of Quantities, what the subcontract total sum is and what the Contractor's corresponding tender amount is for the same scope of work is including all the relevant Establishment and General sums and any other allowable sums.

In the event that the subcontract total sum is less than 85% of the corresponding Contractor's sum indicated above, or the subcontract total sum is less than 65% of the Employer's internal estimate, the Contractor shall undertake to allow the subcontractor to submit any explanatory information regarding the subcontract to the Employer, and the subcontractor shall agree be interviewed by the Employer or the Employer's Agent to discuss the breakdown of the subcontract sum in order to satisfy the Employer that the subcontractor can complete the work at the amount submitted on a reasonable sustainable commercial basis. If there are concerns about the subcontractor's tender

sum the subcontractor shall have the right to withdraw their tender without any sanction of any nature by the Contractor.

If the subcontractor withdraws the Contractor may have to select a different package of work to contribute to his subcontract target or choose and propose to appoint a different subcontractor for the same scope of work, or the Contractor will have to present, for the same subcontractor a re-negotiated subcontract sum that will be acceptable to the Employer. All additional costs that may arise as a result of such a re-negotiation or re-tendering/re-appointment shall be borne by the Contractor.

If a suitable subcontractor cannot be identified for the envisaged scope of works the Contractor shall complete the work at his tendered rates and the associated part of the works shall form part of the works executed by the Contractor and be excluded from counting towards the subcontract participation goal(s).

(b) **3.3.3. TARGETED CONSTRUCTION PROCUREMENT SPECIFICATIONS**

The following South African National Standard Resource Specifications for the implementation of Targeted Construction Procurement issued and published by Standards South Africa:

South African National Standard SANS 1914-4: 2002 (Edition 1)
Targeted Construction Procurement: Part 4: Participation of Targeted Enterprises and Targeted Labour (Local Resources) shall apply to and form part of this Contract.

Where the South African National Standard SANS 1914-Specification is not bound in this document, it may be obtained from South African Standards (website www.sansa.co.za) or inspected, by appointment, at the offices of the Employer's representative during normal working hours.

The South African National Standard Specification makes provision defining targeted enterprises and targeted labour, weightings for different subcategories, for factors and additional requirements to be specified to suit a particular contract. Details of such factors or additional requirements applicable to this contract are contained in this part of the Scope of Work.

Preferences granted in terms of Targeted Enterprises and Targeted Labour (Local Resources) shall be executed in accordance with the conditions specified below.

VARIATIONS TO THE STANDARDISED SANS 1914-4: 2002 SPECIFICATION

Variations, amendments and additions to the SANS 1914-4: 2002: Part 4: Participation of Targeted Enterprises and Targeted Labour (Local Resources) Standardised Specification are as set out below. Should any requirements of the variations conflict with other requirements of the SANS 1914-4: 2002 Specification, the requirements of the variation shall prevail.

The number of each clause and each payment item in this part of the project specifications consists of the prefix TP4 (Targeted Procurement – Part 4) followed by a number corresponding to the number of the relevant clause or item in the SANS Specification. The number of a new clause or item which does not form part of a clause or item in the standard SANS Specification, and which is included here, is also prefixed by TP4 followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the standard specifications.

TP4-2. DEFINITIONS (CLAUSE 2)

TP4-2.10 Target Area (Clause 2.10):

Add the following:

For this Contract the following Target Areas shall apply:

1. The geographical area located within **Montagu: Langeberg Municipality** - Target Area 1 is **defined as ward 7 & 11 in Montagu).**
2. The geographical area located within **Ashton: Langeberg Municipality** - Target Area 2 is **defined as ward 9 & 10 in Ashton).**
3. The geographical area, excluding Target Area 1 & 2, located within the boundaries of the Langeberg Municipal District.
3. The geographical area, excluding Target Areas 1, 2 and 3, located within the Western Cape Province.

TP4-2.11 Targeted Enterprise (Clause 2.11):

Add the following:

Targeted Enterprises for this Contract shall be a sole trader, partnership or legal entity from the Local Area.

TP4-2.12 Targeted Labour (Clause 2.12):

Add the following:

The following individuals are defined as the target group for this Contract:

All unskilled labour (100%) to be from Target Area. South African citizens, temporarily employed by the contractor and his subcontractors in the performance of the contract, who permanently reside within the boundaries of Target Area (Montagu) as specified. It is incumbent on individuals to demonstrate their claims to such residency on the basis of identification and association with and recognition by members of the community residing within the aforementioned area. It is incumbent on individuals to provide evidence of qualifying for the target groups.

TP4-2.15 Weightings (Clause 2.15):

Add the following:

In terms of Targeted Labour Goal Credit calculations (Section 3.3 of SANS 1914-4) the Weighting Factor for all contributions shall be taken as 1,0.

Add the following new subclause:

TP4-2.16 (new subclause 2.16):

Wages:

The actual amount paid periodically to targeted labour employed by the main contractor and his subcontractors after all deductions made in terms of the law (e.g. UIF) and exclusive of all company overheads and other benefits such as protective clothing, transport etc.

TP4-3. REQUIREMENTS (CLAUSE 3)

TP4-3.1 Contract Participation Goal (Clause 3.1):

Add the following to Subclause 3.1.1:

For this Contract the Contract Participation guidelines set by the Employer are:

Contract Participation Goal	CPG _{2min}	Minimum set by Employer
Targeted Enterprises SANS 1914-4 Annex A Method 2 Clause A.2.2.1	CPG _{2Emin}	15 %
Targeted Labour SANS 1914-4 Annex A Method 2 Clause A.2.2.2	CPG _{2Lmin}	5 %
Total Contract Participation Goal SANS 1914-4 Annex A Clause A.3	CPG _{2Emin} + CPG _{2Lmin} = CPG _{2min}	20 %

Tenders that do not meet each of the individual abovementioned minimum Contract Participation Goals (CPG_{2min}) set by the Employer will not be considered (not applicable if minimum percentage specified is 0%).

TP4-3.2 Achieving the Contract Participation Goal (Clause 3.2):

3.2.1 General

(a) Method 1

In the first paragraph numbered (1) replace the words “not less than 50% of the wages and allowances” with the words “not less than 30% of the wages and allowances”.

Delete subclauses (1) and (2) and add the following to Subclause 3.2.1:

For this Contract the Contractor may achieve the specified contract participation goal by the engagement and use of targeted enterprises and targeted labour as outlined in SANS 1914-4 and measured **by using Method 2 only.**

The engagement and use of targeted enterprises and targeted labour as outlined in SANS 1914-4, will not be measured by using Method 1 - **Method 1 will therefore not be applicable.**

TP4-3.3 Contract Participation Goal Credits (Clause 3.3):

Add the following new subclause after subclause 3.3.3

3.3.4 Further to the requirements of 3.3.3, credit will be denied should the Contractor not employ Targeted Labour in accordance with comply with the following relevant statutory legislation:

- Basic Conditions of Employment Act 75 of 1997
- Labour Relations Act 66 of 1995
- Employment Equity Act 55 of 1998 (Chapters 1 and 2)
- Occupational Health and Safety Act 85 of 1993
- Compensation for Occupational Injuries and Diseases Act 130 of 1993
- Skills Development Act of 1998

The statutory Department of Labour Government Notice No. R204 of 2 March 2001 : Basic Conditions of Employment Act (No. 75 of 1997) : Sectoral Determination 2 : Civil Engineering Sector, South Africa as amended shall apply in respect of any employer or employee associated with the contract.

In particular the Contractor shall pay his Labour workers at least the minimum wage prescribed in the statutory legislation.

The prime or main contractor who does not meet each of the individual minimum contract participation goals set by the Employer faces the possibility of being sanctioned. (See clause TP4-6 below)

Credits towards the contract participation goal for targeted enterprises will only be accorded to subcontractors / suppliers / manufacturers / service providers who undertake work directly for / to the main contractor. No credits will be accorded to targeted enterprises who are engaged by subcontractors / suppliers / manufacturers / service providers working under the main contractor.

Similarly, credits towards the contract participation goal for targeted labour will be granted for targeted labour employed by subcontractors only if they undertake work directly for / to the main contractor in the performance of the contract. However, in the case of subcontractors who are also targeted enterprises, the value of their targeted labour will, at the contractor's choice, count either towards the CPG for labour or the CPG for enterprise, but not both.

TP4-5.7. RECORDS (CLAUSE 5)

Add the following:

Contractor must provide a detailed breakdown of the project which shows the value of funding for SMME development and utilisation of local labour as per list below: Feedback must be provided at every site progress meeting in this regard. Where possible if other opportunities exist local labour and local SMME's must be considered. SMME's must be rotated by contractor and monitored for quality.

Type of work to be outsourced	Value	SMME	Utilisation of local labour	Percentage of cost project

TP4-5.8. RECORDS (CLAUSE 5)

Add the following:

Prior to the Client appointing a Tenderer, the Tenderer will have to submit proof of a contract between himself and the proposed SMME. The contract will have to clearly stipulate details of the scope of work and rates agreed

upon between the parties. This agreement together with the representative of the Subcontractor will have to be presented at the Site Handover Meeting to the Employer's Agent and the Employer.

Clear record and proof of all subcontractor expenditure, which must include materials, labour and any training (Formal compensated for training and informal training included) will have to be recorded and presented on a monthly basis at the monthly site meetings.

TP4-6. SANCTIONS (CLAUSE 6)

Add the following:

In the event that the Contractor fails to substantiate that any failure to achieve the Contract Participation Goal (CPG_{2E} and/or CPG_{2L}) relating to the granting of a preference was due to quantitative underruns, the elimination of items, or any other reason beyond the Contractor's control which may be acceptable to the Employer, the Contractor shall pay to the Employer penalties (P) in an amount determined in accordance with the following formula :

$$P = 0,15 \times \frac{(D - D_0)}{(100)} \times N_A$$

where D = tendered Contract Participation Goal (CPG₂) percentage.

D₀ = the Contract Participation Goal (CPG₂) which the Employer's Representative, based on the credits passed, certifies as being achieved upon completion of the Contract.

N_A = Net Amount

P = Rand value of penalty payable

In applying the above formula, the employer may give consideration to the following rules:

- a) In the event of the CPG for a subcategory item not being achieved, credit may be given to reduce the penalty to the extent that other subcategory items under the same main category have exceeded their CPG targets provided that at least 50% of the CPG target for the offending sub category item has been achieved.
- b) Where, after applying rule a), one or more of the subcategory items still warrant a penalty and the CPG target for the relevant main category has also not been achieved, then only the penalty applicable to the main category item will apply.
- c) No credit will be given for exceeding the CPG target of any of the three main categories (Subcontractors, Suppliers/Manufacturers and Targeted Labour)

Refer to the required report format attached hereto on pages 174 and 175

Date:		 PROJECT MANAGEMENT																
EPWP - EMPLOYMENT STATISTICS																		
No	Name & Surname	Id number	Age	*F	*M	*A	*Y	Disabled	Town	Start Date	Employment	Occupational Category <i>(Mark with 1)</i>						Total Wages Paid for '2016
MAN DAYS = →			Mark with 1				Yes / No		dd/mm/yy	Nr of Labour Hours per day	Nr of Labour Days/ month	Daily Wage	Clerical	Labourer	Semi-Skilled	Skilled	Super visor	
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2																		
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PROJECT NAME: T43/2023 CONSTRUCTION OF FIRE STATION

A = Adult >35
Y = Youth <35

M = Male
F = Female

PROJECT MANAGEMENT	
EPWP - PROJECT REPORTING	
Reporting on the 30th OF EVERY MONTH	
Project Name	UPGRADE OF BATH- AND CROSS STREET INTERSECTION, MONTAGU
Project Number	T54/2024
Service Provider	
Description of Project	UPGRADE OF BATH- AND CROSS STREET INTERSECTION, MONTAGU
Start Date of Project	
End Date of Project	
MIG NUMBER :	
Quantity	
Town	
Financial	
Budget excluding VAT	
Monthly Expenditure	
Expenditure Till date	
Main Funder	
Secondary Funder	
Output Actual (Progress)	
Description (what has been done)	
Quantity (how much has been done)	

LANGEBERG
MUNISIPALITEIT MUNICIPALITY MASIPALA

Contact Details of Project Manager	
Name & Surname	Carel Posthumus
Office Number	236158000
Email	cposthumus@langeberg.gov.za
Cell phone	
TRAINING n/a	
Name of Training Course	None
Number of Trainees	None
Outcome	None
PLANNED TRAINING n/a	
Name of Training Course	No training will be provided or planned for this project
Number of Trainees	
Start Date	
End Date	

C3.4 Construction

CONTENTS

- 3.4.1 TRADE NAMES OR PROPRIETARY PRODUCTS
- 3.4.2 APPLICABLE STANDARDISED SPECIFICATIONS
- 3.4.3 PARTICULAR / PROJECT SPECIFIC SPECIFICATIONS

3.4.1. TRADE NAMES OR PROPRIETARY PRODUCTS

Bid specifications may not make any reference to any particular trademark, name, patent, design, type, specific origin or producer, unless there is no other sufficiently precise or intelligible way of describing the characteristics of the work, in which case such reference must be accompanied by the words "or equivalent".

TENDERERS MUST NOTE THAT WHEREVER THIS DOCUMENT REFERS TO ANY PARTICULAR TRADEMARK, NAME, PATENT, DESIGN, TYPE, SPECIFIC ORIGIN OR PRODUCER, SUCH REFERENCE SHALL BE DEEMED TO BE ACCOMPANIED BY THE WORDS 'OR EQUIVALENT'

3.4.2 APPLICABLE STANDARDISED SPECIFICATIONS

SANS 1200A	1986	General
SANS 1200AB	1986	Engineer's Office
SANS 1200C	1982	Site Clearance
SANS 1200D	1990	Earthworks
SANS 1200DB	1989	Earthworks (Pipe Trenches)
SANS 1200DK	1996	Gabions and Pitching
SANS 1200DM	1981	Earthworks (Road and Subgrade)
SANS 1200G	1982	Concrete (structural)
SANS 1200L	1983	Medium Pressure Pipelines
SANS 1200LB	1983	Bedding (Pipes)
SANS 1200LC	1981	Cable Ducts
SANS 1200LD	1982	Sewers
SANS 1200LE	1982	Stormwater Drainage
SANS 1200M	1996	Roads (General)
SANS 1200ME	1981	Subbase
SANS 1200MF	1981	Base
SANS 1200MH	1996	Asphalt Base and Surfacing
SANS 1200MJ	1984	Segmented paving
SANS 1200MK	1983	Kerbing and Channelling
SANS 1200 MM	1984	Ancillary roadworks

All work carried out, as well as equipment supplied, must fully meet and be in compliance with the requirements of the Occupational Health and Safety Act (Act 85 of 1993) and the Construction Regulations (2014) issued in terms of Section 43 of the Act.

In addition, the latest revisions of the following statutory regulations, laws and obligations as pertaining specifically to any and all electrical work applicable to this specific project are applicable:

- The regulations of the local Supply Authority
- The regulations of the Client, being either Governmental, Municipal, Parastatal or Private
- Local fire regulations
- SANS 10400-A: 2010 – The application of the national building regulations, Part A: General principles and requirements

All references to “SABS” specifications shall be read as “SANS” in light of changes by the South African Bureau of Standards. Where a SANS Standard does not exist or if not applicable, the relevant IEC or BS Standard shall be applicable. All applicable electrical instrumentation must be IP68.

- a) The term project specifications appearing in any of the SANS 1200 standardised specifications must be replaced with the terms scope of work.
- b) Departures from and/or additions to specifications listed above are shown in accordance with the numbering system of the standardised or particular specification. Each clause with the prefix PS shall refer to the congruent clause in the appropriate section of the standardised or particular specification. Such clause shall either substitute, or supplement, or amend the clause with the same number. Where there is no such congruent clause in the standardised or particular specification, the PS clause shall be a new clause in the project specification. Any clause that is referred to in the standardised specification will also include the appropriate project specification and shall adhere to the following:
 - (i) In the event of any discrepancy between the project specifications and a part of the standard specifications, the schedule of quantities, or the drawings, the project specifications shall take precedence.
 - (ii) The standard specifications, which form part of this contract, may cover items not applicable to this particular contract and should be clarified with the Employer's Agent if discrepancies are obvious.

3.4.3 PARTICULAR / PROJECT SPECIFIC SPECIFICATIONS

In certain instances, the Standard Specifications listed in 3.4.2 above allow a choice to be specified in the Scope of Work between alternative materials or methods of construction. Allowance is also made for additional requirements to be specified to suit each particular contract. Details of such alternatives or additions are contained in this part of the Scope of Works. In addition, it contains some supplementary specifications required for this particular contract. Subclauses referred to are those in the relevant Standardised Specification.

The number of each clause and each payment item in this part of the project specifications consists of the prefix PS followed by a number corresponding to the number of the relevant clause or payment item in the standard specifications. The number of a new clause or a payment item which does not form part of a clause or a payment item in the standard specifications and which is included here, is also prefixed by PS followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the standard specifications.

PROJECT SPECIFICATION

SANS 1200 A: GENERAL

A 1 SCOPE

PS A 1 SCOPE

Replace sub-clause 1.1 with the following:

"This specification covers requirements, principles and responsibilities of a general nature which are normally applicable to all civil engineering contracts as well as the requirements for the Contractor's establishment on site."

PS A 2 **INTERPRETATIONS**

PS A 2.3 **Definitions**

(a) General

Add the following definitions:

"General conditions: The general conditions of contract specified for use with this contract and the special conditions of contract as applicable.

Specified: As specified in the standardized specifications, the drawings or the Specification Data. Specifications shall have the corresponding meaning."

(c) Measurement and payment

Replace the definitions for fixed charge, time-related charge and value-related charge with the following:

"Fixed charge: A charge that is not subject to adjustment on account of variation in the value of the contract amount or the contract time of completion.

Time-related charge: A charge, the amount of which is varied in accordance with the time for completion of the work as adjusted in accordance with the provisions of the contract.

Value-related charge: A charge, the amount of which is varied pro rata the final value of the measured work executed and valued in accordance with the provisions of the contract."

The terms "ESCOM", "ESC" and "Electricity Supply Commission" shall mean "Eskom".

The terms "GPO", "P&T", "Department of Posts and Telecommunications" and "Telkom" shall mean "Telkom SA Limited".

The terms "South African Railways", "SAR", "South African Transport Services", "SATS" shall mean "Transnet Limited".

Except for references to the Bureau itself, or to the (official) SABS mark, the term "SABS" shall mean "SANS".

PS A 2.4: **Abbreviations**

Add to subclause 2.4(b):

"The acronym 'MAMDD' referred to throughout the document stands for Modified AASHTO Maximum Dry Density."

A 3 **MATERIALS**

PS A 3.1 **Quality**

Substitute the second sentence of the first paragraph of A 3.1 with the following:

Materials shall bear the official mark of the appropriate standard.

Add to the end of the clause:

The Contractor is responsible for the cost of all testing to ascertain that materials do comply with the specific minimum requirements of the applicable standards. No additional payment will be made for such verification tests.

The Contractor shall inform the Engineer of any control testing to be done at least 48 hours prior to the commencement of the tests and must allow time in his programme for necessary testing and processing of results.

Substitute the second paragraph with the following:

Samples on which laboratory testing is required, shall be delivered free of charge to an approved laboratory, which is capable to carry out the necessary tests. The Contractor is responsible for the cost of all testing to ascertain that the materials do comply with the specified minimum requirements of the relative materials and no additional payment will be made for such testing. Only accredited laboratories may be used.

The Contractor shall inform the Engineer of any control testing to be done at least 48 hours before such tests are required and must allow in his program for the time necessary for the tests and the processing of the results thereof.

PS A 3.3 STORAGE OF MATERIALS

Rubber articles, including pipe insertion or joint rings, shall be stored in a suitable shed and kept away from sunlight, oil or grease. Living accommodation shall not be used for the storage of materials.

Large items not normally stored in a building shall be neatly stacked or laid out on suitable cleared areas on the Site. Grass or vegetation shall not be allowed to grow long in the storage areas and the material shall be kept free of dust and mud, and be protected from stormwater. Pipes shall be handled and stacked in accordance with the manufacturer's recommendations, special care being taken to avoid stacking to excessive heights and placing over hard objects. PVC pipes shall be protected from direct sunlight by suitable covers.

Every precaution shall be taken to keep cement dry and prevent access of moisture to it from the time it leaves the place of manufacture until it is required for use on the Site. Bags of cement which show any degree of hydration and setting, shall be removed from the Site of the Works and replaced at the Contractor's own expense.

PS A 3.4 HANDLING OF MATERIALS

Materials should be handled with proper care at all times. Under no circumstances may materials be dropped from vehicles. Large pipes shall be lifted or lowered only by means of suitable hoisting equipment.

The Engineer shall have authority to forbid the transporting or handling of materials in a manner which, in his opinion, could cause damage.

PS A 4.1 SILENCING OF CONSTRUCTION EQUIPMENT

Substitute A4.1 with the following:

The Contractors attention is drawn to the applicable regulations pertaining to noise and hearing conservation, framed under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended.

The Contractor shall at all times and at his own cost, be responsible for implementing all necessary steps to ensure full compliance with such regulations, including but not restricted to the provision and use of suitable and effective silencing devices for pneumatic tools and other plant which would otherwise cause a noise level in excess of that specified in the said regulations.

Where appropriate, the Contractor shall further, by means of temporary barriers, effectively isolate the source of such noise in order to comply with the said regulations.

PS A 4.2 **CONTRACTOR'S OFFICES, STORES AND SERVICES**

Add the following paragraph before the existing first paragraph in A4.2:

The Contractors buildings, sheds and other facilities erected or utilised on the Site for purposes of the Contract shall be fenced off and shall contain all offices, stores, workshops, testing laboratories, toilet facilities, etc. as may be required by the Contractor. The facilities shall always be kept in a neat and orderly condition.

No personnel may reside on the Site. Only night-watchmen may be on the Site after hours."

Delete "and first-aid services" in the second paragraph of A4.2 and add the following:

The Contractor shall provide on the Site and in close proximity to the actual locations where the work is being executed, one toilet per 10 workmen, which toilets shall be effectively screened from public view and their use enforced. Such toilets shall be relocated from time to time as the location of the work being executed changes, so as to ensure that easy access to the toilets is maintained.

PS A 4.3 **SITE SECURITY**

The area to be used by the Contractor, for the execution of the works, may be subject to a security risk. The Contractor must assess the potential risks and make his own provision for additional protection.

No separate payment will be made for these additional security measures and the cost thereof will be deemed to be included in the rates tendered for items PS A 8.3 and PS A 8.4. These rates shall also include additional insurance if required.

A 5 **CONSTRUCTION**

A 5.1 **SURVEY**

PS A 5.1.1 **Setting Out of The Works**

Substitute the first sentence in A 5.1.1 with the following:

Setting out of the works is the sole responsibility of the Contractor and shall be done from survey pegs along the street reserve boundaries and from benchmarks as indicated on the drawings. The Contractor shall, within two (2) weeks after the site has been handed over to him, ascertain himself of the correctness of all pegs and benchmarks. Any discrepancy shall immediately be reported in writing to the Engineer. Any costs or subsequent costs arising from discrepancies which had not been reported to the Engineer within the aforementioned period, shall be the sole responsibility of the Contractor.

PS A 5.1.2 **Preservation and Replacement of Survey Beacons and Pegs Subject to the Land Survey Act**

Delete the words "in the vicinity of boundaries" in the second sentence of A 5.1.2 and replace the words "under the direction of" in the same sentence with "in consultation and liaison with".

Add the following after the second sentence of A 5.1.2:

The Contractor and the Engineer shall record on the said list, their concurrence or disagreement (as the case may be) regarding the completeness and accuracy of the details recorded therein.

Substitute the third sentence of A 5.1.2 with the following:

At the completion of the Contract, the Contractor shall expose all pegs that were listed at the commencement of the construction as being in order and the Contractor shall arrange with a registered Land Surveyor for the checking of the positions of all such pegs and the replacement of those that the Land Surveyors check reveals have become disturbed or damaged. The Contractor shall, as precedent to the issue of the Certificate of Completion, provide to the Engineer, a certificate from the registered land surveyor, certifying that all pegs listed at the commencement of construction in accordance with the provision of this clause, have been checked and that those found to have been disturbed, damaged or destroyed have been replaced in their correct positions, all in accordance with the provisions of the said Act.

The costs of all checking, replacement and certification as aforesaid shall be entirely for the Contractors account. This, with the provision always that the Contractor shall not be held liable for the cost of replacement of pegs which:

- (a) cannot reasonably be re-established in their original positions by reason of the finished dimensions of the permanent works, and
- (b) The Contractor can prove beyond reasonable doubt to the satisfaction of the Engineer, were disturbed, damaged or destroyed by others beyond his control.”

PS A 5.2 WATCHING, BARRICADING, LIGHTING AND TRAFFIC CROSSINGS

Add the following to A 5.2:

The crossings of all streets with services must be done in half widths as to accommodate the traffic to the residential erven.

No staff accommodation will be allowed on Site, but the Contractor will be permitted to have one watchman in the camp during non-working hours.

From the time any portion of the Works commences, until the end of the Contract Period, the Contractor shall be responsible for protecting the property of the Employer and all persons having business on the Site from anything dangerous or likely to cause damage or injury. The Contractor shall take all practical precautions to avoid nuisance or inconvenience to the owners or occupiers of properties near to the Site and to the public generally whilst carrying out the Works and shall at all times keep the Site clean and in a safe and satisfactory condition.

PS A 5.3 PROTECTION OF EXISTING STRUCTURES

Substitute “Machinery and Occupational Safety Act, 1983 (Act No 6 of 1983)” with “Occupational Health and Safety Act, 1993 (Act No 85 of 1993), as amended,” and insert “as amended” after “(Act No. 27 of 1956)”:

PS A 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES

Substitute A 5.4 with the following:

PS A 5.4.1 Location of existing services

Before commencing with any work in an area, the Contractor shall ascertain the presence and actual position of all services which can reasonably be expected by a competent contractor to be present on, under, over or within the Site.

All services indicated on all wayleaves (obtained by Contractor, the RE to oversee the process and must be informed at all times of the progress by the Contractor), additional scanning as allowed for and pointed out on site by the local authority will be opened up and surveyed (level, invert, diameter and coordinates). These services include sewer, water, stormwater, electrical ducts, telecommunications ducts etc. These services will be reported to the Engineer 5 working days before these services will delay the Contractor.

The Contractor must therefore open all existing services and report them to the Engineer, 5 working days before the Practical Completion date and/or the Due Completion date, is affected. No claim will be considered for any delays if the Contractor did not follow protocol. This protocol must be clearly indicated on the initial and all adjusted construction programmes together with the time required by the Contractor to open all existing services. The Contractor must allow for at least 10 working days to open and expose the existing services. Any financial and time implications due to failure to timeously report to the Engineer will be for the Contractors account. Therefore, the protocol that must be indicated on the programme is as follows:

SEQUENCE OF PROTOCOL OF EXISTING SERVICES		
1	2	3
Open and Locating Existing Services	Report All existing services to the Engineer	Time before Practical Completion date and/or Completion date is affected
At Least 10 working days	1 working day	5 working days

The 5 working days, as per sequence number 3, is identified as float in terms of Clause 5.6.2.4 of the GCC 2015 (3rd Edition) and may only be used on prior approval by the Engineer. These 5 days must be programmed as a single bar item/activity, in the initial programme and subsequent adjusted programmes, as the immediate predecessor to normal climatic conditions and on the critical path of the programme.

Without in any way limiting his liability in terms of the Conditions of Contract in relation to damage to property and interference with services, the Contractor shall obtain the most up-to-date plans as are available, showing the positions of services existing in the area where he intends to work. Neither the Employer nor the Engineer offers any warranty as to the accuracy or completeness of such plans and because services can often not be reliably located from plans, the Contractor shall ascertain the actual location of services depicted on such plans by means of careful inspection of the Site.

Thereafter, the Contractor shall, by the use of appropriate methodologies, carefully expose the services at such positions as are agreed to by the Engineer, for the purposes of verifying the exact location and position of the services. Where the exposure of existing services involves excavation to expose underground services, the further requirements of subclauses 4.4 and 5.12.2 of SANS 1200 D (as amended) shall apply.

All services, the positions of which have been determined as aforesaid at the critical points, shall henceforth be designated as 'known services' and their positions shall be indicated by the Contractor on a separate set of drawings, a copy of which shall be furnished to the Engineer without delay and within the time period stated above.

As soon as any service which has not been identified and located as described above is encountered on, under, over or within the site, it shall henceforth be deemed to be a known service and the aforesaid provisions pertaining to locating, verifying and recording its position on the balance of the site shall apply. The Contractor shall notify the Engineer immediately when any such service is encountered or discovered on the Site.

Whilst he is in possession of the Site, the Contractor shall be liable for all loss of or damage as may occur to

- (a) known services, anywhere along the entire lengths of their routes, as may reasonably be deduced from the actual locations at which their positions were verified as aforesaid, due cognizance being taken of such deviations in line and level which may reasonably be anticipated, and
- (b) any other service which ought reasonably to have been a known service in accordance with the provisions of this clause.

The Contractor shall also be liable for consequential damage in regard to (a) and (b), whether caused directly by the Contractors operations or by the lack of proper protection.

No separate payment will be made to the Contractor in respect of this costs of providing, holding available on the Site and utilising the said detecting and testing equipment, nor for any costs incurred in preparing and submitting to the Engineer the Drawings as aforesaid. These costs shall be deemed included in the Contractors other tendered rates and prices included in the Contract.

Payment to the Contractor in respect of exposing services at the positions agreed by the Engineer and as described above will be made under the payment items (if any) as may be provided for in the respective sections of the specifications pertaining to the type of work involved.

PS A 5.4.2 Protection during construction

The Contractor shall take all reasonable precautions and arrange its operations in such a manner as to prevent damage occurring to all known services during the period which the Contractor has occupation and/or possession of the Site.

Services left exposed shall be suitably protected from damage and in such a manner as will eliminate any danger arising therefrom to the public and/or workmen, all in accordance with the requirements of the prevailing legislation and related regulations.

Unless otherwise instructed by the Engineer, no services shall be left exposed after its exact position has been determined and all excavations carried out for the purpose of exposing underground services shall be promptly backfilled and compacted. In roadways, the requirements of subclause 5.9 of SANS 1200 DB should be observed. In other areas compaction is to be to 90% modified AASHTO density.

PS A 5.4.3 Alterations and repairs to existing services

Unless the contrary is clearly in the Contract or ordered by the Engineer, the Contractor shall not carry out alterations to existing services. When any such alteration become necessary, the Contractor shall promptly

inform the Engineer, who will either make arrangements for such work to be executed by the owner of the services or instruct the Contractor to make such arrangements himself.

Should damage occur to any existing services, the Contractor shall immediately inform the Engineer and the relevant authorities should be repaired by the applicable authority and not by the Contractor. In urgent cases, the Contractor shall take appropriate steps to minimise damage to and interruption of the service. No repairs of telecommunication cables or electric power lines and cables shall be attempted by the Contractor.

The contractor shall allow for the time and cost thereof to drain and refill existing water supply/reticulation pipelines for purpose of connecting onto the existing pipelines.

The contractor shall be billed for the time spent by the Client to make alterations and/or repairs on existing infrastructure and the Contractor shall make provision for this in his tender rates.

A list of important telephone numbers for use when services are damaged will be provided at the commencement of the contract."

PS A 5.5

DEALING WITH WATER ON WORKS

Add the following to A 5.5:

All work must be protected against flooding and damage by water (storm water, groundwater etc) and the Contractor's prices will be held to include for such protection and for any rectification that may be required (including drying out of material or layer works or any consequential losses, slow progress, deviations, cofferdams, sumps, well point, labour and pumping of water).

Care shall be taken that a free passage for water is maintained in all gutters and waterways. Special precautions shall be taken by the Contractor not to change existing conditions by leaving spoil in waterways or by diverting water onto private property.

The Contractor shall make good any damage and shall settle all claims at his own expense in the event of flooding of private or public property occurring through waterways being obstructed by his operations or through the effect of any other of his acts or omissions.

The Contractor shall be responsible throughout the duration of the Contract, inclusive of the Defects Liability Period, for the implementation and maintenance of all soil erosion preventative measures necessary to protect any pipeline and the properties through which it passes, and land utilised by the Contractor during the Contract from any adverse effects of soil erosion, settlement, scour, etc, resulting from the contract works.

Notwithstanding the types and quantities of anti-erosion measures executed by the Contractor, whether ordered by the Engineer or not, and notwithstanding the maintenance work performed on these works, the Contractor shall be responsible for repairing and remedying at his own cost all settlement in the trench or elsewhere, all erosion of the trench, of the working area and adjacent to it, and on any other areas occupied or used by him during the course of the Contract, all wash-away, scour at waterways, deteriorating of anti-erosion works and any other damage. He shall, therefore, be free to carry out at his own expense, such additional compaction of the backfill and such other anti-erosion or other works as, in his opinion, will reduce his restoration and repair work during the Contract Period including the Defects Liability Period and shall provide therefore in his Tender.

Unless otherwise allowed for in the Schedule of Quantities, the Contractor shall be responsible for all costs in dealing with water and must therefore allow for such costs in his tendered rates.

PS A 5.6

POLLUTION

The Contractor's attention is drawn specifically to dust disturbance, due to the fact that the works takes place near/in an existing residential area.

Add the following sub clause to A 5.6:

The Contractor is responsible for dust control and is responsible for all claims which may arise from dust disturbance from the date of site handover to the date of completion of the contract. No payment will be made in respect of the above mentioned and all costs will be deemed as covered by the tendered rates.

SAFETY

Substitute A 5.7 with the following:

Pursuant to the provisions of the Conditions of Contract, and without in any way limiting the Contractor's obligations thereunder, the Contractor shall at his own expense (except only where specific provision (if any) is made in the Contract for the reimbursement to the Contractor in respect of particular items), provide the following:

- a) Provide to its Employees on the site of works, all safety materials, clothing and equipment necessary to ensure full compliance with the provisions of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993) as amended (hereinafter referred to as the Act) at all times, and shall institute appropriate and effective measures to ensure the proper usage of such safety materials, clothing and equipment at all times;
- b) Provide, install and maintain all barricades, safety signage and other measures to ensure the safety of workmen and all persons in, on and around the site, as well as the general public;
- c) Implement on the site of the works, such procedures and systems and keep all records as may be required to ensure compliance with the requirements of the Act at all times;
- d) Implement all necessary measures so as to ensure compliance with the Act by all subcontractors engaged by the Contractor and their employees engaged on the works;
- e) Full compliance with all other requirements pertaining to safety as may be specified in the Contract.

The Employer and the Engineer shall be entitled, although not obliged, to make such inspections on the site as they shall deem appropriate, for the purpose of verifying the Contractor's compliance with the requirements of the Act. For this purpose, the Contractor shall grant full access to the site of all parts of the site and shall co-operate fully in such inspections and shall make available for inspection all such documents and records as the Employer and/or Engineer's representative may reasonably require.

Where any such investigation reveals, or where it comes to the Engineer's attention that the Contractor is in any way in breach of the requirements of the Act or is failing to comply with the provisions of this clause, the Engineer shall, in accordance with the provisions of Clause 5.11 (GCC 2015), be entitled to suspend progress on the works or any part thereof until such time as the Contractor has demonstrated to the satisfaction of the Engineer, that such breach has been rectified.

The Contractor shall have no grounds for a claim against the Employer for extension of time and/or additional costs if the progress on the works or any part thereof is suspended by the Engineer in terms of this clause, and the Contractor shall remain fully liable in respect of the payment of penalties for late completion in accordance with the provisions of Clause 5.13 (GCC 2015) should the Contractor fail to complete the Works on or before the specified due completion date in consequence of the suspension.

Persistent and repeated breach by the Contractor of the requirements of the Act and/or this clause shall constitute grounds for the Engineer to act in terms of Clause 9.2.1.3.5 (GCC 2015) and for the Employer to cancel the Contract in accordance with the further provisions of the said Clause 9.2 (GCC 2015).

Ground and access to works

Add the following to A 5.8:

The Contractor shall not use the Site or land connected with the Works or cut down trees or vegetation, for any purpose whatsoever other than for the proper carrying out of the Works and shall locate any facilities that may be required for the Contract on the Site in such areas as the Engineer shall stipulate.

The Contractor shall not operate outside the "working width" or construction area as defined on the drawings, and he will be held wholly responsible for any damage or nuisance caused by himself, his plant, vehicles or staff throughout the period of the Contract.

The Contractor shall:

- a) During construction of the Works:
 - i) improve and maintain to a standard that will ensure the safe execution of the Works, any existing access roads, or roads built under this contract and required by him for the works,
 - ii) construct and maintain additional roads as necessary for his purposes to and along the working width of the channel route, to a standard required for the efficient construction of the Works,

- iii) keep all roads and access tracks used by him watered to minimise dust. The frequency of the watering shall be at least daily when roads and tracks are used by the Contractor unless it is sufficiently damp after rain.
- b) Immediately on completion of each section of the Works:
 - i) reinstate all private roads used by him, other than those under (ii) below, to at least their original condition,
 - ii) scarify all roads constructed by him for construction purposes and which are not required by the property owner or the Employer.

PS A 5.9 SITE MEETINGS

The Contractor or his authorised agent will be required to attend regular site meetings, which shall normally be held once a month on dates and at times determined by the Engineer, but in any case whenever reasonably required by the Engineer. Unless otherwise indicated in the Contract or instructed by the Engineer, such meetings shall be held at the Contractors offices on the site. At such monthly meetings, matters such as general progress on the works, quality of work, problems, claims, payments, and safety shall be discussed, but not matters concerning the day-to-day running of the Contract.

Add the following new item(s):

PS A 5.10 WORKMEN'S COMPENSATION ACT

It is a requirement of this contract that all labour employed on the site be covered by the Workmen's Compensation Act. The Contractor is to arrange a suitable method of complying with the Act including the payment of the necessary levies."

PS A 5.11 DRAWINGS AND DETAILS

Tender drawings shall not be used for construction purposes. Construction drawings and additional detailed information will be made available to the Contractor as and when required by him. The Contractor shall indicate on his construction program critical items/information required from the Engineer.

The originals of all Drawings and Specifications prepared by or on behalf of the Engineer shall remain in his custody and references herein to delivery to the Contractor of Drawings or specifications shall relate to true copies thereof.

The Contractor shall receive three sets of Construction Drawings. Further revisions will be provided to the Contractor with a set of three hardcopies.

One copy of all documents constituting the Contract shall be kept on the Site and be available for perusal by the Engineer or any person authorised 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.

PS A 5.12 CONNECTIONS TO EXISTING LIVE WATER SERVICES

All connections to any existing live systems will be under the supervision of the relevant authority. This work may have to be done at night in order to minimise inconvenience to users. The Contractor shall supply all materials required to undertake the connections to existing services and provide any other assistance that may be required.

A 6 TOLERANCES

PS A 6.2 DEGREE OF ACCURACY

Degree of Accuracy II is applicable

PS A 6.4 USE OF TOLERANCES

No guarantee is given that the full specified tolerances will be available independently of each other and the Contractor is cautioned that the liberal or full use of any one or more of the tolerances may deprive him of the full or any use of tolerances relating to other aspects of the work.

Except where the contrary is specified, or when clearly not applicable, all quantities for measurement and payment shall be determined from the 'authorised' dimensions. These are specified dimensions or those shown on the Drawings or, if changed, as finally prescribed by the Engineer, without any allowance for the payment will be based on the 'authorised' dimensions.

If the work is constructed in accordance with the 'authorised' dimensions plus or minus the tolerance allowed, the calculation of quantities will be based on the 'authorised' dimensions, regardless of the actual dimensions to which the work has been constructed.

When the work is not constructed in accordance with the 'authorised' dimensions plus or minus the tolerances allowed, the Engineer may nevertheless, at his sole discretion, accept the work for payment. In such cases no payment shall be made for quantities of work or material in excess of those calculated for the 'authorised' dimensions, and where the actual dimensions are less than the 'authorised' dimensions minus the tolerance allowed, quantities for payment shall be calculated based on the actual dimensions as constructed.

A 7 TESTING

A 7.1 PRINCIPLELS

PS A 7.1.1 Checking

Add the following to A 7.1.1:

For compaction tests, the Contractor shall carry out a minimum of one compaction test for every 300m³ of subgrade material processed and for every 1500 m² of subbase and base course material placed.

The Contractor shall test compaction density on all pipe bedding and backfill in trenches at least once for every 20m of each layer placed and compacted. The tendered rates for each of the relevant items shall include the costs of all such control testing and no additional claims shall be considered in this regard. Should the control testing arranged by the Contractor not meet the requirements of the specification, the Engineer shall have the right to conduct all such tests at the Contractor's expense and on his behalf. In this case, the Engineer shall be given 72 hours' notice of when testing is required. No claims shall be considered in respect of delays resulting from such testing.

The Engineer may from time to time carry out his own check tests on the work performed by the Contractor. Should such tests show the Contractor's control testing to be such that the quality of the Contractor's work can be called into question, the Engineer may order further check tests to be carried out on work already completed. All costs associated with such subsequent checks shall be for the Contractor's account.

PS A 7.4 STATISTICAL ANALYSIS OF CONTROL TESTS

Substitute A 7.4 with the following:

Test results shall not be evaluated by statistical methods. All results shall comply with the specified minimum requirements of the materials concerned.

A 8 MEASUREMENT AND PAYMENT

A 8.1 MEASUREMENT

PS A 8.1.1 Method of Measurement, All Sections of the Schedule

Delete the words "and Southwest Africa".

A 8.1.2 Preliminary and General Items or Section

PS A 8.1.2.1 Contents

Substitute the last sentence of A 8.1.2.1 b) with the following:

Separate items will be scheduled to cover the fixed, value-related and time-related components of the Contractors preliminary and general costs.

PS A 8.1.2.2 Tendered Sums

Substitute the A 8.1.2.2 with the following:

Except only where specific provision is made in the Specifications and/or the Schedule of Quantities for separate compensation for any of these items, the Contractors tendered sums under item PS A 8.3 and PS A 8.4 shall collectively cover all charges for:

- risks, costs and obligations in terms of the Conditions of Contract, the General Conditions of Contract 2015 (GCC 2015), the Special Conditions of Contract (SCoC) and of this standardized specification;
- head-office and site overheads and supervision;
- profit and financing costs;
- expenses of a general nature not specifically related to any item or items of the permanent or temporary work;
- All Construction Equipment (as per Clause 1.1.1.6 of the GCC 2015, 3rd Edition), required for the execution of the Contract.
- providing such facilities on site as may be required by the Contractor for the proper performance of the Contract and for its personnel, including, but without limitation, providing offices, storage facilities, workshops, ablutions, services such as water, electricity, sewage and rubbish disposal, access roads and all other facilities required, as well as for the maintenance and removal on completion of works of these facilities and cleaning-up of the site of the Contractors establishment and reinstatement to not less than its original condition, and providing the facilities for the Engineer and his staff as specified in the Contract and their removal from the site on completion of the Contract.
- site security described in PS A 4.3

A 8.2 **PAYMENT**

PS A 8.2.1 **Fixed-charge and Value-related Items**

Substitute A 8.2.1 with the following:

Payment of fixed charges in respect of item 8.3.1 will be made as follows:

Eighty per cent (80%) of the sum tendered will be paid when the facilities have been provided and approved. The remaining twenty per cent (20%) will be paid when the works have been completed, the facilities have been removed and the site of the Contractors establishment has been cleared and cleaned to the satisfaction of the Engineer.

No adjustment will be made to the sums tendered in respect of item 8.3.1 should the value of the works finally executed or the time for completion vary in any way from that specified in the tender.

Payment for the sum tendered under item 8.3.2 will be made in three separate instalments as follow:

- a) The first instalment, which is 40% of the sum, will be paid when the Contractor has fulfilled all his obligations to date under this specification, the General Conditions of Contract and the Special Conditions of Contract (GCC 2015), and when the value of work certified for payment, excluding materials on site and payments for preliminary and general items, is equal to not less than 5% of the total value of works listed in the Schedule of Quantities.
- b) The second instalment, which is 40% of the sum, will be made when the amount certified for payment, including retention moneys but excluding this second instalment, exceeds 50% of the tender sum.
- c) The final payment, which is 20% of the sum, will be made when the works have been certified as complete and the Contractor has fulfilled all his obligations to date under this Specifications, the General Conditions of Contract and the Special Conditions of Contract (GCC 2015).

Should the value of the measured work finally complete be more or less than the tender sum, the sum tendered under items 8.3.2 will be adjusted up or down in accordance with the provisions of Clause 6.11 (GCC 2015) and this adjustment will be applied to the third instalment.

PS A 8.2.2 **Time-related Items**

Substitute A 8.2.2 with the following:

Subject to the provisions of PS A 8.2.3 and PS A 8.2.4, payment under item PS A 8.4.1 (time-related item) will be made monthly in equal amounts, calculated by dividing the sum tendered for the item by the tendered Contract period in months, provided always that the total of the monthly amounts so paid for the items is not out of proportion to the value of the progress of the Works as a whole.

PS A 8.2.5 **Adjusted Payment For Time-related Items**

The payment to the Contractor for time-related items shall be adjusted in accordance with the following formula in the event of the contract being extended by means of a variation order:

$$\text{Sum of Tendered amounts for time-related items} \times \frac{\text{Extended contract period as authorised by variation order}}{\text{Tendered contract period}}$$

The above-mentioned adjustment of the payment for time-related items shall be made in the Completion Payment Certificate and shall be the only payment for additional time-related costs.

PS A 8.3 **SCHEDULED FIXED-CHARGE AND VALUE-RELATED ITEMS**

Substitute A 8.3 with following:

PS A 8.3.1 **Fixed Preliminary and General Charges**Unit: Sum

PS A 8.3.2 **Value-related Preliminary and General Charges**Unit: Sum

The sums tendered shall include full compensation for all fixed-charge preliminary and general charges as describe in PS A 8.1.2.2. Payment will be made as described in PS A 8.2.1.

PS A 8.4 **SCHEDULED TIME-RELATED ITEMS**

Substitute A 8.4 with following:

PS A 8.4.1 **Time-related Preliminary and General Charges**Unit: Sum

Payment will be made as described in PS A 8.2.2.

PS A 8.5 **SUMS STATED PROVISIONALLY BY THE ENGINEER**

Substitute A 8.5 with following:

PS A 8.5.1 **Works Executed by the Contractor** Unit: Prov Sum

The Contractor will be reimbursed in substitution of the Provisional Sums (if any) allowed in the Schedule of Quantities for work to be executed by the Contractor, in the amounts determined in accordance with the provisions of Clause 6.6 (GCC 2015) of Conditions of Contract.

PS A 8.5.2 **Works Executed by Nominated Subcontractors**

a) **Work to be Executed by a Nominated Subcontractor** Unit: Prov Sum

b) **Overheads, Charges and Profit on Item (a) above**.....Unit: %

Subitems (a) and (b) will be provided in the Schedule of Quantities for each different Nominated Subcontractor included in the Contract.

The Contractor shall be reimbursed under subitem (a), in substitution of the respective Provisional Sums (if any) allowed in the Schedule of Quantities, the amounts actually paid or payable by the Contractor to the respective Nominated Subcontractors, in accordance with the provisions of Clause 6.6 (GCC 2015) of the Conditions of Contract.

The Contractor shall be paid under subitem (b), either

- a) where the unit of measurement for subitem (b) was specified as being a percentage, the respective percentage, as stated by the Contractor in is tender, of the amount certified by the Engineer for payment under the related subitem (a), all in accordance with the provisions of Sub/Clause 6.6.1.2.1 (GCC 2015) of the Conditions of Contract, or

- b) where the unit of measurement for subitem (b) was specified as being a lump sum, an amount which is in the same proportion to the amount certified for payment under subitem (a) and the tendered lump sum is to the amount of the Provisional Sum stated under subitem (a) in accordance with the provisions of Clause 6.61.2.2. (GCC 2015):

The percentage or sum (as applicable) paid under subitem (b) as aforesaid, shall be deemed to include for full and final compensation to the Contractor for all costs as may be incurred and all charges and profits associated with the engagement, supervision, administration and management of the Nominated Subcontractor required of him in fulfilling its obligations under the Contract as the Principal Contractor.

PS A 8.6 **PRIME COST ITEMS**

Substitute A 8.6 with following:

PS A 8.6 **PRIME COST SUMS**

- a) **Description of Items to which Prime Sums Applies** Unit: Prov Sum
b) **Charges required by Contractor on Item (a) above** Unit: %

Subitems (a) and (b) will be provided in the Schedule of Quantities for each different item to which a Prime Cost Sum applies.

The Contractor shall be reimbursed under subitem(s) (a) in substitution of the respective Prime Cost Sums included in the Contract, the actual price(s) paid or payable by him in respect of the goods, materials or services supplied, but excluding any charges for the Contractors labour, profit, carriage, establishment or other charges related to such goods, services or materials.

The Contractor shall be paid under subitem (b), the respective percentage, as stated by the Contractor in his tender, of the amount certified by the Engineer for payment under the related subitem (a). The percentages tendered by the Contractor for each respective subitem (b) included in the Schedule of Quantities shall be deemed to be in full and final compensation to the Contractor in respect of any charge by the Contractor for labour, carriage profit, establishment and for any other charges related to the goods, services or materials supplied under the related subitem (a).

If the Contractor shall have omitted within his tender to insert a tendered percentage under subitem (b), or tendered a zero percentage, the Contractors tendered rate for subitem (b) shall be deemed to be zero and the Contractor shall not be entitled to any payment under subitem (b).

Note in correction with additional tests required by the Engineer:

When a PC sum is included in the Schedule of Quantities for additional tests required by the Engineer, the Contractor shall be responsible for both the costs of normal testing as described in the Project Specifications and for the cost of any additional test that indicates that the specifications have not been complied with.

Where work is to be done by a sub-contractor, such as DFA and/or Telkom, the Contractor is to take cognisance of the works to be completed and must ensure that the Date of Practical Completion and/or Due Completion date is not delayed. Should the Contractor fail to programme of the said works, any delay will be for the Contractors account.

The Contractor must liaise with the relevant authority (DFA: Mr Paul Roos – 082 658 5695 & Telkom: Mr. Eben de Koker 081 406 1007) and Clause 2.1 of the GCC 2015 (3rd Edition) applies in this regard. This work must therefore be effectively programmed for each section of the works to be completed by the sub-contractor and Clause 4.4 of the GCC 2015 (3rd Edition) shall apply in this regard. All costs pertaining to this is deemed to be included in the overhead costs (of the rates tendered).

The amounts specified in the bill of quantities are provisional and preliminary amounts and may be reduced and/or removed completely at the discretion of the Employer.

PS A 8.7 **DAYWORK**

Replace A 8.7 with the following:

Daywork will be paid according to the percentage allowance method. For calculating the total remuneration, the General Conditions of Contract for the construction works, second edition (2010) shall apply, with the amendments as in the appropriate special conditions of contract which is bound into this document. A daywork schedule will be provided for filling in the necessary information.

PSA 8.7

Daywork

Add the following payment items:

- a) **Unskilled labour**.....Unit: Hour
- b) **Semi-skilled labour**.....Unit: Hour
- c) **Skilled labour**.....Unit: Hour

The items above (8.7 (a) to (c)) will cover all costs related with the provision of labour in the mentioned categories on a dayworks basis. Only net working hours will be measured under daywork, and it will be held that the Contractor has made provision in other rates for possible interruptions and standing time.

Plant:

- d) **Excavator**.....Unit: Hour
- e) **Graders**.....Unit: Hour
- f) **Front end Loader**.....Unit: Hour
- g) **Rollers**.....Unit: Hour
- h) **TLB**Unit: Hour
- i) **Trucks (10m³)**.....Unit: Hour
- j) **Water Trucks**.....Unit: Hour
- k) **Plate Compactor/Rammer Compactor**.....Unit: Hour

The items above (8.7 (d) to (l)) will cover all costs related to the provision of the various plant resources on a dayworks basis. Only net working hours will be measured under daywork and it will be held that the Contractor has made provision in other rates for possible interruptions and standing time. It will be assumed that the capacity, specification and size of the plant resources for which rates are provided will be similar to those that will actually be used during the construction of the works. Where possible at tender stage, the specifications of the plant resources should be specified under this item.

A 8.8

TEMPORARY WORKS

PS A 8.8.2

Accommodation of Traffic Unit: Sum

Add the following to A 8.8.2:

The rate shall cover all costs pertaining to the provision, erection, moving, re-erection and maintenance of all temporary barricades, road signs, lights, flagmen, etc. as required, for the guarding and protection of the works, for the construction, gravelling and maintenance of access roads and detours to the site of the works, borrow pits or spoil sites, as well as for the later removal or the cleaning and tidying up thereof, for making the necessary traffic arrangements and arrangements with regard to the moving and/or re-erection of existing traffic signs, as well as all other costs to accommodate the traffic during construction.

PS A 8.8.4

Existing Services

Add the following to A 8.8.4:

Where the Contractor is responsible for the cost of repairs carried out by the Employer or others, the costs will be recovered by means of a deduction from the Contractor's monthly payment certificate. The Employer will attend to the payment of monies due to others.

PS A 8.8.5	Cost of Survey in Terms Of The Land Survey Act Unit: Sum
	<i>Substitute A 8.8.5 with the following:</i>
	The sum shall cover the cost of all labour, plant and material required for the searching and compilation of a list, all in accordance with the requirements as set out in clause A 5.1.2.
PS A 8.9	OCCUPATIONAL HEALTH AND SAFETY (PROVISIONAL)
PS A 8.9.1	Health and Safety Requirements Unit: Sum
	The rate shall cover all costs pertaining to the provision and maintenance, for the duration of the contract, of the Health and Safety measures required in terms of Clause 5 (Principle Contractor and Contractor) of the Construction Regulations (2014) of the Occupational Health and Safety Act. No other sum shall be paid in this respect and Tenderers must therefore ensure adequate provision has been allowed for.
PS A 8.9.2	Health and Safety Plan Unit: Sum
	The rate shall cover all costs pertaining to the provision and maintenance, for the duration of the contract, of the Health and Safety plan as required in the Construction Regulations (2014). The rate shall include for all risk assessments required as well as for the development and implementation of safe work procedures and method statements. No other sum shall be paid in this respect and Tenderers must ensure adequate provision has been allowed for.
PS A 8.9.3	Health and Safety file Unit: Sum
	The rate shall cover all costs pertaining to the provision and/or collection of data (drawings, design, materials, operation and maintenance of the file during the duration of the contract and the handing over of the file to the Client on the completion of the contract. No other sum shall be paid in this respect and Tenderers must ensure adequate provision has been allowed for.
PS A 8.10	Requirements in Terms of the Environmental Management Specification Unit: Sum
	1. All work not measured elsewhere, associated with complying with any requirements of the environmental management programme shall be measured as sum. 2. The tendered rate shall cover any cost associated with complying with the environmental management specification and shall include for all material, labour and plant required to execute and complete the work as specified

PROJECT SPECIFICATION
SANS 1200 AB: ENGINEER'S OFFICE

AB 3 MATERIALS

PS AB 3.1 NAME BOARDS

Substitute "South African Institution of Civil Engineers" in the first paragraph of AB 3.1 with "South African Association of Consulting Engineers".

PS AB 3.2 OFFICE BUILDINGS

Add the following to AB 3.2:

The office must have an adjacent carport with minimum dimensions of 6 m x 3 m with a free draining, wearing course floor. The roof must be built in such a way that a vehicle will always be shielded against the sun throughout the day. An approved shade net may be used for the sides to comply with above-mentioned requirement.

Substitute sub-paragraph (j) in AB 3.2 with the following:

j) provision of an approved 12 000 BTU air-conditioner.

AB 4 PLANT

PS AB 4.1 TELEPHONE

Substitute AB 4.1 with the following:

No telephone required for Engineer.

AB 5 CONSTRUCTION

PS AB 5.1 NAME BOARDS

Add the following to AB 5.1:

The name boards shall be erected within one month after receipt of the letter of acceptance and shall be placed at the position indicated by the Engineer and kept in good repair for the duration of the contract and the defects liability period. Any damage to these boards shall be repaired within fourteen days of a written instruction issued by the Engineer. No payment shall be made in terms of the contract prior to the erection of the name boards.

The Contractor will be permitted to erect a maximum of two of his own name boards, in positions approved by the Engineer. The Engineer reserves the right to order the removal of these boards if they are not kept in good repair.

PS AB 5.5 SURVEY ASSISTANTS

Substitute "two or more suitably educated survey labourers" in the first sentence of AB 5.5 with "two semi-skilled labourers."

PS AB 5.6 SURVEY EQUIPMENT

The Contractor shall provide the following tested and approved survey equipment on site for the duration of the contract and for the use of the Engineer whenever needed:

- a) one tachometer capable of reading to minimum 20 seconds and maximum 6 seconds of arc, plus tripod;
- b) one automatic level plus tripod;

- c) two tachometer staffs and one level staff, all graduated metrically; and
- d) one 5 m and one 100 m tape measure.

The above-mentioned equipment may by arrangement be shared between the Contractor and the Engineer's representative.

The Contractor shall keep the equipment continuously insured against any loss, damage or breakage, and he shall indemnify the Engineer and the Employer against any claims in this regard.

The Contractor shall maintain the equipment in good working order and keep it clean throughout the contract period.

AB 8 MEASUREMENT AND PAYMENT

AB 8.2 PAYMENT

PS AB 8.2.2 Telephone, Survey Assistants and Survey Equipment

No payment shall be made for the telephone, survey assistants or survey equipment and all costs shall be deemed to be covered by the rates tendered for the Contractor's facilities.

PROJECT SPECIFICATION

SANS 1200 C: SITE CLEARANCE

C 3 MATERIAL

PS C 3.1 DISPOSAL OF MATERIAL

Substitute the first sentence of C 3.1 with the following:

Material obtained from clearing and grubbing, demolition of concrete structures and brickwork, dismantling of pipes and removal of any items shall be disposed of at a licensed municipal dump site, to be identified and procured by the Contractor and approved by the Engineer. All rates shall apply.

C 5 CONSTRUCTION

PS C 5.1 AREAS TO BE CLEARED AND GRUBBED

Substitute the first sentence of C 5.1 with the following:

Unless otherwise indicated by the Engineer, clearing and grubbing are limited to the street reserves or such wider area as is necessitated by the street prism, borrow pits, a 10 m wide strip for concrete and/or earth channels, a 3 m wide strip for pipelines not in street reserves and if requested by the Engineer the spoil areas. The Contractor may proceed with clearing and grubbing after the handing over of the site. Measurement and payment for clearing and grubbing shall only occur for areas as required in writing by the Engineer.

Substitute the last paragraph with the following:

The Contractor shall program his work in such a manner that re-clearing will not be necessary. The cost of re-clearing shall be borne by the Contractor.

C 5.2 CUTTING OF TREES

C 5.2.3 Preservation of Trees

PS C 5.2.3.2 Individual trees

Add the following to C 5.2.3.2:

Trees outside street, channel and pipeline routes must be left standing and undamaged, except where otherwise ordered, in writing, by the Engineer.

A penalty of R1500-00 per tree for trees damaged and/or removed will be charged.

PS C 5.3 CLEANING

Add the following to C 5.3:

The removal of existing fences will only be allowed on written approval of the Engineer. The Contractor shall on his own cost immediately repair any damage done to existing fences due to construction work, if the fences are not to be removed.

C 8 MEASUREMENT AND PAYMENT

C 8.2 SCHEDULED ITEMS

Add the following payment items:

PS C 8.2.1 Clear and Grub in: Unit: m or m²

The clearing operation will be decided into the following sections as listed below:

- a) Stormwater pipe route (3m wide)
- b) Road Reserve (Width Varies)

PS C 8.2.7	Dismantle and Remove Pipelines, Electricity Transmission Lines, Cables etc. Unit: m
	<i>Add the following to C 8.2.7:</i>
	Existing pipelines, cables, etc shall only be dismantled subject to written instruction by the Engineer. Excavation and backfilling shall be measured in the appropriate items of SANS 1200 DB: Earthworks (pipe trenches).
PS C 8.2.11	Remove from site and dispose of rubble and undesirable material at a site to be identified by the contractorUnit: m³
	The rate shall cover the cost of dismantling, demolishing of all structures and foundations, the additional costs for precautions required during the demolition and loading operations, all excavations and backfilling as required and the cost of loading, transporting and dumping of the material at a dump site to be identified by the Contractor.
PS C 8.2.12	Sawing or cutting asphalt or cemented pavement layers:
	a) Cutting asphalt 40mm thickUnit: m
	b) Cutting Concrete 100mm thick Unit: m
	"The unit of measurement for subitem (a) and (b) shall be the metre of cut measured in accordance with the authorized saw length. The tendered rate shall include full compensation for all material and sawing or cutting costs and for all incidentals for cutting or sawing the pavement in accordance with the instructions of the engineer. The rate must also allow for any and all labour, equipment and plant associated thereto."
PS C 8.2.13	Remove existing asphalt surfacing and dispose of material at a site to be identified by the Contractor.....Unit: m²
	The rate shall cover the cost of cutting, removal, loading, transporting of the existing asphalt surfacing to a dump site identified by the Contractor, and the finishing of the area to the Engineers satisfaction.
PS C 8.2.14	Remove existing concrete driveway and dispose of material at a site to be identified by the Contractor.....Unit: m²
	The rate shall cover the cost of cutting, removal, loading, transporting of the existing concrete to a dump site identified by the Contractor, and the finishing of the area to the Engineers satisfaction.
PS C 8.2.15	Remove existing paving and dispose of material at a site to be identified by the Contractor.....Unit: m²
	The rate shall cover the cost of cutting, removal, loading, transporting of the existing paving to a dump site identified by the Contractor, and the finishing of the area to the Engineers satisfaction.
PS C 8.2.16	Remove existing kerbs and stockpile Unit: m
	The rate shall cover all the costs associated with removing the existing kerbs and stockpiling it at a suitable location for the duration of the installation of stormwater services. The rate shall cover all costs associated with labour, material, plant and transportation and shall be for a complete unit. The reinstatement of the kerbs will be measured separately.
PS C 8.2.17	Demolish existing stormwater grid inlet and dump at a site to be identified by the contractorUnit: No
	The rate shall cover the cost of demolishing of the grid inlet structure, the additional costs for precautions required during the demolition and loading operations, all excavations and backfilling as required and the cost of loading, transporting and dumping of the material at a dumpsite to be identified by the Contractor.
PS C 8.2.18	Remove and reinstate existing fencing in road reserve.....Unit: m
	The rate shall cover the cost of removal and stacking of existing fencing materials, including all gates, including labour, material, concrete, etc and shall be for a complete unit. Payment shall be per linear metre of reinstated fence, complete. The rate shall also cover all costs for reinstating the fence that was removed, including labour, material, concrete, etc and shall be for a complete unit. Payment shall be per linear metre of reinstated fence, complete.

No additional payment will be made for the replacement of fencing material that has been damaged by the Contractor. Material that is unsuitable for re-erection must be viewed by the Engineer before it is removed after which the Engineer must give written approval for the replacement thereof and for payment therefore.

- PS C 8.2.19 **Remove and reinstate existing road traffic signs in road reserveUnit: No**
- The rate shall cover the cost of removal and stockpiling of existing traffic signs, including all supports, including labour, material, concrete, etc and shall be for a complete unit. Payment shall be per number of reinstated road signs, complete. The rate shall also cover all costs for reinstating the traffic signs that was removed, including labour, material, concrete, etc and shall be for a complete unit.
- No additional payment will be made for the replacement of material that has been damaged by the Contractor. Material that is unsuitable for re-erection must be viewed by the Engineer before it is removed after which the Engineer must give written approval for the replacement thereof and for payment therefore.
- PS C 8.2.20 **Demolish existing stormwater manhole and dump at a site to be identified by the contractorUnit: No**
- The rate shall cover the cost of demolishing of the grid inlet structure, the additional costs for precautions required during the demolition and loading operations, all excavations and backfilling as required and the cost of loading, transporting and dumping of the material at a dumpsite to be identified by the Contractor.
- PS C 8.2.21 **Remove existing stormwater pipe and dump at a site to be identified by the contractorUnit: m**
- The rate shall cover the cost of excavating, removal, the additional costs for precautions required during the loading operations, all excavations and backfilling as required and the cost of loading, transporting and dumping of the material at a dumpsite to be identified by the Contractor.
- PS C 8.2.22 **Cleaning of existing stormwater structureUnit: No**
- The rate shall cover the cost of opening the structure, removal of rubble and debris, removal of sediment and closing the structure. The rate shall include the cost of loading, transporting and dumping of the rubble, debris and sediment at a dumpsite to be identified by the Contractor.
- PS C 8.2.23 **Cleaning of existing stormwater pipesUnit: m**
- The rate shall be all inclusive of flushing existing stormwater pipes, loading, transporting and dumping of the rubble, debris and sediment to a dumpsite to be identified by the Contractor.
- PS C 8.2.24 **Cleaning of existing stormwater channelsUnit: m**
- The rate shall be all inclusive of removal of rubble and debris, removal of sediment in existing open channels. The rate shall include the cost of loading, transporting and dumping of the rubble, debris and sediment at a dumpsite to be identified by the Contractor.
- PS C 8.2.25: **Import from stockpile and reinstate existing kerbs, pavers, etc. (all inclusive).....Unit: m2**
- The rate shall cover the cost of replacing concrete kerbs on existing layerworks, including 25mm sand bedding, cutting of edge restraints and rolling of units.

PROJECT SPECIFICATION

SANS 1200 D: EARTHWORKS

D 2 INTERPRETATIONS

PS D 2.3 DEFINITIONS

Add the following after the description of 'Restricted excavation':

"Where it is required that earthworks be carried out using labour intensive methods, the definition "restricted excavation" shall read "An excavation required to be carried out using only hand tools, or where so permitted in terms of the Project Specification, with restricted plant usage".

Add the following definition before 'Specified Density':

"Sand (cohesionless and non-cohesive). For the purposes of the compaction requirements, a non-plastic material of which not less than 95 % by mass passes a sieve of nominal aperture size 4,75 mm, and not more than 10 % passes a sieve of nominal aperture size 0,075 mm."

D 3 MATERIALS

PSD 3.1.2 Classes of Excavation

Add the following after the last paragraph:

f) Hand Excavation

The definitions given for soft, intermediate, and hard rock excavation under Clause 3.1.2(a), (b) and (c) respectively will not apply to those aspects of the earthworks which must be undertaken by labour intensive methods in terms of the Project Specification. For hand excavation, the following classifications shall apply:

"Soft excavation" will be held to be any material which in the opinion of the Engineer can be excavated by pick and shovel, without the use of pneumatic or hydraulic breaking tools or blasting.

"Hard rock excavation" will be held to be any material which possesses characteristics of hardness and geological structure which in the opinion of the Engineer can most economically be broken up broken up by blasting before removing the material from the excavation as soft material.

The definition of boulder excavation Classes A & B given under Sub-Clauses 3.1.2(d) and (e) will apply irrespective of whether the earthworks are carried out by labour intensive methods or by any other method.

D 3.3 SELECTION

PS D 3.3.1 General

Substitute the second paragraph of D 3.3.1 with the following:

The Contractor shall deal selectively with material from general excavation. Any imported material in road reserves that do not comply with the minimum requirements for the respective layers, shall be removed and replaced with suitable material, all at the Contractor's expense.

The Contractor shall deal in such a way with materials from all excavations for streets, channels or pipe trenches to ensure that usable material is not contaminated or mixed with material. If material is contaminated, such contaminated material shall be removed and replaced with suitable material, all at the Contractor's expense. No additional payment shall be made in respect of this and all relevant costs shall be deemed to be included in the tendered rates.

All unsuitable material shall be removed prior to importing fill material to such areas.

D 4 PLANT

Add the following new item(s):

PS D 4.5 AVOIDING QUAGMIRE CONDITIONS

In order to prevent quagmire conditions occurring in the excavations, relatively static plant such as back-actors shall be used combined with hand trimming to complete the excavation to final level. Should the Contractor allow quagmire conditions to develop, he shall, at his own expense, take such steps to rectify the conditions as the Engineer may order.

D 5 CONSTRUCTION

D 5.1 PRECAUTIONS

PS D 5.1.2 Existing Services

PS D 5.1.2.2 Detection, location and exposure

Add the following to D 5.1.2.2:

If existing services are not shown on the drawings but the existence thereof can be reasonably expected, the Contractor shall, in conjunction with all relevant authorities, determine the exact depth and location of such services before the commencement of construction.

After locating the exact position of services, whether indicated on the drawings or not, such services shall be deemed to be known services, and the Contractor shall be liable for all costs and subsequent costs arising from the damage thereof as a result of the Contractor's activities. These services must also be indicated on the "as built" drawings.

PS D 5.1.2.3 Protection of cables

Substitute "estimated position" in the second sentence of D 5.1.2.3 with "actual or exposed position".

PSD 5.1.2.4 Negligence

Substitute D 5.1.2.4 with the following:

Where a service is damaged because of the contractor's negligence, any costs arising from such damaged service will be payable by the contractor.

PS D 5.1.4 Nuisance

PS D 5.1.4.1 Dust nuisance

Add the following to D 5.1.4.1:

The Contractor is responsible for dust control and is liable for all claims that may result from dust nuisance on all parts of the site and at all times from the date of handing over of the site to the completion date of the contract. No payment regarding the above-mentioned will be made and all costs shall be deemed to be covered by the tendered rates.

PS D 5.1.6 Road Traffic Control

Add the following to D 5.1.6:

- a) Sufficient road signs must be erected in such a way that motorists will be warned in time of works, e.g. at the closing of a street sufficient signs to direct traffic must be erected at the preceding intersection.
- b) Bypasses and/or road signs shall be provided and/or erected at all locations where the free flow of traffic is obstructed and shall be approved by the Engineer before the commencement of construction. Where main roads are crossed, detours and temporary traffic signs must be provided as shown on the attached drawings.
- c) Where a trench crosses a street or any place where a trench crosses the direction of traffic flow, drums must be placed in the street and not just along the sides of the street with danger tape in between.
- d) Danger tape must be put up between drums and tied around the drums.
- e) Drums may not be filled with stones. The spacing of drums must be in such a way (maximum 5 m) that they are visible from all directions.
- f) Sufficient safety measures must be utilised for pedestrians.

D 5.2 **METHODS AND PROCEDURES**

D 5.2.1 **Site Preparation**

PS D 5.2.1.2 **Conservation of topsoil**

Add the following to D 5.2.1.2:

Removal of topsoil shall only occur in areas as approved, in writing, by the Engineer. The topsoil shall be conserved for use elsewhere.

D 5.2.2 **Excavation**

PS D 5.2.2.3 **Disposal**

Substitute the second sentence of D 5.2.2.3 with the following:

Excess materials arising from the excavations shall by instruction of the Employer's Agent be spread out on the adjacent erven and levelled and shaped in such a manner that the material so spread allows the erven to drain into the road. Material arising from excavations and not utilised in the above manner shall be disposed of at a licensed municipal dumpsite, or in depressions, dongas and erosion gullies as directed by the Employer's Agent. All rates tendered shall be deemed to include any levies or fees payable at such dumpsite.

PS D 5.2.2.4 *Add the following new item(s):*

Excavation by hand around existing services

Where hand excavation is required around existing services it shall be done within 3,0 m above and on both sides of cables and within 300 mm above and on both sides of pipes, as well as underneath the services.

PS D 5.2.3.2 **Backfilling of trenches and backfilling against structures**

Add the following to D 5.2.3.2:

Backfilling around structures shall be compacted to 95 % (100 % for sand) of MAASHTO density.

When specified or ordered by the Engineer the backfilling against structures shall be done using a mixture of soil cement. The mixture shall contain 5 % cement and just sufficient water for it to be placed and compacted like ordinary backfilling material.

PSD 5.2.5 **Transport for Earthworks**

Replace D 5.2.5.1 with the following:

Freehaul – All material transported within the boundaries of the site or from a commercial source will be regarded as being hauled under freehaul. No overhaul will be paid.

Replace D 5.2.5.2 with the following:

Overhaul – Transportation of all excavated material beyond the boundaries of the site will be regarded as being hauled under freehaul. No overhaul will be paid under this contract. Hauling and transportation costs will be deemed to be included under the relevant payment items.

D 8 **MEASUREMENT AND PAYMENT**

D 8.3 **SCHEDULED ITEMS**

PS D 8.3.2 **Bulk Excavation**

**a) Excavate in all materials and use for embankment or backfill or dispose,
as ordered Unit: m³**

Add the following to D 8.3.2(a):

There will also be distinguished between the different types of fill and backfill as well as the different densities to which each will be compacted.

PS D 8.3.2	c) Hand excavation in all materials and use for embankment or backfill or dispose, as ordered Unit: m³ The provisions of D 8.3.2(a) shall apply mutatis mutandis.
PS D 8.3.2	d) Extra-over for hand excavation in 1) Intermediate excavation Unit: m³ The provisions of D 8.3.2(b) shall apply mutatis mutandis.
PSD 8.3.4	Add the following new item(s): iv) Import to fill, material from commercial sources compacted to specified MOD AASHTO percentage Unit: m³ "The rate for importation of commercial material (minimum G9 classification or better) shall include all cost of royalties if applicable, acquiring suitable material (minimum G9 classification or better), forming of access, removal of overburden, loading, transportation, offloading at point of placing, removal of access and replacing overburden. The rate also needs to allow for spreading out of material after offloading, watering and compacting of the material in a uniform layer to specified MOD AASTHO percentage.
D 8.3.8	Existing Services
PS D 8.3.8.1	c) Excavate by hand in soft material to expose service Unit: m³ or day work Where hand excavation around existing services do occur, it shall be measured within 3 m above and on both sides of cables, and within 500 mm above and on both sides of pipes, as well as all excavations underneath the services. Measurement shall occur in depth increments of 1 m.
PS D 8.3.8.1	d) Extra-over PS D 8.3.8.1(c) for excavation in Unit: m³ The provisions of PS D 8.3.2(d) shall apply mutatis mutandis.
PS D 8.3.17	Construction of Earth Stormwater Channels Unit: m³ The rate shall be all inclusive for labour, material and equipment necessary for the excavation, fill, construction, selection, transport, offloading and placement according to the specified slopes and dimensions as shown on the drawings.
PS D 8.3.18	Shaping of Channel Slopes Unit: m² The area measured for payment is the unpaved area from the concrete up to finished ground level. The rate shall cover the cost of the shaping of the channel slopes according to the specified slopes, heights and widths (as shown on the drawings), for the re-compaction of any disturbed material to the same density as that of the adjacent in situ material and for any extra work involved in the proper completion of the slopes.
PS D 8.3.19	Shaping in Erven Unit: m² The rate shall cover the cost of the finishing off of erven after mass earthworks have been completed and includes all labour and plant necessary to shape the surface to the erf boundary in order to obtain a uniform surface that can drain to the streets.

PROJECT SPECIFICATION

SANS 1200 DB: EARTHWORKS (PIPE TRENCHES)

DB 1 **SCOPE**

Add the following to DB 1.1:

This specification additionally covers the excavation for cable trenches.

PS DB 2.2 **APPLICATION**

Substitute "pipe trenches" with "pipe and cable trenches" in DB 2.2.

DB 3 **MATERIALS**

PSDB 3.1 **Classes of excavation**

Add the following after the last paragraph:

Classification of excavation by mechanical means for measurement and payment shall either be soft excavation or hard rock excavation, notwithstanding the provisions of sub clause 3.1 of SANS 1200D. Intermediate material shall be classified as soft material and will not be measured or paid for separately.

The definitions given for soft, intermediate and hard rock excavation under Clause 3.1.2(a), (b) and (c) of SANS 1200D respectively will not apply to those aspects of the trench excavation which must be undertaken by labour intensive methods in terms of the Project Specification, i.e. excavations for all pipelines. For hand excavation, the following classifications shall apply:

"Soft excavation" will be held to be any material which in the opinion of the Engineer can be excavated by pick and shovel, without the use of pneumatic or hydraulic breaking tools or blasting.

"Intermediate excavation" will be held to be any material which possesses characteristics of hardness and geological structure which in the opinion of the Engineer requires breaking by pneumatic or hydraulic means before removing the material from the excavation as soft material.

"Hard rock excavation" will be held to be any material which possesses characteristics of hardness and geological structure which in the opinion of the Engineer can most economically be broken up broken up by blasting before removing the material from the excavation as soft material. "

All excavation of material classified under a) Soft excavation and b) Intermediate excavation above will be paid for under payment item 1200 DB 8.3.2 a). There will be no separate payment item scheduled for intermediate excavation, and it will be assumed that the rate tendered for 1200 DB 8.3.2 a) will allow for both soft excavation and intermediate excavation as classified above.

PS DB 3.5 **BACKFILL MATERIALS**

a) *Substitute "from trenches" in DB 3.5(a) with "from trenches, channel or street excavations".*

b) *Replace DB 3.5 (b) with:*

All pipe and duct trenches across roadways shall be backfilled with selected material (G7 or higher) from commercial sources.

DB 3.6 **MATERIALS FOR REINSTATEMENT OF ROADS AND PAVED AREAS**

PS DB 3.6.1 **Subbase and Base**

Substitute DB 3.6.1 with the following:

Where trenches cross or run adjacent to surfaced roads and paved areas of which the surfaces are scheduled to be reinstated, the material excavated from the existing base and/or subbase pavement layer(s) shall be set aside and used in the reconstruction of the subbase layer. Where applicable new material complying with the requirements of SANS 1200 MF shall be used in the reconstruction of the base layer. Any shortfall in material for the reconstruction of the subbase layer shall be made up by the use of material complying with the requirements of SANS 1200 ME.

PS DB 3.7 **Selection**

Add the following to DB 3.7:

“The Contractor shall deal selectively with material from general excavation. Any material that does not comply with the minimum requirements for the respective layers, shall be removed and replaced with suitable material, all at the Contractor's expense.

The Contractor shall deal in such a way with materials from all excavations to ensure that usable material is not contaminated with unsuitable material. If usable material is contaminated, such contaminated material shall be removed and replaced with suitable material, all at the Contractor's expense. No additional payment shall be made in respect of this, and all relevant costs shall be deemed to be included in the tendered rates.

All unsuitable material shall be removed prior to importing fill material to such areas.

Prior to commencing with earthworks, the Contractor shall make trial holes at positions and to depths ordered by the Employer's Agent, to determine the area containing unsuitable material that is to be spoiled. No additional payment shall be made in respect of this, and all relevant costs shall be deemed to be included in the tender rates.

PSDB 3.8 *Add the following new item(s):*

Geotextiles for unstable trench-bottom conditions

The following products are acceptable:

A4 Geotextile

The specific product will be chosen to suit the in-situ material. Alternatives may be submitted to the Employer's Agent for approval.

DB 4 **PLANT**

PS DB 4.1 **EXCAVATION EQUIPMENT**

Add the following to DB 4.1:

All excavations exceeding the specified widths, shall be backfilled with approved selected material. No payment shall be made for this and all relevant costs shall be deemed to be included in the tendered rates.

PSDB 4.2 **Control of Water**

Add the following to DB 4.2:

“One set of dewatering equipment shall consist of pumps, pipes, well points and other equipment necessary for keeping the trenches sufficiently free from water for dewatering of excavations up to 4 m depth and a trench length of 45 m for both sides or 70 m on one side.”

DB 5 **CONSTRUCTION**

DB 5.1: **Precautions**

PSDB 5.1.1 **Water in trenches excavation**

Water in pipe trenches may cause movement of the pipe due to flotation and backfilling must be completed as soon as possible. If there was any movement, the Contractor must remove and relay the pipes at his own cost and to the satisfaction of the Engineer.

PSDB 5.1.2 **Storm water, seepage and dewatering of excavations**

The costs of dealing with water shall be deemed to be included in the tendered rates for excavation and no additional payment shall be made in this respect.

PS DB 5.2 **MINIMUM BASE WIDTHS SPECIFIED**

Substitute DB 5.2(a) with the following:

The base widths for combined pipe trenches are as shown on the drawings and the excavation depth is determined by the deepest pipe in the trench. The depth increment of a combined trench will be determined by the sewer or alternatively by the water pipe. The electrical ducts will determine the depth increment where they are laid together with house water connections. The total excavation, backfilling, bedding, etc form a specific trench and is measured in the bill of quantities under the service that determines the depth.

Substitute paragraph (b) of DB 5.2 with the following:

The minimum base width for all pipes with a diameter less than 125 mm shall be 600 mm plus the outside diameter of the pipes, irrespective of the depth at which they are laid, except for subsurface drains where the width shall be 400 mm and for house water connections where the width shall be 300 mm.

The base width of box culverts shall be the net width of the in situ cast bottom slab or the net width of the precast bottom slab plus 100 mm.

A bedding is required for all pipes with a diameter less than 125 mm, except for subsurface drains.

The minimum base width for Telkom ducts shall be 500 mm.

The minimum base width for electric cable trenches shall be 500 mm. Where more than one cable is installed in the same trench, the base width shall become 300 mm plus the distances specified between the centre lines of the cables (50 mm minimum).

PS DB 5.4 **EXCAVATION**

Add the following to DB 5.4:

Excavation and backfilling of pipe trenches underneath sidewalks in the residential area shall be done in such a way as to ensure the least possible disruption to the public and entrances to properties. No additional payment shall be made for this, and all relevant costs shall be deemed to be included in the tendered rates. Electric cable trenches shall be dug in lengths as requested by the electrical contractor.

The provisions of PS D 5.2.2.4 shall apply mutatis mutandis for hand excavation.

PSDB 5.5.1 *Add the following new item(s):*

Trench Bottom

Material that the Engineer considers unsuitable at the bottom of the trench shall be excavated to the depths and disposed of in the manner directed. The resulting space shall be refilled, as order, with approved material and compacted as directed.

Should bedding of the pipeline in accordance with SABS 1200LB form part of the contract, the depth of the trench shall be such that the specified depth of the cradle can be placed under the pipeline, and the trimming and grading of the trench shall be such that the barrel of each length of pipe can be uniformly supported over its full length, free at the joints, and at the correct grades and levels. Except where the trench excavation is in rock, hard objects and boulders that may adversely affect the uniformity of the foundation shall be removed to a depth of 100mm below the specified trench bottom. Where the bottom of the trench has been loosened during excavation, it shall be compacted at OMC to 90 % of the modified AASHTO maximum density prior to bedding and pipe laying.

The bottom of trenches shall be sufficiently straight (or true to alignment in the case of curved pipelines) to enable the pipes to be laid without reduction of the side allowances given in 5.2 and in conformity with the applicable tolerance specified in any standardised specification covering pipe work that forms part of the contract.

DB 5.6 **BACKFILLING**

PS DB 5.6.2 **Material for Backfilling**

Substitute "from trench excavations" in the first paragraph of DB 5.6.2 with "from trench, channel or street excavations".

PS DB 5.6.3 **Disposal of Soft Excavation Material**

Add the following to DB 5.6.3:

All surplus and unsuitable material as described in DB 5.6.3 shall be disposed of at a legal spoil site, (as described in PS D 5.2.2.3) and levelled.

DB 5.7 **COMPACTION**

PS DB 5.7.2 **Areas Subject to Traffic Loads**

Add the following to DB 5.7.2:

“Backfill of all pipe trenches that fall under roadways shall be compacted to 95% of MAMDD density for cohesive materials and sand backfilling shall be compacted to 100 % of MAMDD density.”

DB 5.9 **REINSTATEMENT OF SURFACE**

PS DB 5.9.4 **Bitumen Roads: Subbase and Base**

Add the following to DB 5.9.4:

Any additional imported material required for the reinstatement of selected layers, subbase or base shall comply with the requirements of the relevant standardised and/or project specifications.

PS DB 5.9.5.1 **Bitumen roads: Surfacing**

Add the following to DB 5.9.5.1:

The thickness of the asphalt shall be 30 mm for all streets except if specified otherwise.

DB 8 **MEASUREMENT AND PAYMENT**

DB 8.2 **COMPUTATION OF QUANTITIES**

PSDB 8.1.2: **b) Basic Principles**

Replace DB 8.1.2 (b) with the following:

“Separate items will be scheduled for lengths of trench of depths not exceeding certain depths as per the bill of quantities”.

c) Basic Principles

Replace the last sentence of DB 8.1.2 (c) with the following:

The ground surface will be that existing after any bulk excavation has been carried out and before any embankment has been constructed, unless a portion of the embankment has to be constructed in order to achieve an acceptable cover over a pipe that is to be installed, in which case measurement will be made from the level of embankment that produces an acceptable minimum cover over the pipe. The depth of the excavation for measurement and payment purposes will be as specified in Sub-clause 8.1.2 (b).

PS DB 8.2.4 **Shoring**

Add the following to DB 8.2.4:

Shoring will only be measured and paid for if written approval is given by the Engineer before it is installed.

DB 8.3 **SCHEDULED ITEMS**

PS DB 8.3.2 **Excavation**

a) Excavate in all materials for trenches, backfill, compact and dispose of surplus material Unit : m

Add the following to D 8.3.2(a):

The depth of excavation in street reserves shall be measured from the final finished level.

In cases where services lay parallel to steep slopes, the depth of the excavation will be measured along the centre of the trench (on the route of the service).

The rate for excavation for subsurface drains shall cover the cost of excavation and spoil of surplus material within 1,0 km.

The rate shall also provide for the fact that the excavation width in sand will be wider than normal and that fast excavation and backfill will reduce ground water seepage.

i) Combined trenches

The rate for excavation and backfilling of trenches with more than one service, shall allow for trench widths as set out in PS DB 5.2 and the bill of quantities. Extra bedding and fill blanket will be measured as in the case of normal pipe trenches.

The depth increment for combined trenches is determined by the deepest pipe in the trench.

PS DB 8.3.2 **b) Extra over for excavation in: Unit: m**

Add the following to D 8.3.2 (b):

In accordance with PS DB 3.1, all classes of excavation will be paid for under item PS DB 8.3.2 (a), except for hard rock that will be paid for under this item.

Hard rock excavation Unit: m³

This payment item shall be for hard rock excavation by methods other than blasting.

PS DB 8.3.2 **c) Excavate unsuitable material from trench bottom Unit: m³**

Delete "and the disposal" in the heading of DB 8.3.2(c) and in the last paragraph.

PS DB 8.3.2 **d) Hand excavation and backfill Unit: m³**

The provisions of PS DB 8.3.2(a) and PS DB 8.3.2(c) shall apply mutatis mutandis for hand excavation.

Payment shall only be made if so ordered by the Engineer.

PS DB 8.3.2 **e) Extra-over PS DB 8.3.2(a) for temporary stockpiling of material Unit: m³**

Temporary stockpiling of material will only be measured and paid for if ordered so in writing by the Engineer and if it is not contaminated with unsuitable material.

The rate shall provide for the handling and stockpiling of the material within the free haul distance.

DB 8.3.3 **Excavation Ancillaries**

PS DB 8.3.3.1 **Make up deficiency in backfill material (provisional) Unit: m³**

Add the following to DB 8.3.3.1:

d) Stockpile Unit: m³

Add the following to the last paragraph of DB 8.3.3.1:

No payment will be made for the transport of material from commercial sources or sources outside the site that the Contractor has selected.

PS DB 8.3.3.3 **Compaction in road reserves Unit: m³**

Add the following to DB 8.3.3.3:

This item is only applicable to the backfill above the bedding and fill blanket.

DB 8.3.5 **Existing Services That Intersect or Adjoin a Pipe Trench**

PS DB 8.3.5 **a) Services that intersect a trench Unit: No**

Add the following to DB 8.3.5(a):

Existing services with a depth of cover exceeding 300 mm, measured from the bottom of excavation to the top of the existing service shall not be measured and paid for. There will be distinguished between existing trunk services and existing erf connection.

The rate shall also allow for the following costs:

- i) Sufficient photos have to be taken of existing services and handed over to the Engineer before they are being crossed, if there is a possibility of a difference in opinion over the condition of those services, especially on private property.
- ii) If such a service is damaged, it has to be repaired to its original condition or if possible, to a standard agreed to in writing with the relevant owner. This agreement has to be approved by the Engineer.
- iii) If such a service is removed, it has to be replaced as per original.

PS DB 8.3.5 **b) Services that adjoin a trench Unit: No or m**

Add the following to DB 8.3.5 (b):

The unit "number" will only be used for services such as poles and trees.

No payment will be made for overhead services that do not rest directly on the ground except where allowance is made for this in the schedule of quantities.

Existing services that rest directly on the ground e.g. poles, trees, walls and structures are handled in the same way as underground services, but the axis of the service will be determined as follows:

The vertical axis is defined as the nearest side or corner of the existing structure to the excavation, measured at the point where the structure and natural ground level intersect.

The horizontal axis will be at the point where the structure and the natural ground level intersects. In this instance, where the excavation falls above the 45° line but within 1,0 meter horizontally from the structure, the service will also be measured as adjoining.

If the structure, according to the above-mentioned, does not qualify as an adjoining service but the foundation of the structure is such that if a 45° line drawn from the nearest bottom corner thereof cuts through the excavation, the structure will be measured as an adjoining service **if approved by the Engineer**. These will be distinguished between existing trunk services and existing erf connection.

PS DB 8.3.6.1 **Reinstatement of road surfaces, complete with all courses Unit: m²**

The layer works to be allowed for under this item are as follows below. The costs of the imported material to be used in terms of PS DB 3.6.1 and PS DB 5.9.4, and for surfacing to be included in this rate are:

- a) Premix roads: 40mm Medium continuously graded premix
 150mm G4 base coarse
 150mm G5 subbase
 150mm G7 upper selected
 150mm G9 lower selected
- b) 25mm Premix Driveways: 25mm Medium continuously graded premix
 100mm G5 basecourse
- c) 50mm Paved Driveways: 50mm Concrete Interlocking Paving
 20mm Sand layer
- d) Concrete Driveways 150mm 25MPa Concrete with Ref.617 mesh

Should the layer works for reinstatement at certain locations be changed, on instruction by the Engineer to suit the existing, the rate will be adjusted accordingly. No additional payment for a selected layer or any

work relating to a selected layer shall be made. Should level control of the backfill material be required, it is deemed to be included in the tendered rate.

The tendered rate shall be for reinstating the actual width of road layers damaged including provision for the fact that the excavation width in sand and wet conditions will be wider than normal as well as for benching each layer with 150mm. The rate shall also include material, labour and equipment for cutting back the damaged premix layer to form a neat straight line parallel to the kerb line with no steps for at least 20m per section. The rate shall also include the removing of the old premix by hand and replacing it with new premix.

PS DB 8.3.8 **Handling of ground water in trenches**

The rates for excavation must include any costs for action needed to deal with water in the excavation.

Where instructed by the Engineer, a layer of crushed stone will be put down to stabilize the trench bed. The volume will be calculated according to the length of the trench, the specified minimum width and prescribed thickness.

The tendered rate shall provide for all additional excavations, and the preparation of the trench bed to allow for the layer of stone, the removal of unsuitable material, the provision and placing of 150 mm layer of crushed stone for the prescribed width as well as any other action need to stabilize the trench.

If the Engineer instructs the use of geotextile, it will be measured per area.

The rate must include all costs for the provision and placing of material and losses for excavation that are bigger than prescribed.

- a) **Provision and placing of crushed stone.....Unit: m³**
- b) **Provision and placing of geotextileUnit: m²**

PROJECT SPECIFICATION

SANS 1200 DK: GABIONS AND PITCHING

DK 3 MATERIALS

DK 3.1 GABIONS

PS DK 3.1.2 MESH

Gabions shall be made of hexagonal woven, triple twisted mesh (80 x 100mm) galvanized to SANS 675 class A before weaving. PVC coated gabions shall have been extruded onto the galvanized wire before weaving, to a minimum thickness of 0,5mm polyvinylchloride, capable of resisting the deleterious effects of saltwater and ultraviolet light.

The diameter of the mesh wire shall be as specified hereunder: -

Gabion boxes:	(80 x 100) wire mesh
Mesh wire:	2.7mm and PVC coated
Selvedge wire:	3.4mm and PVC coated
Binding wire:	2.2mm and PVC coated

Gabion mattresses:	(80 x 100) wire mesh
Mesh wire:	2.5mm and PVC coated
Selvedge wire:	3.0mm and PVC coated
Binding wire:	2.2mm and PVC coated

All edges shall be mechanically selvedge with a wire of which the diameter is as specified above. Diaphragm and end panels shall be selvedge along the top edge and vertical sides.

Wire mesh diaphragm panels shall be provided at 1m intervals.

Sufficient binding wire shall be provided to carry out all necessary wiring operations in accordance with the manufacturer's instructions.

PS DK 3.1.3 GEOTEXTILE

The geotextile to be used shall be minimum Grade A2 needle punched non-woven filter fabric. The table below gives the values for the properties:

GRADE A2 GEOTEXTILE PROPERTIES		
PROPERTY	GRADE A2	TEST METHOD
Penetration load (minimum), kN	1.9	3.5 of SANS 10221 – 2007
Puncture resistance (maximum diameter of hole), mm	27	Clause B8114
Water percolation (minimum), l/hr	30	3.7 of SABS 10221 – 1988
Mass per unit area (minimum), 1/m ² /s g/m ²	150	3.4 of SABS 10221 – 1988

The geotextile for subsurface drainage shall comply to Grade A2 or Grade A3 as specified in the Bill of Quantities or shown on the drawings.

Only non-woven Geotextile's complying with the requirements of Grade A4 and with a minimum mass of 210 gram per square metre, as determined in accordance with test method 3.4 of SANS 10221, shall be considered as filter backing for the protection of earthworks against erosion.

DK 3.2 PITCHING

PS DK 3.2.1 SIZE OF STONE FOR PITCHING

The size shall comply with the medium classification of Table 2. Prior to commencement of work, samples of the stone shall be provided to the Engineer for his/her approval.

DK 8 MEASUREMENT AND PAYMENT

DK 8.2 SCHEDULED ITEMS

PS DK 8.2.5 Pitching

Add the following to DK 8.2.5:

The pitching for channels, as shown on the drawings, shall be grouted light stone pitching.

PROJECT SPECIFICATION

SANS 1200 DM: EARTHWORKS (ROADS, SUBGRADE)

DM 3 MATERIALS

PS DM 3.1 CLASSIFICATION FOR EXCAVATION PURPOSES

Add the following to DM 3.1:

All in situ pavement material shall be classified as soft material for excavation purposes.

DM 3.2 CLASSIFICATION FOR PLACING PURPOSES

PS DM 3.2.3 Selected Layers

Substitute DM 3.2.3 with the following:

Materials used for selected layers shall comply with the requirements of standard specification 1200 M.

DESCRIPTION	LOWER SELECTED LAYER (G9 – TRH14)	UPPER SELECTED LAYER (G7-TRH 14)
Minimum CBR at 93 % MAASHTO density (100 % for sand)	7	15
Maximum CBR swell at 100 % MAASHTO density	1,5 %	1,5 %
Maximum size of aggregate after compaction	100 mm	100 mm
Minimum Grading Modulus (GM)	0,5	0,75
Maximum Plasticity Index (PI)	12	12
Maximum Group Index	-	1

All imported material underlying the subbase or base of the final road prism, whichever may be applicable, that does not comply with the requirements for lower selected layer or upper selected layer in the respective depth categories, shall be removed and replaced with material or mechanically modified to comply with the requirements of selected layers, all at the Contractor's expense.

DM 4 PLANT

PS DM 4.2 PLANT FOR TREATMENT BELOW SELECTED LAYER

PS DM 4.2.1 Pneumatic-Tyred Roller

Pneumatic-tyred rollers shall be of the self-propelled type that is equipped with smooth pneumatic-tyred wheels of the same diameter. The mass of the roller shall be at least 10 tons. All wheels must bear the same mass.

The rollers must be equipped with devices that will be able to keep the wheels wet and clean during operation.

The wheels of the roller shall be arranged in such a way that one pass with the roller will cover the whole width of the machine. The roller must be able to take a tyre pressure of 600 kPa and the minimum allowed working tyre pressure shall be 450 kPa. The maximum difference in pressure between any two wheels shall not be greater than 35 kPa.

DM 5 **CONSTRUCTION**

DM 5.1 **PRECAUTIONS**

PS DM 5.1.2 **Accommodation of Traffic**

Add the following to DM 5.1.2:

Bypasses shall be constructed and road signs erected where the free flow of public traffic is restricted. Such bypasses and road signs shall be in accordance with the "CSRA-CUTA : Road Traffic Signs Subcommittee; Road Signs Note no 13, the SA Road Traffic Signs Manual" and shall be approved by the Engineer before the commencement of construction.

DM 5.2 **METHODS AND PROCEDURES**

DM 5.2.2 **Cut and Borrow**

PS DM 5.2.2.2 **Dimensions of cuts**

Substitute "subbase" in the second paragraph of DM 5.2.2.2 with "subbase or selected layer, whichever may be applicable", and

Substitute "CBR of at least 7" with "CBR as applicable according to the provisions of PS DM 3.2.3".

PS DM 5.2.2.3 **b) Cut to spoil**

Substitute DM 5.2.2.3(b) with the following:

All surplus and/or unsuitable material shall be removed from the site and disposed of at a legal spoil site (as described in PS D 5.2.2.3) and shall be shaped to establish a free draining surface.

PS DM 5.2.2.4 **Temporary stockpiling of materials**

Add the following to DM 5.2.2.4:

The Contractor shall program the works in such a manner that suitable excavated material shall, if practically possible, be placed directly in the appropriate position to ensure that temporary stockpiling is limited to an absolute minimum. No payment shall be made for the temporary stockpiling of material where such material is to be used for backfilling of pipe trenches, except when so ordered in writing by the Engineer.

DM 5.2.3 **Treatment of Roadbed**

PS DM 5.2.3.3 **Treatment of Roadbed**

a) Preparation and compaction of roadbed

Substitute the first paragraph of DM 5.2.3.3(a) with the following:

The roadbed shall be scarified to a depth of 150 mm, watered, shaped and compacted to 90 % of MAASHTO density (100 % for sand), except where otherwise ordered by the Engineer.

In clay areas only excavation and shaping to the correct level will be necessary.

The roadbed shall be prepared with a ionic stabiliser at a rate of 0,03 ℓ/m^2 in layers of 150 mm and 0,02 ℓ/m^2 in layers of 100 mm before compaction if ordered by the Engineer.

The stabiliser must be thoroughly mixed with water.

Measurement and payment shall be made under item PS ME 8.3.8(g).

Add the following subclause:

c) In situ preparation of roadbed with eight roller passes

Any part of the roadbed that lies within the selected layer and which, regardless of its density, is suitable according to the Engineer's opinion, can be used in situ if so instructed by the Engineer.

If due to the nature of material, the degree of compaction cannot be controlled by means of in situ density tests, the Engineer may instruct compaction to be done by eight roller passes as specified in PS DM 4.2. The Engineer may further request that the compaction effort be altered by increasing or reducing the number of passes and that payment be amended accordingly.

The surface of the roadbed shall be shaped true in respect of line and level within the tolerances as specified in clause 6. During the shaping of the roadbed, all material that has to be removed and cannot be re-used, shall be disposed of and will be paid for under item PS DM 8.3.7. If necessary, additional material that has been approved by the Engineer shall be imported to meet the required levels.

No strict measurements in connection with soil moisture content will be applied by the Engineer during compaction. The Contractor must however convince the Engineer that all possible efforts have been made to utilise favourable soil moisture conditions. Compaction must be done during periods when the roadbed is not too wet or too dry. The Engineer has full authority to decide whenever conditions are favourable for compaction and may at any stage instruct the Contractor to water the roadbed at the Contractor's expense if he, in the Engineer's opinion, neglected to satisfy the above-mentioned requirements.

PS DM 5.2.5 Selected Layer

Add the following to DM 5.2.5:

The Engineer may, depending on the quality of the in-situ material, order the omission of one or both of the selected layers. To determine the amount of selected layers, if any, the Engineer may order the Contractor to dig test holes with maximum dimensions of 1,5 m x 1,5 m and 1,0 m deep at positions indicated by the Engineer, before construction commences.

The Contractor shall backfill all test holes with selected material and compact it to 95 % of MAASHTO density (100 % for sand), after the Engineer has taken samples and profiled the holes.

PS DM 5.2.9 Shaping and Compacting Below Selected Layer

Each portion of the roadbed below the selected layer which, by virtue of its inadequate natural density, is directed by the Engineer to be compacted by means of a pneumatic-tyred roller, shall be prepared by shaping where necessary, and each such portion shall be compacted by means of at least eight complete passes by a pneumatic-tyred roller. One pass shall consist of the complete area being systematically passed in the longitudinal direction so that each pass overlaps the previous by half.

DM 6 TOLERANCES

PS DM 6.5 DIMENSIONS AND LEVEL CONTROL

The Contractor shall submit to the Engineer, in a form acceptable to the Engineer, records of dimension and level control, prior to requesting the Engineer to carry out any routine inspections.

DM 7 TESTING

PS DM 7.2 PROCESS CONTROL

Amend table 1 of DM 7.2 as follows:

Substitute "2 000 m²" with "1 500 m²", "1 500 m²" with "1 200 m²" and "5 000 m²" with "3 000 m²".

DM 7.3 ROUTINE INSPECTION AND TESTING

Substitute DM 7.3.2 with the following:

No density shall be less than the specified minimum density for the relevant layer.

It is the responsibility of the contractor to prove to the engineer that all the layer works prepared and constructed complies with the minimum specifications specified at the cost of the contractor. The costs of these tests shall be deemed included in the relevant rates for construction of such items.

If the Engineer dispute any test results submitted by the contractor, the engineer shall request routine testing. The results which do not comply with the specified minimum requirement for the material or layer, shall be borne by the Contractor and will be subtracted from the monthly payment certificates.

DM 8 MEASUREMENT AND PAYMENT

PS 8.2.1 Volume only measured once

Substitute the first sentence in DM 8.2.1 with the following:

Earthworks will be measured by volume once only as compacted fill from cut shapes

DM 8.3 SCHEDULED ITEMS

PS DM 8.3.3 Preparation of Roadbed

Substitute DM 8.3.3(b)(1) and (2) with the following:

b) Preparation of in situ roadbed in:

1) Intermediate material Unit: m³

Add the following subclauses:

c) In situ preparation of roadbed with eight roller passes (pneumatic roller) Unit: m²

The unit of measurement is in square metres of roadbed which has been treated with eight roller passes.

The rate shall cover the costs of shaping, watering and compacting all as specified in PS DM 5.2.3.3(c). The removal, disposal, transport and replacing of materials will be paid under the appropriate items.

PS DM 8.3.4 Cut to Fill, Borrow to Fill Unit: m³

Substitute "90 %" in DB 8.3.4 with "90 % (100 % for sand)" and "road prism" with "road prism and borrow pits".

Add the following:

Separate items will be scheduled for fill in the road prism, fill on spoil areas and fill on erven (where a minimum density for such spoil material is required by the Engineer) and fill from the road prism, fill from the site and fill from commercial sources.

Overhaul within the road reserve is included.

The rate for fill from commercial sources shall, in addition to the requirements of DM 8.3.4, cover the cost of the location of the source, complying with all the applicable precaution as set out in DM 5.1, obtaining the material, selection and transport from the source to the point on the road where it is to be used.

Excavation in intermediate material will not be measured separately and is deemed to be included in the rate tendered.

On the areas where fill is to be placed, the area will first be prepared by ripping and scarifying the area to ensure sufficient mixing with the fill to be placed onto the area. Rate will be based on all relevant amendments in the project specifications.

PS DM 8.3.5 Selected Layer Compacted To 93 % Of MAASHTO Density Unit: m³

Substitute "93 % of MAASHTO density" in the heading of DM 8.3.5 with "93 % (100 % for sand) of MAASHTO density".

Add the following to DM 8.3.5:

Separate items will be scheduled for lower and upper selected layers as well as for material from the site of works and from commercial sources. The rate for selected layers from commercial sources shall, in addition to the provisions of DM 8.3.5, allow for locating the source, complying with all the applicable precautions as set out in DM 5.1, obtaining the material, selection and transport from the source to the point on the road where it is going to be used. No payment shall be made for the removal and replacement of unsuitable imported material.

PS DM 8.3.7 **Cut to Spoil or Stockpile from** **Unit: m³**

Add the following to DM 8.3.7:

Payment for temporary stockpiling shall be made under DM 8.3.11, only if so instructed in writing by the Engineer.

(For hand excavation see SANS 1200 D.)

PS DM 8.3.12 **Overhaul** **Unit: m³ or m³.km**

Substitute DM 8.3.12 with the following:

The provisions of clause D 8.3.6 shall apply mutatis mutandis.

PS DM 8.3.17 **Trim, Shape and Compact Sidewalks** **Unit: m²**

The area to be trimmed is the unsurfaced area from the back of the kerbs or edging to the boundary of the road reserve, or such wider or narrower area as required by the Engineer. Always confirm with the engineer in writing the width thereof required before shaping the area behind the kerbs.

Measurement and payment for the above shall be restricted to areas ordered in writing by the Engineer.

The rate shall cover the cost of trimming and shaping the sidewalks to the lines, levels and dimensions as shown on the drawings, of acquiring additional material to compensate for any material lost due to weather or other reasons, and of the compaction of any loose or disturbed material to 90 % of MAASHTO density (100 % for sand).

PS DM 8.3.19 **Removal of Unsuitable Material** **Unit: m³**

The volume measured for payment is the volume of unsuitable material, removed on written instruction of the Engineer in accordance with clause DM 5.2.3.2, below the level of the initial roadbed.

The rate is extra-over Item PS DM 8.3.7 and covers all additional costs in respect of the removal and spoil of unsuitable material, as well as all additional costs in respect of the backfilling thereof. Payment for backfilling shall be made either under PS DM 8.3.4 or PS DM 8.3.5, whichever may be applicable.

Payment shall differentiate between the areas of the unsuitable material, as measured on the initial roadbed, in increments as scheduled.

PROJECT SPECIFICATION
SANS 1200 G: CONCRETE (STRUCTURAL)

G 3 MATERIAL

PS G 3.2.1 Applicable Specifications

Substitute G 3.2.1 with the following:

All cement types shall comply with the requirements of SANS EN 197-1.

For this contract CEM I portland cement shall be used.

Where Malmesbury hornfels (shale) is used as aggregate in concrete, a blend (by mass) of 50 % CEM I 42,5 or CEM I 42,5R and 50 % milled granulated blast-furnace slag shall be used in the concrete mix.

PS G 3.2.3 Storage of Cement

Add the following to G 3.2.3:

Consignments of cement shall be used in the same sequence as that in which they are delivered to site. No cement shall be used which has been stored on site for a longer period than 6 (six) weeks. All cement so stored for a longer period than 6 (six) weeks, all cement damaged in any way, and all cement which does not comply with the specification, shall be removed immediately and permanently from the site.

PS G 3.5.2 Air-entraining Agents

Substitute G 3.5.2 with the following:

Air-entraining agents shall not be used in concrete.

G 4 PLANT

PS G 4.5.3 Ties

Add the following to G 4.5.3:

Permanent metal ties shall have a minimum concrete cover of 40 mm after formwork has been removed.

Tie holes shall be filled with an approved expansive cementitious grout similar to "Durabed" of ABE. The product shall be prepared to a non-slump consistency, but where no cracking occurs when pressed into a firm ball. Trial mixes shall be made to arrive at the required working consistency.

G 5 CONSTRUCTION

G 5.1 REINFORCEMENT

PS G 5.1.3 Cover

Substitute G 5.1.3 with the following:

The cover of concrete over reinforcement, unless otherwise indicated on the drawings, shall in no case be less than 40 mm.

PS G 5.2.1 Classification of Finishes

Add the following to G 5.2.1:

The following surface conditions are required on the various portions of the finished concrete:

(a) **Rough**

Concealed surfaces and surfaces more than 100 mm below final ground level.

(b) **Smooth**

All surface finishes not classified as "rough" in paragraph (a) shall be classified as "smooth". All exposed arrises (i.e. where the angle between adjacent sides is 110° or less) unless otherwise indicated on the drawings, shall be chamfered 20 mm x 20 mm by means of triangular fillets fixed to the formwork.

PS G 5.2.5 Removal of formwork

In Table 2 of G 5.2.5.2, substitute "portland cement and portland cement 15" in columns 2, 3 and 4 with "CEM 1 portland cement, delete columns 5, 6 and 7 and substitute "portland blast-furnace cement" in columns 8, 9 and 10 with "CEM III blast-furnace cement or blends of CEM I portland cement with milled granulated blast-furnace slag".

PS G 5.4 PIPES AND CONDUITS

Add the following to G 5.4:

All pipes and specials which must be installed in the floors and walls of structures shall be embedded in the concrete during the casting of such concrete. No holes shall be left for the later installation of pipes and specials, without the written approval of the Engineer.

Where such holes have been approved by the Engineer, the Contractor shall be responsible for the grouting-in of such pipes or specials with an approved expansive cementitious grout as specified in PS G 4.5.3, regardless of whether or not these have been supplied by himself. The Contractor shall provide a smooth, dense and waterproof finish around the pipes or specials.

The clear space between pipes of any kind embedded in reinforced concrete and the clear space between such pipes and reinforcement shall at any point be not less than –

- (a) 40 mm, or
- (b) 5 mm plus the maximum size of coarse aggregate, whichever is the greater.

G 5.5 CONCRETE

PS G 5.5.1.5 Durability

Substitute G 5.5.1.5 with the following:

Concrete shall be so proportioned to ensure that the water/cement ratio does not exceed 0,5 and, to ensure workability, water-reducing admixtures of approved manufacture shall be used in preference to increasing the cement content.

PS G 5.5.1.7 Strength concrete

Add the following to G 5.5.1.7:

The grade of strength concrete and the maximum nominal size of coarse aggregate for each portion of the works, unless otherwise indicated on the drawings, shall be as follows:

- (a) Mass concrete under floors and foundations 20 MPa/19 mm
- (b) Blinding layers 20 MPa/19 mm
- (c) Encasing of pipes 20 MPa/19 mm
- (d) Strip foundations 20 MPa/19 mm
- (e) Benching and screeds 20 MPa/10 mm
- (f) All reinforced concrete 30 MPa/19 mm

PS G 5.5.7 Construction Joints

Add the following to G 5.5.7.1:

Construction joints shall be limited to the minimum and shall only be made in positions as shown on the drawings or in positions as specifically approved by the Engineer. Construction joints between floors, or

wall bases, and the walls standing on them shall not be made flush with the supporting surface but shall be made in the wall 150 mm above the base. The 150 mm high riser wall shall be cast as an integral part of the bottom, floor or base, i.e. the concrete in the riser shall be deposited simultaneously with the concrete in the bottom, floor or base adjacent to it. Where there is a fillet at the bottom of a wall, the construction joint shall be made 150 mm above the fillet.

PS G 5.5.7.4 Expansion joints

Expansion joints shall be formed in positions and in accordance with details as shown on the drawings. All expansion joints shall be formed with an approved closed cell polyethylene fill material similar to "SPV 120" as supplied by Sondor, with a single part polyurethane sealant similar to Sikaflex – PRO 2HP as supplied by Sika.

All sealants and fill material shall be installed strictly in accordance with the specification of the manufacturers and to the satisfaction of the Engineer. The sealant shall be installed in one operation and jointing to already hardened sealant will not be permitted.

PS G 5.5.9 Adverse Weather Conditions

Add the following to G 5.5.9.1:

No material having a temperature of below 5 °C shall be used for concrete, and no concrete shall be deposited when the ground or air temperature is below 2 °C. Furthermore, if the air or ground temperature is likely to fall below 2 °C within twelve (12) hours after depositing of concrete, no concreting shall be done without the written consent of the Engineer. If such consent is given the Contractor shall heat the aggregate stockpiles and mixing water and defrost the formwork and reinforcement.

PS G 5.5.10 Concrete Surfaces

Add the following to G 5.5.10.1:

Concrete surfaces under screeds, granolithic floor finishes or benching, and surfaces of strip foundations and footings shall be brought up to a plane, uniform surface with a suitable screed board.

PS G 5.5.10.4 Wood-floated finish

Where wood floating is specified or scheduled, the surface shall first be given a finish as specified in G 5.5.10.1 and after the concrete has hardened sufficiently, it shall be floated to a uniform surface free from trowel marks. The screeded surface shall be wood-floated, either by hand or machine, only sufficiently to produce a uniform surface free from screed marks.

PS G 5.5.10.5 Steel-floated finish

Where steel floating is specified or scheduled, the surface shall be treated as specified in PS G 5.5.10.4 except that, when the moisture film has disappeared and the concrete has hardened sufficiently to prevent laitance from being worked to the surface, the screeded surface shall be steel trowelled under firm pressure to produce a dense, smooth, uniform surface free from trowel marks.

PS G 5.9 JOINING NEW CONCRETE TO EXISTING

Where partial demolition is required for extension work to existing structures, the contact face shall be cut to predetermined line and level, and any loose and fragmented material shall be removed, and projecting steel cleaned and bent as directed by the Engineer. Where partial demolition is not required but extension work only, the contact surface shall be scabbled and cleaned of all dirt and loose particles.

If dowels are required, they shall be installed in holes drilled into the existing structure, in accordance with the details shown on the drawings, and secured by means of an approved type of epoxy bonding compound such as EPIDERMIX 372 or similar.

Fresh concrete shall be bonded to the old concrete with an approved type of epoxy bonding compound, such as EPIDERMIX 344 or similar.

G 8 **MEASUREMENT AND PAYMENT**

G 8.1 **MEASUREMENT AND RATES**

PS G 8.1.1 **Formwork**

Delete the following in G 8.1.1.3(c):

"and for different prop heights for beams and slabs".

PS G 8.1.3 **Concrete**

Add the following to PS G 8.1.3.1(d):

Strip foundations and encasement of pipes shall be cast directly against the sides and bottoms of excavations. No payment shall be made for additional concrete in overbreak.

Delete the full stop at the end of G 8.1.3.3(a) and add the following:

and special steps necessary before depositing concrete during cold weather, as prescribed in PS G 5.5.9.

G 8.4 **SCHEDULED CONCRETE ITEMS**

PS G 8.4.4 **Unformed Surface Finishes Unit: m²**

Add the following to G 8.4.4:

The concrete surface finishes under screeds, granolithic finishes or benching as prescribed in PS G 5.5.10 shall not be measured separately. The rates for the related concrete items shall also cover the cost of these surface finishes.

PS G 8.4.8 **Concrete complete with formwork and/or trowel finish Sum or m³**

The rate shall cover the cost of the provision of concrete (made from ordinary Portland cement, unless otherwise scheduled), mixing, testing, placing, compacting, the forming of stop-ends and unforeseen construction joints, striking-off or levelling as applicable, trowelling and curing and repairing where necessary, together with the cost of all parts of formwork in contact with the concrete and the necessary bearers, struts, and other supports, plus the layout and plant necessary to erect and strike such formwork.

PROJECT SPECIFICATION

SANS 1200 L: MEDIUM PRESSURE PIPELINES

L 3 MATERIALS

L 3.7 Other types of pipes

PS L 3.7.1 uPVC pipes

Replace the clause with the following:

All uPVC pipes and fittings shall be fitted with spigot and socket rubber ring joints and shall comply with the relevant requirements of SANS 966, of the class and size as specified on drawings and schedule.

Bends shall be socketed uPVC, class 16. Standard specials such as tees, flange adaptors, reducers, etc shall be fabricated from cast iron and shall be rated at not less than the pressure rating of the pipeline.

Substitute the first sentence of the last paragraph of L 3.8.4 with the following:

Bolts and nuts shall comply with the requirements of SABS 135.

L 3.9 Corrosion protection

PS L.3.9.1 CI pipes

Replace the clause with the following:

All internal cast iron surfaces valves and specials shall be thoroughly cleaned by grit blasting to SA 2,5 finish in compliance with the requirements of SIS 05 09 00 before applying Copon EP 2300 epoxy paint, applied in three coats to give a dry film thickness of not less than 250 microns. All external cast iron surfaces valves and specials shall be cleaned and coated in accordance with B4772. After it has set, coating shall be such that it will not flow when heated to temperature of 75°C.

PS L.3.9.5 Joints, bolts, nuts, and washers

Replace the clause with the following:

All bolts, nuts and washers shall be stainless steel.

L 3.10 Valves

Add the following new item(s):

PS L 3.10.1 Gate valves

All gate valves shall comply with the requirements of SABS 664 and shall be suitable for a working pressure of 1,6 MPa. All gate valves must be supplied with a square spindle nut, suitable to be used with a valve key.

Gate valves shall have spigot ends unless shown differently on the drawings and shall open clockwise. The direction for opening and closing shall be permanently displayed on the valves. Valves shall have non-rising spindles.

Compression shut-off valves with rubber protected gate and smooth finish without recess inside, may be used.

All flanged gate valves shall be drilled according to SABS 1123 Table 1600/3. Pipes shall not be tested against a closed valve. Thrust blocks for test sections shall be approved by the Engineer prior to testing of pipes.

PS L 3.10.2 Butterfly valves

Butterfly valves shall be of the wafer pattern to be installed between two flanges in the water main with either short collar repair couplings or Viking Johnson couplings.

The valves shall be fitted with a gearbox with a stainless-steel shaft. The body shall be clad with rubber.

Valves shall be similar to the "Compact" type with a working pressure of 1,6 MPa. Pipes shall not be tested against closed butterfly valves.

PS L 3.10.3 Fire hydrants

Fire hydrants shall be of the screw-down underground type and shall be suitable for a working pressure of 1,6 MPa with a 65 mm inlet. The outlet shall be 63 mm dia gun-metal with London Vee screw thread with cap top and chain. It shall open clockwise with a square spindle nut of the same size that is specified for the gate valves.

The fire hydrant shall be bolted to the flanged branch of a cast iron hydrant tee.

PS L 3.10.6 Non-return valves

Non-return valves shall be of the flanged, single door swing type check valve, rated at 16 Bar minimum or to suit pump shut off head. All valves shall be equipped with a lever and counterweight.

PS L 3.11.4 Step Irons

Substitute L 3.11.4 with the following:

Step irons shall consist of polypropylene coated 12 mm high tensile steel such as Calcamite or similar. The installation of the step irons shall be in accordance with the specification of the manufacturer.

PS L 3.11.6 Surface Boxes

Add the following to L 3.11.6:

The type of cast iron boxes shall be as specified on the drawings.

PS L 4.3 Testing

Add the following to L 4.3

The Contractor must ensure that the test equipment is in good order and that it is calibrated.

L 5 CONSTRUCTION

PS L 5.1.1 General

Add the following to L 5.1.1:

Where asbestos cement pipes are built into structures as indicated on the drawings, the length of pipe that is built in, must not exceed 600 mm.

In order to facilitate for movement between structures, a length of asbestos cement pipe of a minimum of 600 mm must be connected to the section that is built into the structure or to the pipe, as indicated on the drawings.

PS L 5.1.4 Laying: Depths and Cover

Add the following after the first sentence:

Unless otherwise shown on the drawings, all pipes smaller and equal to 110mm diameter shall be laid to provide a minimum cover of 1,0m from finished ground or roadway level within road reserve and 0,8m elsewhere. Pipes larger than 110mm diameter shall be laid to provide a minimum cover of 1,2m.

PS L 5.1.4.2 Deflection

Substitute "1,5° per joint in the case of AC pipes" in L 5.1.4.2 with "3° per joint in the case of AC pipes with AC couplings and 4° in the case of AC pipes with cast iron short collar repair couplings".

PS L 5.6.1 **Construction: Valve and Hydrant Chambers: General**

Replace the clause with the following:

“All chambers and surfaces boxes shall be constructed in accordance with the details shown on the drawings.”

The drawings of valve and hydrant chambers which are bound into the document shall supersede the corresponding drawings in the standard specification.

PS L 5.9 **Lifting and Relaying of Existing Pipes**

Add the following to L 5.9:

Existing water pipes at certain points shall be lifted and relayed deeper in the same position. The Contractor must make timeous arrangements with the local authority.

L 7 **TESTING**

PS L 7.3.1 **Testing: Standard Hydraulic Pipe Test: Test Pressure and Time of Test**

Add the following to CI 7.3.1.1:

“Pipes shall not be tested against isolating valves. Special blank flanges or end caps, fully anchored, shall be provided for testing.”

Substitute CI 7.3.1.2 with the following:

“The test pressure for field testing shall be 1,5 times the rated maximum working pressure of the pipe.”

Substitute CL 7.3.1.3 with the following:

“The test pressure applied according to CI 7.3.1.2, must, with allowance for any level differences along the pipeline, be such that the pressure at any point in the pipeline will be at least 1,25 times and not more than 1,5 times the rated working pressure of the pipe.”

L 8 **MEASUREMENT AND PAYMENT**

PS L 8.2.11 **Anchor/Thrust Blocks and Pedestals.....Unit: m³**

Under item (b) delete the following item:

ReinforcementUnit: t

Replace the first sentence under “Reinforcement” with the following:

“Anchor and thrust blocks shall be measured per cubic metre concrete and the tendered rate shall include for all reinforcement for the required dimensions”

PS L 8.2.16 **Cut into And Connect to Existing MainsUnit: No**

The cutting into existing mains shall be measured by the number of each type and diameter of pipe cut into.

The tendered rate shall include full compensation for all arrangements with the relevant authorities, isolating the main, cutting into the main to accommodate the connecting fitting, dewatering, excavating, removing of excess material, taking steps to prevent the ingress of soil, stones and other material into the main as well as all material and labour to connect the pipe.

PROJECT SPECIFICATION

SANS 1200 LB: BEDDING (PIPES)

LB 1 SCOPE

PS LB 1.1 SCOPE

Add the following to LB 1.1:

This specification also covers the bedding required for electric cables and cable ducts.

LB 3 MATERIALS

PS LB 3.1 SELECTED GRANULAR MATERIAL

Substitute LB 3.1 with the following:

Selected granular material shall be an aggregate, sand or granular material, all of a non-cohesive nature and free from any organic material, of which the grading analysis shows 100 % passing a 13,2 mm sieve and not more than 5 % passing a 0,075 mm sieve.

In very wet conditions and if so ordered by the Engineer, a non-plastic crushed material with the specification as stated underneath should be used for bedding cradle.

a) Grading

Sieve size (mm)	% going through		
19,0	100		
13,2	84	-	100
9,5	70	-	84
4,75	45	-	65
2,36	29	-	47
1,18	19	-	33
0,600	13	-	25
0,300	10	-	18
0,150	6	-	13
0,075	4	-	10

b) Crusher value

The aggregate crushing value, calculated at minus 13,2 mm plus 0,5 mm fraction, may not exceed 29.

PS LB 3.2 SELECTED FILL MATERIAL

Substitute LB 3.2 with the following:

The requirements of PS LB 3.1 shall apply mutatis mutandis.

PS LB 3.3 BEDDING

Add the following to LB 3.3:

All pipes shall be classified as rigid pipes and shall be laid on a Class C bedding except water connections which shall be classified as flexible pipes.

HDPE pipes shall be classified as flexible pipes.

PS LB 3.4 **SELECTION**

PS LB 3.4.1 **Suitable Material Available from Trench Excavation**

Substitute the first sentence of LB 3.4.1 with the following:

Irrespective the requirements of subclause 3.7 of SANS 1200 DB and subclause 3.4.1 of SANS 1200 LB regarding the use of selective methods of excavation, the Contractor must use selective methods of excavation and supply and use plant that will avoid burying or contaminating material that is suitable and required for bedding or covering the pipeline.

PS LB 3.5 **POLYETHYLENE WARNING TAPE**

The danger tape shall be manufactured from Grade XJF 46/60 polyethylene at least 0,4 mm thick and with a nominal width of 230 mm, and which is completely impregnated with a light orange pigment reasonably matching colour no B26 of SABS 1091.

A black triangle and lightning flashes for electricity, as depicted on sign WW7 of SABS 1186, as well as the words "DANGER, GEVAAR, INGOSI" shall be printed clearly and permanently onto the tape. The whole pattern shall be repeated every 1 m.

The quality of all materials employed shall be such as to ensure the permanency of the tape under all environmental and soil conditions, as well as the stability of the orange pigmentation and the lettering and warning symbols.

The cost to supply, handle and place the tape must be allowed for throughout the rates under the relevant items and no additional payment will be made.

LB 5 **CONSTRUCTION**

LB 5.1 **GENERAL**

PS LB 5.1.4 **Compacting**

Substitute "90 % of MAASHTO" in LB 5.1.4 with "93 % of MAASHTO (100 % for sand)".

LB 8 **MEASUREMENT AND PAYMENT**

LB 8.1 **PRINCIPLES**

PS LB 8.1.1 **Supply of Bedding Materials Measured Separately**

Add the following to LB 8.1.1:

Except for electric cables, payment for bedding material and selected fill material is only made if the selected trench-excavation material cannot be used in the same position as bedding material but has to be obtained from another part of the site of works or designated borrow pits, or from commercial sources.

Rate will include all relevant amendments in the project specifications.

PS LB 8.1.3 **Volume of Bedding Materials**

Add the following to LB 8.1.3:

c) The volume of the pipe will be deducted when the volume of the bedding material are calculated.

PS LB 8.1.4 **Separate Items for Cradle and Blanket**

Substitute LB 8.1.4 with the following:

No distinction shall be made as regards material for the bedding cradle and selected fill blanket, and the material shall comply with the requirements for material for bedding cradle.

PS LB 8.1.5 **Disposal of Displaced Material**

Substitute LB 8.1.5 with the following:

Material displaced by the pipeline and by imported material from sources other than trench excavations, shall be disposed of at an approved site furnished by the Contractor. No haulage is payable for such material.

LB 8.2 **SCHEDULED ITEMS**

LB 8.2.2 **Supply Only of Bedding by Importation**

PS LB 8.2.2.3 **From commercial sources**

Add the following to LB 8.2.2.3:

Rate tendered for (a) - (b) to include PS LB 3.1, PS LB 3.2, PS LB 3.3, PS LB 8.1.3 and PS LB 8.1.4.

Add the following to LB 8.2.2.3:

c) Bedding for wet conditions Unit: m³

The requirements of PS LB 3.1 for bedding in wet conditions must be noted. Payment will only be applicable if ordered by the Engineer.

Rate will include all relevant amendments in the project specifications

PROJECT SPECIFICATION
SANS 1200 LC: CABLE DUCTS

LC 3 MATERIALS

PS LC 3.1 DUCTS

Add the following to LC 3.1:

Class 6 uPVC pipes (dia 110 mm or 160 mm) shall be used as ducts for electric cables under streets. Ducts for Telkom shall be of pitch-impregnated fibre pipes.

PS LC 3.2 BEDDING

Substitute LC 3.2 with the following:

The provisions of SANS 1200 LB: Bedding (Pipes) and the relevant project specification shall apply mutatis mutandis, and payment shall be made under the appropriate payment clauses of SANS 1200 LB.

PS LC 3.3 BACKFILL

Substitute LC 3.3 with the following:

The provisions of SANS 1200 DB: Earthworks (Pipe Trenches) and the relevant project specification shall apply mutatis mutandis, and payment shall be made under the appropriate payment clauses of SANS 1200 DB.

PS LC 3.4 CABLE DUCT MARKERS

Add the following to LC 3.4:

Cable duct markers shall be provided as specified in PS LC 5.10.

LC 5 CONSTRUCTION

LC 5.1 EXCAVATION OF TRENCHES

PS LC 5.1.1 Trench Widths and Depths

Add the following to LC 5.1.1:

Trench widths shall be in accordance with the provisions of SANS 1200 DB: Earthworks (Pipe Trenches).
The minimum depth of cover over ducts shall be 600 mm from the final road level.

PS LC 5.1.3 Excavation of Trenches at Road Crossings

The minimum depth of cover over ducts shall be 300 mm where construction traffic is liable to cross them. Road crossings shall therefore be constructed after the construction of the roadworks has reached the stage where the required cover is available.

PS LC 5.2 BEDDING AND COMPACTION OF BEDDING

Substitute LC 5.2.1 and LC 5.2.2 with the following:

All ducts shall be laid on a Class C bedding according to the provisions of SANS 1200 LB: Bedding (Pipes). Backfilling shall be according to the provisions of SANS 1200 DB: Earthworks (Pipe Trenches).

PS LC 5.4 BACKFILLING AND COMPACTION

Add the following to LC 5.4:

Road crossings shall be backfilled with sand from designated borrow pits, the site or commercial sources, whichever is applicable, up to underneath the subbase, and compacted to a minimum of 100 % of MAASHTO density.

PS LC 5.8 **ROAD CROSSINGS**

Substitute "0,5 m" in the last sentence of LC 5.8 with "1,0 m" and add the following:

Ducts for road crossings shall be effectively sealed by means of end caps.

PS LC 5.10 **POSITION TO BE MARKED**

Add the following to LC 5.10:

The lettering height shall be at least 70 mm.

The positions of ducts shall be marked by means of incisions on top of the kerb. The dimensions of such incisions shall be at least 40 mm long, 3 mm wide and 5 mm deep and the spacing, where more than one incision is required, shall be 20 mm. Ducts for Telkom crossings and electrical crossings shall be marked with green and red painted incisions respectively.

The draw wire, as specified in LC 5.3.3, shall be secured to a 150 x 150 x 150 mm grade 20 MPa/19 mm concrete marker, which shall be installed with a depth of cover of 50-100 mm below the final level.

PS LC 5.12 **DRAW AND JOINT BOXES FOR TELKOM CABLES**

Draw and joint boxes shall be constructed strictly in accordance with the positions and details given on the plans.

LC 7 **TESTING**

PS LC 7.2 **COMPACTION TESTS**

Substitute LC 7.2 with the following:

The Contractor shall, for at least one out of every five road crossings, submit density tests to the Engineer at his own expenses. The decision as to which road crossing densities shall be tested, rests with the Engineer. The Contractor shall, if such densities fail to meet the minimum requirements, prove at his expense that all the other densities do comply with the specified minimum requirements.

LC 8 **MEASUREMENT AND PAYMENT**

LC 8.2 **SCHEDULED ITEMS**

PS LC 8.2.8 **Cable Markers Unit: No**

Substitute LC 8.2.8 with the following:

The rate shall also cover the cost of the end cap and the incisions, concrete marker and draw wire, as specified in PS LC 5.10.

PROJECT SPECIFICATION
SANS 1200 LE: STORMWATER DRAINAGE

LE 3 MATERIALS

LE 3.1 CULVERT UNITS AND PIPES

PS LE 3.1 d) Skewed Ends

Substitute LE 3.1(d) with the following:

Where pipe culverts are to be constructed with a skew angle of more than 20°, the skew ends shall be cut on site.

LE 3.4 MANHOLES, CATCHPITS AND ACCESSORIES

PS LE 3.4.3 Manhole Covers, Grid Inlets, Etc.

Substitute the last sentence in LE 3.4.3 with the following:

Covers and frames for manholes and grid inlets shall comply with the requirements of SANS 558 for Type 2A and Type 9D, respectively.

LE 5 CONSTRUCTION

LE 5.1 TRENCH BOTTOM

PS LE 5.1.3 Unsuitable Founding Conditions

Substitute "90 % of MAASHTO maximum density" in LE 5.1.3 with "90 % of MAASHTO maximum density (100 % for sand)".

LE 5.2 BEDDING AND LAYING

PS LE 5.2.2 Pipe Culverts

Add the following to LE 5.2.2:

All pipes shall be laid on a Class B bedding, as specified in SANS 1200 LB. Spigot and socket pipes with rubber ring joints must be used exclusively.

PS LE 5.4 BACKFILLING OF PREFABRICATED CULVERT UNITS

PS LE 5.4.2 Portal and Rectangular Sections

Add the following to LE 5.4.2:

Backfilling on the sides of portal and rectangular sections can, if indicated on the drawings and requested in writing by the Engineer, be done with a 1:3:6/38 mix concrete.

LE 5.5 CATCHPITS, MANHOLES, INLETS, AND OUTLET STRUCTURES

PS LE 5.5.3 Plaster

Add the following to LE 5.5.3:

No plaster is required for manholes or inlets, except where otherwise shown on the drawings or ordered in writing by the Engineer.

PS LE 5.5.5 **Precast Manholes and PS LE 5.5.7: Precast Inlet and Outlet Structures**

Substitute LE 5.5.5 and LE 5.5.7 with the following:

Manholes and inlet and outlet structures shall be constructed in accordance with the details as shown on the drawings.

LE 8 **MEASUREMENT AND PAYMENT**

LE 8.2 **SCHEDULED ITEMS**

PS LE 8.2.1 **Supply, handle, lay and bed (Class C bedding) pipe culvertsUnit: m**

Add the following to LE 8.2.1:

The provisions of LE 8.2.1 shall apply mutatis mutandis to uPVC pipes.

PS LE 8.2.4 **Extra-over Items LE 8.2.1 And LE 8.2.2 For Cutting End
Units For Culverts on Site Unit: No**

Add the following to LE 8.2.4:

Payment shall be made only for skew cuts greater than 20° at manholes, kerb inlets and inlet and outlet structures.

PS LE 8.2.8 **Supply and Install Manholes, Catch pits, And the Like Unit: No**

Substitute LE 8.2.8 with the following:

The unit of measurement shall be the number of each, in the depth increments as scheduled, fully installed in accordance with the details shown on the drawings.

The rate shall cover the cost of excavating and backfilling with approved selected material from site borrow pits, stockpile or commercial sources, compacted to 93 % of MAASHTO density (100 % for sand), supplying and installing of all material and accessories, the inlet kerbs and the channel adjacent thereto as well as for the removal and spoil of all surplus material. The rate shall also include the connection of pipes to manholes, catch pits, etc. and of building pipes into the walls of such structures, but not for the cutting of skewed ends.

Add the following to LE 8.2.8

d) Headwalls:

“The unit of measurement shall be the number of each, in the depth increments as scheduled, fully installed in accordance with the details shown on the drawings. The rate shall cover the cost of excavating and backfilling with approved selected material from site borrow pits, stockpile or commercial sources, compacted to 93 % of MAASHTO density (100 % for sand), supplying and installing of all material and accessories, the inlet kerbs and the channel adjacent thereto as well as for the removal and spoil of all surplus material. The rate shall also include the connection of pipes to the headwall, building pipes into the walls of such structures and for the cutting of skewed ends.”

Add the following payment items:

PS LE 8.2.14 **Connect into Existing Catchpit/Manhole Unit: No**

The unit of measurement for connecting into manholes/catchpits shall be by the number of connections and various pipe sizes.

An item will be provided for each connection to an existing manhole/catchpit and the rate tendered shall include full compensation for breaking into the manhole, connecting the pipe, modifying or enhancing the benching, cutting pipes, dealing with the existing flow, preventing unacceptable debris entering the drain line and making good any benching finish walls, covers and frames.

PS LE 8.2.18 **Connect to existing stormwater system.....Unit: No**

The unit of measurement is the number of connections to a live stormwater system. The manhole is measured separately. The rate tendered shall deemed to be full compensation for diverting stormwater in the live systems as required and for cutting into and connecting to existing system.

PS LE 8.2.20 **Cleaning of Existing Stormwater Pipeline Unit: m**

The rate shall cover all material, labour and equipment needed for cleaning the existing pipeline by mechanical or manual means and disposing the resultant material coming out of the pipeline to an approved dumping site.

PROJECT SPECIFICATION

SANS 1200 M: ROADS (GENERAL)

M3 MATERIAL

The contractor's attention is drawn to the fact that the widening of road shall be done according to the benching method. No additional payment will be made with regard thereto and all the costs relating to the benching-method is deemed to be included in the various rates for the widening.

PS M 3.2 RESPONSIBILITY FOR LOCATION

Add the following to M3.2:

The subbase and base layers of all streets shall be constructed with material from designated borrow areas. The Contractor is responsible for the selection of the material in the borrow areas and if the material in the paving layers do not comply with the minimum requirements it shall be removed and replaced with suitable material at the expense of the Contractor.

M 5 CONSTRUCTION

Add the following:

The relevant widths and road details are shown in the cross sections contained in the relevant drawings.

PS M 5.1 SELECTION

The Contractor shall deal selectively with material when existing streets are broken up in order that suitable material is not contaminated with unsuitable material. If suitable material is contaminated, the Contractor shall replace such contaminated material with suitable material, at his own expense.

M 6 TOLERANCES

PS M 6.3 FREQUENCY OF CHECKS

Add the following to M 6.3:

These checks shall be submitted to the Engineer for his approval.

M 7 TESTING

PS M 7.3 ROUTINE INSPECTION AND TESTING

Substitute M 7.3.3 with the following:

Statistical evaluation of test results shall not be applicable to this contract and all tests shall meet the specified minimum requirements for the specific material.

PSM 7.3.4 Add the following subclauses:

The Contractor shall bear the costs of process control tests carried out by the Engineer at the request of the Contractor or as specified for process control.

PSM 7.3.5 Add the following subclauses:

The cost of refilling and compacting the density test holes shall be included in the rate tendered for the construction of that layer.

M 8 MEASUREMENT AND PAYMENT

Add the following to M 8:

It is the responsibility of the contractor to proof to the engineer that all the materials and layer works prepared or constructed complies with the minimum specifications specified at the cost of the contractor. The costs of these tests (UCS-, compaction test results, etc.) shall be deemed included in the relevant rates for construction of such items.

If the Engineer dispute any test results submitted by the contractor the engineer shall request routine testing. The results which do not comply with the specified minimum requirement for the material or layer, shall be borne by the Contractor and will be subtracted from the monthly payment certificates.

The cost of all routine testing done by the Engineer, and of which the results are in accordance with the specification shall be paid by the contractor. The contractor may claim this billed cost plus superintendence and administration in his next payment certificate. The cost of failed testing shall not be claimable by the contractor. The employer may elect to pay the commercial laboratory himself, in which case no payment will be made to the contractor for this work. An administration fee on the routine testing for the engineer has been allowed for where paid through the contractor.

Add the following to M 8.1:

The cost of all routine testing done by the Engineer, and of which the results do not comply with specified minimum requirements for the material, shall be borne by the Contractor.

These costs shall be deducted from the Contractor's monthly payment certificates.

PROJECT SPECIFICATION

SANS 1200 ME: SUBBASE

ME 3 MATERIALS

ME 3.2 PHYSICAL PROPERTIES

PS ME 3.2.1 Subbase Material

Substitute ME 3.2.1 with the following:

- a) Materials of G5 quality for use in the unstabilised subbase shall comply with the requirements of SANS 1200 M 3.3.3.
- b) Materials of G7 quality for use in the unstabilised subbase shall comply with the requirements as specified in SANS 1200 M 3.3.3, except that the maximum aggregate size after compaction shall not exceed 63 mm.

PSME 3.2.1(d) Materials: Physical Properties: Regional Factor

Replace the last sentence with the following:

"The regional factor for this area is 0,60 and the regional minimum CBR value for sub-base material is thus 45%."

PS ME 3.2.2 Gravel Shoulder and Gravel Wearing Course Material

Substitute ME 3.2.2 with the following:

The material used for gravel wearing course shall comply with the following requirements:

- i) Maximum aggregate size after compaction 37,5 mm
- ii) Oversize index (I_o) nil
- iii) Shrinkage product (S_p) 100-240
- iv) Grading coefficient (G_c) 16-34
- v) Minimum CBR at 95% of MAASHTO of density 25
- vi) Minimum Plasticity Index (PI) 6

Where:

Oversize index (I_o) is the mass of the material larger than 37,5 mm, expressed as a percentage of the total mass of material;

Shrinkage product (S_p) is the product of the linear shrinkage and the percentage smaller than 0,425 mm (expressed as a percentage of the material smaller than 37,5 mm) of the material;

And

Grading coefficient (G_c) is the product of the percentage of material smaller than 26,5 mm but larger than 2,0 mm and the percentage smaller than 4,75 mm (expressed as a percentage of the material smaller than 37,5 mm) divided by 100.

ME 3.3 STABILISING AGENT

PS ME 3.3.1 General

Substitute ME 3.3.1 with the following:

Where ionic stabilisation is required, the stabilising agent shall be approved by the Engineer, and the rate of application shall be 0,03 l/m² for layer thickness of 150 mm and 0,02 l/m² for layer thicknesses of 100 mm.

ME 5 **CONSTRUCTION**

ME 5.4 **PLACING AND COMPACTION**

PS ME 5.4.1 **Placing**

Substitute "the project specification" in the second paragraph of ME 5.4.1 with "ME 6.1.4".

PS ME 5.4.5 **Work in Restricted Areas**

No additional payment shall be made for work in restricted areas and any relevant costs shall be deemed to be included in the tendered rates.

PS ME 5.5.6 **Curing**

Substitute ME 5.5.6 with the following:

Stabilised layers will be protected against desiccation during the first 7 days after construction, by lightly watering the layer to ensure the surface is always damp. Only light water sprinklers must be used seeing that heavy sprinklers will damage the layer. Any negligence to ensure above mentioned is implemented, may result into the disapproval of the layer. In that case, the Contractor will on his own costs, break up the layer, re-stabilise and compact. Compaction and indicator tests will be done on the first day after completion of construction. No other traffic, except the vehicles that water the layer, will be allowed on the layer within 7 days after stabilising have been completed.

ME 5.7 **TRANSPORT**

PS ME 5.7.1 **Free-haul**

Substitute ME 5.7.1 with the following:

An unlimited free-haul distance shall apply to subbase material.

ME 7 **TESTING**

ME 7.2 **PROCESS CONTROL AND ROUTINE INSPECTION AND TESTING**

PS ME 7.2.1 **Process Control**

Substitute "1 500 m²" with "1 200 m²" and "5 000 m²" with "3 000 m²" in Table 2 of ME 7.2.1.

PS ME 7.2.2 **Routine Inspection and Testing**

Substitute the second sentence of ME 7.2.2 with the following:

No density shall be less than the specified minimum density for the relevant layer.

ME 8 **MEASUREMENT AND PAYMENT**

PS ME 8.2 **COMPUTATION OF QUANTITIES**

Substitute ME 8.2 with the following:

Measurement and payment shall be to the exact dimensions as shown on the drawings.

ME 8.3 **SCHEDULED ITEMS**

PS ME 8.3.8 **Stabilising Agent**

Add the following sub item to ME 8.3.8:

No additional payment will be made for Stabilising Agent within small areas. The rate per ton will be applicable for any size of area that must be stabilised.

g) Ionic stabilising agent Unit: £

The rate shall also cover the cost of application and mixing in of the stabilising agent.

PS ME 8.3.11 **Preparation of Roadbed to a depth of 150 mm as subbase
compacted to 95 % of MAASHTO density (100 % for sand) Unit: m³**

The rate covers the cost of crust breaking up to a minimum depth of 150 mm, watering, shaping, building and compaction of subbase, final scraping, compliance with the tolerances and testing.

PROJECT SPECIFICATION

SANS 1200 MF: BASE

MF 3 MATERIALS

MF 3.3 PHYSICAL AND CHEMICAL PROPERTIES

PS MF 3.3.1 Natural Gravel (Unstabilised or Stabilised)

Substitute the requirements of MF 3.3.1 for unstabilised natural gravel with the following:

- 1) Natural gravel, of G4 quality which is placed in the base shall, after compaction, comply with the requirements of SANS 1200 M 3.3.3.
- 2) Natural gravel, of G5 quality which is placed in the base shall, after compaction, comply with the requirements of SANS 1200 M 3.3.3.

PS MF 3.3.2 Graded Crushed Stone

Substitute the requirements of MF 3.3.2 with the following:

Graded crushed stone placed in the base shall, after compaction, comply with the requirements for type G1 as specified in 3.3.3 in SANS 1200 M.

Replace subclause (a) with the following:

“The maximum size of the crushed stone shall be 37.5mm”

Add the following subclause:

“d) The CBR at specified density shall be at least 80%”

PS MF 3.3.3 Graded Crushed Stone and Soil Fines

Substitute the requirements of MF 3.3.3 with the following:

Graded crushed stone that is admixed with soil fines, placed in the base shall comply with the requirements for type G2 or G3 as specified in 3.3.3 in SANS 1200 M.

MF 5.4 PLACING AND COMPACTION OF A BASE OTHER THAN A WATER BOUND MACADAM BASE

PS MF 5.4.6 Work in Restricted Areas

No additional payment shall be made for work in restricted areas and any relevant costs shall be deemed to be included in the tendered rates.

MF 5.9 TRANSPORT

PS MF 5.9.1 Free-haul

Substitute M 5.9.1 with the following:

An unlimited free-haul distance shall apply to basecourse material.

MF 6 **TOLERANCES**

MF 6.1 **DIMENSIONS, LEVELS, ETC**

PS MF 6.1.2 **Grade**

Add the following to MF 6.1.2:

In addition to the above-mentioned requirements the surface shall be of such a grade that all surface water shall drain freely to the adjacent kerbs and/or channels, and all subsequent costs to rectify the surface to comply hereto shall be borne by the Contractor.

MF 7 **TESTING**

PS MF 7.2 **PROCESS CONTROL**

Substitute "1 500 m²" with "1 200 m²", "1 500 m³" with "1 200 m³" and "5 000 m²" with "3 000 m²" in Table 3 of MF 7.2.

MF 7.3 **ROUTINE INSPECTION AND TESTING**

Substitute MF 7.3.2 with the following:

No density shall be less than the specified minimum density for the relevant layer.

MF 8 **MEASUREMENT AND PAYMENT**

PS MF 8.2 **COMPUTATION OF QUANTITIES**

Substitute MF 8.2 with the following:

PS ME 8.2 shall apply mutatis mutandis.

PROJECT SPECIFICATION

SANS 1200 MH: ASPHALT BASE AND SURFACING

PS MH.2.3.1 **Interpretations: Definitions and Abbreviations: Asphalt (SANS 1200MH CI 2.3.1)**

Add the following:

"In these documents, the terms "asphalt" and "premix" are synonymous.

MH 3 **MATERIAL**

PS MH 3.1 **PRIME**

Substitute MH 3.1 with the following:

The prime shall be MC-30 cutback bitumen complying with the applicable requirements of SANS 308.

PS MH 3.3 **TACK COAT**

Substitute MH 3.3 with the following:

The tack coat shall be a 60 % stable-grade bitumen emulsion diluted with water at a 1:1 ratio.

MH 3.4 **BITUMINOUS BINDER**

PS MH 3.4.2 **Surfacing**

Substitute MH 3.4.2 with the following:

The bituminous binder shall consist of 50/70 penetration-grade bitumen complying with the requirements of SANS 307.

MH 3.5 **AGGREGATES**

PS MH 3.5.1 **General**

Add the following:

Single-sized crushed aggregates used for asphalt shall comply with the requirements for grade 2.

PS MH 3.5.5 **Sand Equivalent Value**

Substitute "30" with "35" in MH 3.5.5.

PS MH 3.5.6 **Grading**

The asphalt shall be continuous graded (medium) as per Table 2 under MH3.5.6

MH 5 **CONSTRUCTION**

PS MH 5.1 **GENERAL REQUIREMENTS**

PS MH 5.1.1 **Preparation of Surface**

Add the following to MH 5.1.1:

The application of the prime-coat may only proceed after the written approval of the base by the Engineer and only if the moisture content of the upper 50 mm of the base is lower than 50 % of the optimum moisture content.

PS MH 5.1.5 **Weather Limitations**

Add the following to MH 5.1.5:

- d) if the moisture content of the upper 50 mm of the base is more than 50 % of the optimum moisture content.

PS MH.5.2 **Prime Coat**

Add the following:

The rate of application is 0.7ℓ/m² or as directed by the Engineer.

PS MH.5.4 **Tack Coat**

Add the following:

The rate of application is 0.55ℓ/m² or as directed by the Engineer.

MH 5.5 **DESIGN OF ASPHALT**

PS MH 5.5.2 **Marshall Criteria**

Amend Table 6 of MH 5.5.2 as follows:

PROPERTY	CONTINUOUSLY GRADED		GAP-GRADED OR SEMI-GAP-GRADED	
	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM
Stability, Kn	4,0	12,5	3,0	12,5
Air voids, %	3,0	5,0	2,0	6,0

The rest of the values remain the same.

PS MH 5.8 **COMPACTION**

Substitute the second paragraph of MH 5.8 with the following:

The compacted asphalt shall have a density equal to or greater than 93%, and less than 97% of rice-density, and must comply with the requirements for the surface texture.

PS MH 5.11 **CONSTRUCTION OF TRIAL SECTION**

Before the Contractor commences the construction of asphalt surfacing, he shall if so ordered, demonstrate, by laying a trial section 200 m² in area, that the equipment and processes that he proposes to use will enable him to construct the asphalt layer in accordance with the specified requirements.

Only when such a trial section has been satisfactorily laid and finished, and is found to comply with the specified requirements, will the Contractor be allowed to commence with construction of the permanent work.

Should the Contractor make any alteration in the methods, processes, equipment, or materials used, or should the work consistently fail to comply with the applicable requirements of the specifications, the Engineer may require that further trial sections be laid and tested at the cost of the Contractor before allowing the Contractor to continue with the permanent work.

Trial sections shall be laid where indicated by the Engineer. The Contractor shall prepare the surface on which a trial section is to be laid and shall also, if the work fails to comply with the applicable requirements of the specification, remove the trial section after completion and acceptably restore the surface on which it was constructed, all at his own cost. Cost for trial sections are deemed to be included in the tendered rates.

MH 6 **TOLERANCES**

PS MH 6.2 **Bituminous binder content**

Substitute MH 6.2 in its entirety with:

The bituminous binder content, determined on samples taken as specified in 7.2, shall not deviate from the ordered value, as stated in the approved mix design, by more than 0.3% (by mass).

MH 6.3 **DIMENSIONS, LEVELS, ETC.**

PS MH 6.3.6 **Smoothness**

Add the following to MH 6.3.6:

The appropriate degree of accuracy under this contract shall be degree II.

In addition to the above-mentioned requirements the surface shall be of such a grade that all surface water shall drain freely to the adjacent kerbs and/or channels and subsequent costs to rectify the surface to comply herewith shall be borne by the Contractor.

MH 7 **TESTING**

PS MH 7.1 **MIX DESIGN**

Add the following to MH 7.1:

The proposed mixture design shall be submitted for approval to the Engineer at least two (2) weeks fourteen (14) days before commencement of the construction of asphalt surfacing. The Contractor shall ensure that the samples, on which the mixture is based, are a true representation of the actual materials to be used for the work.

MH 8 **MEASUREMENT AND PAYMENT**

PS MH 8.1 **RATES OF APPLICATION AND BITUMINOUS BINDER CONTENT**

PS MH 8.1.5 **Bituminous Binder Content**

Amend MH 8.1.5(b)(l) as follows:

(b) Surfacing 1) Continuously graded 5,5 %

PS MH 8.4 **COMPUTATION OF QUANTITIES**

Substitute the first sentence of MH 8.4.2 with the following:

Asphalt is measured and paid for according to the exact dimensions (width and thickness) as indicated on the drawings.

Delete the last paragraph of MH 8.4.2.

Add the following new item(s):

PS MH.8.5.9 **Excavation in existing pavements for patching (non-milling)**

Refer to Standard Specifications for Road and Bridge Works for South African Road Authorities. Draft Standard (DS) – CHAPTER 8: Pretreatment and Repair of Existing Layers (October 2020)

C8.8.2 Excavation in existing pavements for patching (non-milling)

C8.8.2.3 Other layers

(a) Not exceeding 10 m² including for edge repairs wider than 250 mm.....Unit: m³

PS MH 8.5.10 **Backfilling of excavations for patching with:**

*Refer to Standard Specifications for Road and Bridge Works for South African Road Authorities.
Draft Standard (DS) – CHAPTER 8: Pretreatment and Repair of Existing Layers (October 2020)*

C8.8.4 Backfilling of excavations for patching with:

C8.8.4.1 Chemically stabilized pavement material for a patch with a surface area:

(a) Not exceeding 10 m² including for edge repairs wider than 250 mm.....**Unit: m³**

PROJECT SPECIFICATION
SANS 1200 MJ: SEGMENTED PAVING

MJ 3 MATERIALS

PS MJ 2.3 DEFINITIONS AND ABBREVIATIONS

Replace “SABS 1058” with “SANS 1058:2012

MJ 3.1 UNITS

PS MJ 3.1.2 Class, Strength and Type

Add the following to MJ 3.1.2:

The type of paving shall be as specified in the bill of quantities.

MJ 5 CONSTRUCTION

PS MJ 5.7 JOINT FILLING

Joint filling shall be done with a 1:3 cement-sand mix.

MJ 6 TOLERANCES

PS MJ 6.2 PERMISSIBLE DEVIATIONS

Add the following to MJ 6.2:

The degree of accuracy shall be degree I.

MJ 7 TESTING

PS MJ7.1.1 TESTING: GENERAL: CHECKING

Add the following to MJ7.1.1:

A SANS accredited laboratory must be used for conducting tensile splitting tests on the materials that will be used in construction. Testing on batches will be as instructed by the Engineer.

PS MJ 7.4 PERMISSIBLE DEVIATIONS

Add the following to MJ 7.4:

SANS 1058:2012 is applicable.

PS MJ 7.4.2 OTHER TEST

Replace 7.4.2 with the following:

Blocks shall be subject to such tests as are described in SANS 1058:2012 and/or in the latest (on the date of tender closing) “*Concrete Block Paving Specification and Installation*” published by the Concrete Manufacturing Association. The frequency of the tests will be 10 samples per each day of delivery or 10 samples every 500m². Samples must be taken from the roadways and will be identified by the Engineer and will be tested by an independent and SANS accredited lab. The onus is placed on the Contractor to ensure that sufficient control testing is done and is deemed included in the rate tendered.

MJ 8 **MEASUREMENT AND PAYMENT**

MJ 8.2 **SCHEDULED ITEMS**

PS MJ 8.2.2 **Construction Of Paving Complete Unit : m²**

Add the following to MJ 8.2.2:

The rate shall also cover the cost of the joint filling and 20mm thick sand layer beneath paving as specified in PS MJ 5.7.

Add the following to MJ 8.2.2:

The rate shall include PS A 7.1.1, PS A 7.1.2, PS A 7.2, PS A 7.4, PS M 8.3, PS M 7.3, PS MJ 3.1.2, PS MJ 3.1.2, PS MJ 5.7, PS MJ 6.2, PS MJ 7.1.1, PS MJ 7.4.2, the units to be used in construction must have spacer nibs and all other relevant amendments in the project specifications.

PROJECT SPECIFICATION

SANS 1200 MK: KERBING AND CHANNELLING

MK 3 MATERIALS

MK 3.2 PRECAST KERBING AND CHANNELLING

PS MK 3.2.3 Strength

Substitute MK 3.2.3 with the following:

Precast kerbs, edging and channels shall be of grade 20 MPa/19 mm concrete.

PS MK 3.9 BEDDING MATERIAL

Substitute MK 3.9 with the following:

The material on which concrete kerbs, channels and edging are bedded, shall be in accordance with the dimensions shown on the drawings and shall consist of a 1:3:6 concrete mix with a 6,7 mm single size coarse aggregate.

MK 5 CONSTRUCTION

PS MK 5.1 EXCAVATION AND BEDDING

Substitute "90 %" in MK 5.1 with "93 % (100 % for sand)".

PS MK 5.2 PRECAST CONCRETE KERBING AND CHANNELLING

Substitute the first sentence of MK 5.2 with the following:

Precast concrete kerbing and channelling shall be laid and bedded on a concrete bedding complying with the requirements of PS MK 3.9 and to the dimensions shown on the drawings.

PS MK 5.11 TRANSITION SECTIONS AND INLET AND OUTLET STRUCTURES

Substitute the first sentence of the second paragraph of MK 5.11 with the following:

Inlet and outlet structures shall be in accordance with the details shown on the drawings.

MK 8 MEASUREMENT AND PAYMENT

PS MK 8.1 BASIC PRINCIPLES

Substitute the second sentence of MK 8.1.1 with the following:

Deductions will be made for catchpits, etc.

Add the following to MK 8.1.1:

Payment shall include the provision of expansion joints as specified.

MK 8.2 SCHEDULED ITEMS

PS MK 8.2.1 Concrete kerbing Unit: m

The rate shall include provision for expansion joints every 10m interval, neatly corked with polystyrene and sealed off to the approval of the engineer.

Rate will include PS MK 3.2.3, PS MK 3.9, PS MK 5.2 and all other relevant amendments in the project specifications.

- PS MK 8.2.2 **Concrete kerbing and channelling combined** **Unit: m**
- The rate shall include provision for expansion joints every 10m interval, neatly corked with polystyrene and sealed off to the approval of the engineer.
- Rate will include PS MK 3.2.3, PS MK 3.9, PS MK 5.2 and all other relevant amendments in the project specifications
- PS MK 8.2.14 **Street Name and Transition Kerbs** **Unit: No**
- The provisions of MK 8.2.1(b) shall apply mutatis mutandis.
- Rate will be based on all relevant amendments in the project specifications.
- PS MK 8.2.15 **Transition Kerbs (In situ)** **Unit: No**
- The tendered rate shall cover all costs for material and labour to construct in situ transition kerbs and/or channels with a length of 1,0 m to fit the profiles of the different types of kerbs and channels.

PROJECT SPECIFICATION

SANS 1200 MM: ANCILLARY ROADWORKS

MM 3 MATERIALS

MM 3.2 ROAD SIGNS

PS MM 3.2.1 General

Add the following to MM 3.2.1:

All road signs and road markings shall be in accordance with the SA Road Traffic Signs Manual and as shown on the drawings.

No special breakaway devices are required.

PS MM 3.2.2 Structural Steel

Substitute the second paragraph of MM 3.2.2 with the following:

All structural steel, including steel tubes, shall have a hot-dip (galvanised) zinc coating that complies with the requirements of SANS 763 for coatings of type A1 or B1 articles, as applicable.

MM 5 CONSTRUCTION

MM 5.2 ROAD SIGNS

PS MM 5.2.1.1 Supports

All the supports for signboards shall be galvanised supports. Confirm with the engineer and the local authority before any materials is purchased and delivered to site.

PS MM 5.2.1.6 Galvanising

Substitute the second paragraph of MM 5.2.1.6 with the following:

Galvanised mild steel supports for road signs shall be painted in accordance with PS MM 5.2.2.4.

MM 5.2.2 Painting

PS MM 5.2.2.4 Painting of structural steelwork

The provisions of MM 5.2.2.4 shall apply mutatis mutandis to the painting of galvanised surfaces, except for the following:

a) Surface preparation

Galvanised surfaces shall be thoroughly scrubbed down using an approved galvanised iron cleaning agent to remove all traces of the resin protective coating.

The surface shall be washed down and scrubbed to remove all traces of grease, oil, dirt, etc;

b) Priming

Two coats of calcium plumbate primer shall be applied to a dry film thickness of at least 25 microns. The undercoat shall follow within one week after the priming.

d) Finishing coat

The colour of the finishing coat shall be dark grey, as specified in MM 3.2.8.2.

PS MM 5.3.2 **Surface Preparation**

Substitute "48 h" in MM 5.3.2 with "7 days (168 h)".

MM 8 **MEASUREMENT AND PAYMENT**

PS MM 8.3.1 **Sign Faces with Painted Background and Symbols Unit: m²**

Add the following to MM 8.3.1:

No additional payment shall be made for the aluminium extrusions for road signs and all relevant costs shall be deemed to be covered by the tendered rates for such road signs.

PS MM 8.3.8 **Sign faces of 1.4mm thick Chromadek steel plate including pedestal Unit.: No**

Add the following to MM 8.3.8:

Rate will be based on all relevant amendments in the project specifications.

MM 8.4 **SCHEDULED ITEMS FOR ROAD MARKINGS**

PS MM 8.4.1 **Non-reflectorised Paint Applied at Nominal Rate Of 0,42 /m² Unit: km or m²**

Add the following to MH 8.4.1:

Markings for parking bays shall be measured and paid for as "characters and symbols".

No additional measurement and payment shall be made for "(e) Traffic Island markings" and payment shall be made under the appropriate rates of payment item MM 8.4.1.

PS MM 8.4.4 **Setting Out and Premarking Unit: m, m², Sum or No**

Add the following to MM 8.4.4:

No additional payment shall be made for the premarking and/or dotting of lines or special markings and all relevant costs are deemed as covered by the tendered rates for MM 8.4.1.

C3.5 Management

CONTENTS

3.5.1. FORMS FOR CONTRACT ADMINISTRATION

3.5.2. HEALTH AND SAFETY

3.5.1. FORMS FOR CONTRACT ADMINISTRATION

The Contractor shall complete, sign and submit with each monthly statement for payment, the following updated returns (the format of which are attached in C3.6 Annexes as amended from time to time):

- a) Monthly Project Labour Report (Annex 1)
- b) B-BBEE Sub-contract Expenditure Report (Annex 2)
- c) Joint Venture Expenditure Report (Annex 3)

The Monthly Project Labour Report must include details of all labour (including that of sub-contractors) that are South African citizens earning less than **R350.00** per day, as adjusted from time to time (excluding any benefits), who are employed on a temporary or contract basis on this contract in the month in question.

In addition to the Monthly Project Labour Report the Contractor shall simultaneously furnish the Employer's Agent with copies of the signed employment contracts entered into with such labour, together with certified copies of identification documents, proof of attendance in the form of attendance registers or timesheets as well as evidence of payments to such labour in the form of copies of payslips or payroll runs. 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 and proof of such acknowledgement shall be furnished to the Employer's Agent.

The Monthly Project Labour Reports shall be completed and submitted in accordance with the instructions therein and copies of all submitted documents must be kept on site be made available to the employer's agent upon request.

The **B-BBEE Sub-contract Expenditure Report** is required for monitoring the prime contractor's compliance with the sub-contracting conditions of the **Preference Schedule**.

The Joint Venture Expenditure Report is required for monitoring the joint venture's compliance with the percentage contributions of the JV partners as tendered, where the joint venture has been awarded preference points in respect of its consolidated B-BBEE scorecard.

The Expenditure Reports shall be verified by the Employer's Agent/Employer's Agent's Representative.

In respect of Annexes 2 and 3, the Employer shall, in addition to any other sanctions available to it, apply the financial penalties applicable to breach of preferencing conditions in the **Preference Schedule** Preference Schedule in Part T2.2 Returnable Schedules. In the case of joint ventures (Annex 3), the contractor shall prove his compliance with item 6 in Section 2 of the Preference Schedule by providing a consolidated scorecard at his own cost on instruction from the Employer's Agent.

3.5.2. HEALTH AND SAFETY

Particular Specification C6: Health and Safety Specification is attached hereto.

Part C4: Site Information

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LOCALITY PLAN 01

AALWYN STREET (ASHTON)



LOCALITY PLAN 02

INDUSTRIAL ROAD (ASHTON)



LOCALITY PLAN 03

ZOLANI (ASHTON)



LOCALITY PLAN 04

BARLINKA ROAD (MONTAGU)



The coordinates below can be used for directions to the sites.

- 1. Aalwyn Street in Ashton - 20°03'0.56"E 33°49'54.51"S**
- 2. Industrial Road in Ashton - 20°04'28.20"E 33°50'10.24"S**
- 3. Several Streets in Zolani, Ashton - 20°05'17.09"E 33°50'20.04"S, and**
- 4. Two sections of Barlinka Street in Montagu - 20°08'06.51"E 33°46'32.26"S and 20°07'59.02"E 33°46'45.59"S**

LANEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Part C5: LANE BERG Municipality Supply Chain Policy

PART C5: LANE BERG MUNICIPALITY SUPPLY CHAIN POLICY217

(The Supply Chain Policy can also be obtained from <https://www.langeberg.gov.za>)

Part C6: Health and Safety Specifications

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safe working practice
OCCUPATIONAL HEALTH AND SAFETY GROUP

Project Health and Safety Specification

In terms of Construction Regulations 2014

Project Client

Langeberg Municipality

Description of Project Works

Upgrade of Roads and Related SW Infrastructure in Ashton and Montagu

Project Location

Ashton & Montagu

Preparation Date

November 2024

Project Health and Safety Specification developed by:

Safe Working Practice Worcester
Tel: 023 342 0332
Cell: 082 323 3911
Email: johnm@safeppractice.co.za

PROJECT HEALTH AND SAFETY SPECIFICATION

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1.0 SPECIFIC PROJECT INFORMATION

1.1 INTRODUCTION AND DEFINITIONS

THE REQUIREMENTS OF THE CONSTRUCTION REGULATIONS 2014 (AND GUIDANCE NOTES OF 2017) HAVE BEEN IN EFFECT SINCE 7TH AUGUST 2014. THE REGULATIONS PLACE LEGAL DUTIES UPON PRINCIPAL CONTRACTORS AND CONTRACTORS. ALTHOUGH THIS HEALTH AND SAFETY SPECIFICATION INCLUDES MUCH OF THE CONTENT OF THE REGULATIONS, THE CONTRACTOR WILL BE DEEMED TO BE FAMILIAR WITH THE REQUIREMENTS OF THESE REGULATIONS, AND OTHER ASSOCIATED HEALTH AND SAFETY REGULATIONS, AND TO HAVE FACTORED IN ALL THE DUTIES PLACED UPON CONTRACTORS AND PRINCIPAL CONTRACTORS IN THE TENDER. A COPY OF THE REGULATIONS CAN BE VIEWED ON THE DEPARTMENT OF LABOUR'S WEBSITE.

PLEASE NOTE THAT THE TERMS "CONTRACTOR" AND "PRINCIPAL CONTRACTOR" HAVE THE SAME MEANING AS THAT IN THE CONSTRUCTION REGULATIONS AND ARE USED INTERCHANGEABLY IN THIS DOCUMENT, I.E., REFERENCES TO "CONTRACTOR" REFER TO PRINCIPAL CONTRACTOR AND/OR CONTRACTOR AS THE REGULATIONS PERTAIN TO THEIR FUNCTIONS.

This Health and Safety Specification contains clauses that are generally applicable to construction activities, as well as imposing pro-active controls associated with activities that impact on Health and Safety as it relates to work on site. Compliance to the requirements of the Occupational Health and Safety Act 1993 is an additional requirement of this Health and Safety Specification and is part of the Contractor's responsibility. The Client, and/or their agents, will monitor that all Contractors comply with the requirements of such legislation.

ALL REFERENCES TO CLIENT IN THIS HEALTH AND SAFETY SPECIFICATION ALSO REFER TO SAFETY AGENT, WHERE SO APPOINTED.

Definitions (as per the Construction Regulations 2014) applicable to this Health and Safety Specification:

"agent" means a competent person who acts as a representative for a Client;

"angle of repose" means the steepest angle of a surface at which a mass of loose or fragmented material will remain stationary in a pile on the surface, rather than sliding or crumbling away;

"bulk mixing plant" means machinery, appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purposes of using the mixed product for construction work;

"client" means any person for whom construction work is being performed;

"competent person" means a person who has, in respect of the work or task to be performed, the required knowledge, training and experience and, where applicable, qualifications, specific to that work or task: Provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualification Framework Act, 2000 (Act No.67 of 2000), those qualifications and that training must be regarded as the required qualifications and training; and is familiar with the Act and with the applicable regulations made under the Act;

"construction manager" means a competent person responsible for the management of the physical construction processes and the coordination, administration, and management of resources on a construction site;

"construction site" means a workplace where construction work is being performed;

"construction supervisor" means a competent person responsible for supervising construction activities on a construction site;

"construction vehicle" means a vehicle used as a means of conveyance for transporting persons or material, or persons and material, on and off the construction site for the purposes of performing construction work;

"construction work" means any work in connection with -

- the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or
- the construction, erection, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system; or the moving of earth, clearing of land, the making of excavation, piling, or any similar civil engineering structure or type of work;

"construction work permit" means a document issued in terms of regulation 3;

"contractor" means an employer who performs construction work;

Note:

a) Includes organisations and or self-employed person that contracts with a client, principal contractor, or a contractor to carry out construction work.

"demolition work" means a method to dismantle, wreck, break, pull down or knock down of a structure or part thereof by way of manual labour, machinery, or the use of explosives;

"design" in relation to any structure, includes drawings, calculations, design details and specifications;

"designer" means a competent person who-

- prepares a design;
- checks and approves a design;
- arranges for a person at work under his or her control to prepare a design, including an employee of that person where he or she is the employer; or
- designs temporary work, including its components;
- an architect or engineer contributing to, or having overall responsibility for a design;
- a building services engineer designing details for fixed plant;
- a surveyor specifying articles or drawing up specifications;
- a contractor carrying out design work as part of a design and building project; or
- an interior designer, shopfitter, or landscape architect;

"ergonomics" means the scientific discipline concerned with the fundamental understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data, and methods to design in order to optimise human well-being and overall system performance;

"excavation work" means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

"explosive actuated fastening device" means a tool that is activated by an explosive charge and that is used for driving bolts, nails, and similar objects for the purpose of providing fixing;

"fall arrest equipment" means equipment used to arrest a person in a fall, including personal equipment, a body harness, lanyards, deceleration devices, lifelines, or similar equipment;

"falsework" means a combined system of formwork and support work;

"formwork" means temporary or permanent shutters used to form wet concrete into elements of a structure, and includes both horizontally and vertically placed shutters;



"fall prevention equipment" means equipment used to prevent persons from falling from a fall risk position, including personal equipment, a body harness, lanyards, lifelines or physical equipment such as guard-rails, screens, barricades, anchorages or similar equipment;

"fall protection plan" means a documented plan, which includes and provides for -

- all risks relating to working from a fall risk position, considering the nature of work undertaken;
- the procedures and methods to be applied in order to eliminate the risk of falling; and
- a rescue plan and procedures;

"fall risk" means any potential exposure to falling either from, off or into;

"health and safety file" means a file, or other record containing the information in writing required by these Regulations;

"health and safety plan" means a site, activity or project specific documented plan in accordance with the Client's health and safety specification;

"health and safety specification" means a site, activity or project specific document prepared by the Client pertaining to all health and safety requirements related to construction work;

"material hoist" means a hoist used to lower or raise material and equipment, excluding passengers;

"medical certificate of fitness" means a certificate contemplated in regulation 7(8);

"mobile plant" means any machinery, appliance or other similar device that is able to move independently, and is used for the purpose of performing construction work on a construction site;

"National Building Regulations" means the National Building Regulations made under the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977), and promulgated by Government Notice No. R. 2378 of 30 July 1990, as amended by Government Notices No's R. 432 of 8 March 1991, R. 919 of 30 July 1999 and R. 547 of 30 May 2008;

"person day" means one normal working shift of carrying out construction work by a person on a construction site;

"principal contractor" means an employer appointed by the Client to perform construction work;

"Professional Engineer or Professional Certificated Engineer" means a person holding registration as either a Professional Engineer or Professional Certificated Engineer in terms of the Engineering Profession Act, 2000 (Act No. 46 of 2000);

"Professional Technologist" means a person holding registration as a Professional Engineering Technologist in terms of the Engineering Profession Act, 2000;

"provincial director" means the provincial director as defined in regulation 1 of the General Administrative Regulations, 2003;

"scaffold" means a temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both;

"shoring" means a system used to support the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation;

"structure" means:

- any building, steel, or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, bulk mixing plant, pylon, surface and underground tanks, earth retaining structure, or any structure designed to preserve or alter any natural feature, and any other similar structure;

- any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or
- any fixed plant in respect of construction work which includes installation, commissioning, decommissioning, or dismantling and where any construction work involves a risk of a person falling;

"support work" means the temporary structure erected to support the formwork before the casting of a concrete element of a structure.

"suspended platform" means a working platform suspended from supports by means of one or more separate ropes from each support;

"temporary works" means any falsework, formwork, support work, scaffold, shoring or other temporary structure designed to provide support or means of access during construction work;

"the Act" means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

"tunnelling" means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral.

Reference should be made to the following documentation in conjunction with this Safety Specification (including existing surveys, drawings, and reports):

Tender documents Drawings

IMPORTANT NOTE:

This Health and Safety Specification has been prepared to comply with the requirements of the Construction Regulations 2014.

1.2 BACKGROUND TO THE HEALTH AND SAFETY SPECIFICATION

Historically, the Construction Industry has had a poor health and safety record. Due to the complex and potentially dangerous operations being undertaken, there is a high risk of incidents, accidents, and injuries. In many instances poor adherence to the Act and Regulations has resulted in severe consequences for Health and Safety performance. The Client is determined that the highest Health and Safety standards will prevail throughout the Contract and that there will be full commitment from all parties involved.

To achieve this goal the Client has arranged for the preparation of this Health and Safety Specification. The Health and Safety Specification sets out guidelines and minimum levels of awareness and guidance for Health and Safety requirements for the project. Contractual responsibility for adhering to these requirements rests with the Contractors. All employees are encouraged to be pro-active in compliance.

The Client is committed to ensuring the highest Health and Safety standards for all work undertaken within the Contract.

Contractors as employers are fully responsible and accountable for compliance with all Health and Safety requirements.

IMPORTANT NOTE:

Compliance with the Occupational Health and Safety Act and Regulations shall not be limited to this Health and Safety Specification and definitions contained in this document.

Contractors shall be conversant with the requirements and effects of Health and Safety legislation upon their activities, in particular the Construction Regulations,

2014, and the Occupational Health and Safety Act, 1993, and to have made adequate resource in their tender submission to comply with all legislative requirements.

Failure to comply with the requirements of this Safety Specification will result in severe sanction and the severity of the sanction will depend on the severity of the non-compliance.

The Contractor's personnel will be responsible for the auditing of the implementation of the Health and Safety Specification and maintaining the document control and record systems associated with the Health and Safety Specification. The Client will arrange for Health and Safety audits to be conducted on site on their behalf to monitor health and safety compliance by contractors.

1.3 PURPOSE OF THE HEALTH AND SAFETY SPECIFICATION

The purpose of this site-specific Health and Safety Specification is to comply with legal requirements and to provide health and safety information about specific project risks known by the Client, Designer and Safety Agent to be applicable to this project. This document also provides minimum health and safety requirements, standards, and expectations that the contractor must adhere to.

The Contractor must take into account all information in this specification and ensure that their tenders include adequate resource and competence to deal with the matters detailed herein so that all relevant contents are dealt with in a way which is in compliance with legislation and the ethical concerns for the safeguarding of employees, contractors and other persons affected by the construction activities. Please note that a detailed OHS bill of quantities must be provided by the contractor on all Construction Work Permit projects. The Bill of Quantities will form part of the Construction Work Permit application presented to Department of Labour for approval.

The Health and Safety Specification will be implemented during construction of the works and any construction activity that the Client has control over.

This will also assist in ensuring that all the costs related to the compliance with Occupational Health Act 85 of 1993 and the Construction Regulations 2014, as well as this Health and Safety Specification, are taken into consideration at Tender stage.

No advice, approval of any document required by the Health and Safety Specification such as hazard identification and risk assessment action plans or any other form shall be construed as an acceptance by the Client of any obligation that absolves the Contractor from achieving the required level of performance and compliance with legal requirements.

Further, there is no acceptance of liability by the Client which may result from the Contractor failing to comply with the Health and Safety Specification unless the Client has issued an instruction to any requirement, i.e., the Contractor remains responsible for achieving the required performance levels.

1.4 IMPLEMENTATION OF THE HEALTH AND SAFETY SPECIFICATION

This Health and Safety Specification forms an integral part of the Contract, and Contractors shall make it an integral part of their Contracts with other Contractors and Suppliers. Contractors employed by the Client are to ensure that the provisions of the Health and Safety Specification are applied both on the site and in respect of all off site activities relating to the project, in particular in transport activities and project dedicated off site fabrication works.

The Contractor shall enforce the provisions of the Health and Safety Specification amongst all Contractors and suppliers for the project.

The Contractor shall sign the acknowledgement on the last page of this safety specification that he/she has familiarised him/herself with the content of the Health and Safety Specification and shall comply with all obligations in respect thereof.

The successful Contractor will be required to compile a Health and Safety Plan based on the requirements of the Occupational Health Act 85 of 1993 and these Specifications, which will need to be approved by Client (or their appointed safety agent) prior to commencement with construction work.

1.4.1 Client Duties

In terms of the Construction Regulations 2014 the Client (or their Agent, where appointed) has legal duties. Where an Agent (refer to "definitions" section of this document) is appointed in terms of this project, these Health and Safety duties assigned will also apply.

All references to "Client" will apply to their appointed "Safety Agent", where so appointed, in this Health and Safety Specification.

The Client must:

- Prepare a baseline risk assessment for the construction work
- Prepare a suitable, sufficiently documented, and coherent site-specific Health and Safety specification for the intended construction work, based on the baseline risk assessment
- Include the health and safety specification in the tender documents
- Ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures
- Ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely
- Take reasonable steps to ensure co-operation between all contractors appointed by the Client to enable each of those contractors to comply with the regulations
- Ensure, before work commences, that every principal contractor is registered and in good standing with the compensation fund, or with a licensed compensation insurer as contemplated in the Compensation for Occupational injuries and Diseases Act, 1993 (Act no 130 of 1993)
- Appoint each principal contractor in writing for the project, or part thereof
- Discuss and negotiate with the principal contractor the contents of the principal contractor's safety plan and thereafter finally approve that plan for implementation
- Ensure that a copy of the principal contractor's health and safety plan is implemented and maintained
- Ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days
- Ensure that a copy of the health and safety audit report is provided to the principal contractor within 7 days after the audit
- Stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the principal contractor's health and safety plan for site
- Where changes are brought about to the design or construction work, make sufficient health and safety information and appropriate resources available to the principal contractor to execute the work safely
- Ensure that the health and safety file is kept and maintained by the principal contractor.
- Where the Client requires additional work to be performed as a result of a design change or error in construction due to the actions of the Client, the Client must ensure that sufficient safety information and appropriate additional resources are available to execute the required work safely.

- Where more than one principal contractor is appointed, the Client must take reasonable steps to ensure co-operation between all principal contractors and contractors to ensure compliance with the Regulations
- Where the Client has appointed a Safety Agent for the project, their details for this project are contained in the Project Directory section of this health and safety specification.

1.4.2 Designer Duties

It must be noted that the Designer also has Health and Safety duties assigned in terms of the Construction Regulations. Where the contractor fulfils a design function in terms of this project (refer to "definitions" section of this document), these duties will also apply. Please refer to Regulation 6 of the Construction Regulations 2014.

Please note that the designer of temporary works must ensure that:

- all temporary works are adequately designed so that it will be capable of supporting all anticipated vertical and lateral loads that may be applied;
- the designs of temporary works are done with close reference to the structural design drawings issued by the contractor, and in the event of any uncertainty consult the contractor;
- all drawings and calculations pertaining to the design of temporary works are kept at the office of the temporary works designer and are made available on request by an inspector; and
- the loads caused by the temporary works and any imposed loads are clearly indicated in the design.

1.5 PROJECT DIRECTORY		
Project Client	Langeberg Municipality Ashton Office 28 Faure Street Ashton	Company Tel: 023 615 8000
Contact Person	Carel Posthumus	
Project Manager	iX Engineers 31 Allen Drive Loevenstein, Bellville	Company Tel: 021 912 3000
Contact Person	Bertie de Waal	
Consulting Engineer	iX Engineers 31 Allen Drive Loevenstein, Bellville	Company Tel: 021 912 3000
Contact Person	Bertie de Waal	
Construction Safety Agent	Safe Working Practice Worcester 14b Bergsig Avenue Worcester West	Company Tel: 023 342 0332
Contact Person	John McGregor	

OTHER PARTIES DIRECTORY

Department of Labour for submission of Annexure 2: Notification of Construction Work

Tel: 021 441 8158

WESTERN CAPE – Fezeka Ngalo

e-mail:
fezeka.ngalo@labour.gov.za

Department of Labour
90A Durban Street
Worcester
6850

Tel: 023 347 0152

E-mail:
khayaletu.songelwa@labour.gov.za

Khaya Songelwa

Telecommunications

Contractor to refer all queries on location and nature of existing services to the Project Manager / Client.

OR

Contractor to apply for and refer to wayleave information from service providers for the nature and location of services. Refer all queries Project Manager.

Water

Company: Langeberg Municipality

Company Tel: 023 615 8000

Contact Name: Carel Posthumus

Electricity

Company: Langeberg Municipality

Company Tel: 0860 88 1111

Contact Name: tbc

1.6 PROJECT DETAILS
Description of Works This description of the works is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract. <i>Upgrade of roads and stormwater infrastructure in Ashton and Montagu.</i>
Anticipated Construction Duration 6 months
Provisional Start Date February 2025
Provisional Completion Date August 2025
Construction Work Permit Required for the Project? No

1.7 EXISTING ENVIRONMENT
Hazards particular to this project by virtue of location: Members of the public; pedestrian & vehicular traffic; live services.
Overhead, Above Ground and Underground Services crossing the site: Overhead: electricity, telecommunications Underground: water, sewerage, stormwater Ground level: roads, stormwater Service Drawings available: refer to engineer Wayleaves required: yes Permits required: no Isolations required: no
Existing structures on site and surrounding land use (with a significant impact on Health & Safety): residential areas (houses); various businesses (industrial)
Existing ground conditions and ground survey report: municipal roads in various state of repair
Existing Traffic Systems Condition: poor to fair Restrictions to access: none Speed restrictions: 20km/h
1.8 AVAILABLE DRAWINGS
Refer to tender documentation.
1.9 PROJECT HEALTH AND SAFETY REQUIREMENTS
Significant health and safety hazards identified by Client, Designer and Safety Agent: Excavations Fire Flammable Liquids / Gas Hazardous Substances Members of Public Overhead Services (Working near) Road Working – in or next to (including Traffic Management) Snakes Underground Services

Other construction hazards that the contractor can reasonably expect are as follows:

Asphalting
Compacting and Filling
Cutting Kerbs
Cutting Off Disc
Hand tools
Kerb Laying
Manhole Rings and Pipes Storage
Manual Handling of General Items
Mobile Crane
Noise and Dust
Paving (Laying)
Plant/Vehicle and Equipment Operation
Road Construction
Road Marking

NOTE: Please refer to end of this Health and Safety Specification for the baseline risk assessment for these hazards and risks.

ACTIVITIES REQUIRING APPROVED METHOD STATEMENTS

None

ACTIVITIES REQUIRING PERMITS (FOR HEALTH AND SAFETY PURPOSES)

None required.

CONTRACTOR SAFETY OFFICER PROVISION

Records of safety audits undertaken by the Contractor's Safety Officer must be kept on site in the safety file and non-conformances reported by the Safety Officer to the Contractor's management team. All non-conformances identified by the Safety Officer and Client's Safety Agent must be investigated and corrective action taken by the Contractor to prevent re-occurrence.

Please note that as from 7th August 2018 the safety officer must be professionally registered with the SACPCMP. Proof of registration with the SACPCMP must be provided.

If registered as a Candidate proof of mentorship and weekly visits by mentor must be available on site.

The requirement for this site is that a part time Safety Officer be appointed by the Contractor. **Part time Safety Officer must visit the site at least fortnightly.**

MEDICAL CERTIFICATE OF FITNESS (ANNEXURE 3)

The contractor must ensure that their employees on site have a valid medical certificate of fitness, specific to the construction work being performed, issued by an occupational health practitioner in the form of an Annexure 3 template.

MANAGEMENT AND SUPERVISION OF CONSTRUCTION WORK

A principal contractor must, in writing, appoint one full-time competent person as the construction manager with the duty of managing all the construction work on a single site, including the duty of ensuring occupational health and safety compliance, and in the absence of the construction manager an alternate competent person must be appointed by the principal contractor. Proof of an all-inclusive assessment by the Principal Contractor of the Construction Manager's Competency in construction management and health and safety competency must be available in the Safety File.



The Construction Manager, Alternate Construction Managers, Assistant Construction Managers, and designated construction supervisor/s must, as a minimum, have training in Legal Liability, Construction Regulation 2014 and the OHS Act and Regulations.

TRAFFIC MANAGEMENT AND TRAFFIC SAFETY OFFICER PROVISION

The Traffic Management Plan must be approved by the Project Manager and as required, the Traffic Chief as per the National Road Traffic Act, No. 93 of 1996. ***The Traffic Safety Officer must have training as per Unit Standard 14561 or similar.***

ENVIRONMENTAL CONDITIONS

Contractor must take into account adverse weather conditions on site activities and implement control measures to mitigate risk. This includes risk of exposure to excessive heat, cold, rain, lightning, and wind.

The open nature of the site works will not preclude any of the above.

ARRANGEMENTS FOR ACCESS, PARKING, DELIVERIES, ETC.

Access to site by Construction Vehicles: municipal roads

Access to site by Construction Workers and Visitors: municipal roads

All service providers must sign a 37.2 Mandatory Agreement and must be inducted before they can be allowed on site.

ARRANGEMENTS FOR SITE CAMP, ABLUTIONS AND YARD

Site camp location and set up

- | | | |
|--------------------------------|---|--------------------------------------|
| • Restrictions / requirements: | } | |
| • Storage areas: | } | Contractor to advise in consultation |
| | } | with Engineer / Professional Team |
| • Security: | } | |

Ablutions and Welfare Arrangements

Contractor to supply ablutions and facilities in line with the Construction Regulations 2014, refer to section 2.31 of this health and safety specification regarding the below. Toilets should be provided with built in facilities for hand washing.

- | | | |
|-----------------------|---|--|
| • Toilets: | } | |
| | } | |
| • Washing facilities: | } | |
| | } | |
| • Drinking Water: | } | Contractor to provide as per Regulations |
| | } | |
| • Shelter: | } | |
| | } | |
| • Showers: | } | |

Mobile site facilities requirements:

A camping toilet/mobile toilet will be required for sites that cannot facilitate a permanent location for ablution units and must be available for each gender per location.

The use of a camping toilet must be prepared and set-up correctly with additional anchors and available toiletries prior to each working day and to be first priority when changing location of works along a set working path.



Teams are to ensure that the toilets are cleaned correctly and suitable for easy and hygienic uses and recorded on a daily register.

PROTECTION OF SITE AGAINST UNAUTHORISED ACCESS BY PUBLIC

Excavation Fencing: Note that excavations accessible to public, or adjacent to public roads / thoroughfares, must have (1) barrier / fence of at least 1m in height, and (2) warning illuminants at night or when visibility is poor, or have other suitable precautionary measures if of both these are not practicable.

General Fencing of Site: Note that construction sites in built up areas adjacent to public walkway must be fenced off and have controlled access points with the correct signs to indicate the site office for any relevant enquiries.

Warning Notices: Roads traffic safety signs; standard construction warning signs

Look Outs: Required in residential areas

PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Client requires the Contractor to ensure that employees (and others under his/her control) wear the following minimum PPE:

Overalls: yes

Hard Hats: no

Reflective Vests: yes

Goggles / gloves / ear defenders / respiratory protection: task specific

Safety Footwear: yes

Specialist Equipment (e.g., for confined Spaces): task specific

Note: Every employer must check regularly on the websites of the National Department of Health (www.health.gov.za), National Institute of Communicable Diseases (www.nicd.ac.za) and the National Institute for Occupational Health (www.nioh.ac.za) whether any specialised PPE for COVID-19 is required or recommended in any guidelines based on the nature of the workplace or the nature of the duties and the associated level of risk.

HAZARDOUS SUBSTANCES

The following materials and substances have, or may have, to be used in the works and are identified as potentially posing special health and / or safety hazards during the project. Appropriate measures will need to be specified for their control: asphalt, bitumen, cement, fuel, paint

1.10 INTERFACE AND RESTRICTIONS BY CLIENT

Contractor must note that the following Client activities will continue during construction: road & pedestrian traffic

The following Client safety rules and/or requirements are to be observed:

All workers are to receive induction prior to commencement of work on site.

Other safety rules and requirements to be advised at induction.

Please also refer to tender document.



Restrictions on times, access, or other restrictions by Client

Please refer to tender document.
Other restrictions may be advised at induction.

1.11 PROJECT CLOSE OUT

The Health and Safety files for the Principal Contractors and all Contractors require closure and handover to the Client at the completion of the project in the form of a consolidated safety file. The following list is an example of what should be included but is not exhaustive. The Safety Agent or the Client may require further information at the time of completion and the Principal Contractor is to ensure that all instructions are responded to. Documentation would include all health and safety related records from the start of the project. All records to be in hard copy or electronic format and submitted to the Safety Agent for approval in adequately formatted lists and folders. Layout should be logical and in the same order as in the site files.

Consolidated Health and Safety close out file requirements include:

- Health and safety specification (most recent version)
- Principal Contractor's health and safety plan/s
- Site safety organograms
- Legal appointments - All OHS appointments to be cancelled at project completion
- Notification to Department of Labour of commencement of work / Construction Work Permit
- Workman's Compensation Letters of Good Standing for the project
- Full safety files for all contractors as well as their close out reports
- List of all contractors who worked on site
- Letters of safety plan approval of contractors by the Principal Contractor
- Mandatory agreements (section 37.2 agreements)
- Incident and accident records / Occupational Disease records
- Contractor Nonconformance records
- Safety agent's audit reports
- Safety Officer reports
- Method Statements
- Risk assessments
- Safe work procedures
- Medical surveillance certificates of fitness. Medical records are to be kept according to the Occupational Health and Safety Act, as amended.
- All temporary works drawings (suspended beams/scaffolds, etc.)
- Copies of test results, policies, and procedures for environmental monitoring (silica, noise, dusts, etc.)
- Detailed registers of all material used
- Copies of all Checklists completed

1.12 SAFETY FILE RETURN TO CLIENT

The consolidated Health and Safety Files for the Project is to be handed over by the Principal Contractor to the Client upon Project Completion in hard copy format.

2.0 FURTHER REQUIREMENTS

2.1 *Duties of Principal Contractor / Contractor in terms of Construction Regulations 2014*

A Principal Contractor must:

- provide and demonstrate to the Client a suitable, sufficiently documented and coherent site-specific health and safety plan, based on the Client's documented health and safety specifications, *which* plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the principal contractor as work progresses;
- open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, which must be made available on request to an inspector, the Client, the Client's Safety Agent, or a Contractor; and
- on appointing any other contractor, in order to ensure compliance with the provisions of the Act -
 - provide contractors who are tendering to perform construction work for the principal contractor, with the relevant sections of the health and safety specifications pertaining to the construction work which has to be performed;
 - ensure that potential contractors submitting tenders have made sufficient provision for health and safety measures during the construction process;
 - ensure that no contractor is appointed to perform construction work unless the principal contractor is reasonably satisfied that the contractor that he or she intends to appoint, has the necessary competencies and resources to perform the construction work safely;
 - ensure prior to work commencing on the site that every contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993;
 - appoint each contractor in writing for the part of the project on the construction site
 - take reasonable steps to ensure that each contractor's health and safety plan is implemented and maintained on the construction site;
 - ensure that the periodic site audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
 - stop any contractor from executing construction work which is not in accordance with the Client's health and safety specifications and the principal contractor's health and safety plan for the site or which poses a threat to the health and safety of persons;
- where changes are brought about to the design and construction, make available sufficient health and safety information and appropriate resources to the contractor to execute the work safely;

- discuss and negotiate with the contractor the contents of their health and safety plan and finally approve that plan for implementation;
- ensure that a copy of both the principal contractor and contractor's health and safety plan is available on request to an employee, an inspector, a contractor, the Client, or the Client's Safety Agent;
- hand over a consolidated health and safety file to the Client upon completion of the construction work, to include a record of all drawings, designs, materials used and other similar information concerning the completed structure;
- in addition to the documentation required in the health and safety file include and make available a comprehensive and updated list of all the contractors on site accountable to the principal contractor, the agreements between the parties and the type of work being done;
- ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

A contractor must prior to performing any construction work-

- provide and demonstrate to the principal contractor a suitable and sufficiently documented health and safety plan, based on the relevant sections of the Client's health and safety specification and provided by the principal contractor, which plan must be applied from the date of commencement of and for the duration of the construction work and which must be reviewed and updated by the contractor as work progresses;
- open and keep on site a health and safety file, which must include all documentation required in terms of the Act and these Regulations, and which must be made available on request to an inspector, the Client, the Client's Safety Agent or the principal contractor;
- before appointing another contractor to perform construction work be reasonably satisfied that the contractor that he or she intends to appoint has the necessary competencies and resources to perform the construction work safely;
- co-operate with the principal contractor as far as is necessary to enable each of them to comply with the provisions of the Act;
- as far as is reasonably practicable, promptly provide the principal contractor with any information which might affect the health and safety of any person at work carrying out construction work on the site, any person who might be affected by the work of such a person at work, or which might justify a review of the health and safety plan.

Where a contractor appoints another contractor to perform construction work, the duties that apply to the principal contractor will apply to the contractor as if he or she were the principal contractor.

A principal contractor must take reasonable steps to ensure co-operation between all contractors appointed by the principal contractor to enable each of those contractors to comply with these Regulations.

No contractor may allow or permit any employee or person to enter any site unless that employee or person has undergone health and safety induction training pertaining to the hazards prevalent on the site at the time of entry.

A contractor must ensure that all visitors to a construction site undergo health and safety induction pertaining to the hazards prevalent on the site and must ensure that such visitors have the necessary personal protective equipment.

A contractor must at all times keep on his or her construction site records of the health and safety induction training and such records must be made available on request to an inspector, the Client, the Client's Safety Agent or the Principal Contractor.

A contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3 (a template of which can be found in the Construction Regulations, 2014).

2.2 Management and Supervision of Construction Work

A principal contractor must, in writing, appoint one full-time competent person as the construction manager with the duty of managing all the construction work on a single site, including the duty of ensuring occupational health and safety compliance, and in the absence of the construction manager an alternate must be appointed by the principal contractor. Proof of all-inclusive assessment of the Construction Manager's Competency in construction management and H & S competency must be available in the Safety File. The Construction Manager must, as a minimum, have a Construction Regulation course. No contractors may be left unsupervised on site by the principal contractor.

A principal contractor must upon having considered the size of the project, in writing appoint one or more assistant construction managers for different sections thereof: Provided that the designation of any such person does not relieve the construction manager of any personal accountability for failing in his or her management duties in terms of this regulation.

Where the construction manager has not appointed assistant construction managers, or, in the opinion of an inspector, a sufficient number of such assistant construction managers have not been appointed, that inspector must direct the construction manager in writing to appoint the number of assistant construction managers indicated by the inspector, and those assistant construction managers must be regarded as having been appointed.

No construction manager appointed in terms of the Regulations may manage any construction work on or in any construction site other than the site in respect of which he or she has been appointed.

A contractor must, after consultation with the Client and having considered the size of the project, the degree of danger likely to be encountered or the accumulation of hazards or risks on the site, appoint a full-time or part-time construction health and safety officer in writing to assist in the control of all health and safety related aspects on the site: Provided that, where the question arises as to whether a construction health and safety officer is necessary, the decision of an inspector is decisive.

No contractor may appoint a construction health and safety officer to assist in the control of health and safety related aspects on the site unless he or she is reasonably satisfied that the construction health and safety officer that he or she intends to appoint is registered with a statutory body approved by the Chief Inspector and has necessary competencies and resources to assist the contractor

A construction manager must in writing appoint construction supervisors responsible for construction activities and ensuring occupational health and safety compliance on the construction site. Proof of all-inclusive assessment of the Construction Supervisor's competency in construction supervision and H&S competency must be available in the Safety File. The Construction Supervisor must, as a minimum, have a supervision course as per Unit Standard 262845 (Civil Engineering), 119080 (Building Construction) and 262884 (Civil Engineering).

A contractor must, upon having considered the size of the project, in writing appoint one or more competent employees for different sections thereof to assist the construction supervisor, and every such employee has, to the extent clearly defined by the contractor in the letter of

appointment, the same duties as the construction supervisor: Provided that the designation of such employee does not relieve the construction supervisor of any personal accountability for failing in his or her supervisory duties.

Where the contractor has not appointed such an employee, or, in the opinion of an inspector, a sufficient number of such employees have not been appointed, that inspector must instruct the employer to appoint the number of employees indicated by the inspector.

No construction supervisor appointed may supervise any construction work on or in any construction site other than the site in respect of which he or she has been appointed: Provided that if a sufficient number of competent employees have been appropriately designated on all the relevant construction sites, the appointed construction supervisor may supervise more than one site.

2.3 Notification of Intention to Commence Construction Work

The Contractor shall notify the Provincial Director of the Department of Labour of the intention to commence construction work at least 7 days prior to the works commencing if the intended construction work will:

- Include excavation work
- Include work at height where there is a risk of falling
- Include the demolition of a structure, or
- Include the use of explosives to perform construction work.

If the construction work involves construction of a single storey dwelling for a Client, and such Client will be residing in such dwelling upon completion, the contractor must also notify the Provincial Director of the Department of Labour at least 7 days before the works commence.

This must be done on a form similar to an Annexure 2 (template of which can be found in the Construction Regulations, 2014). A copy of the notification letter to the Provincial Director shall be forwarded to the Client for record purposes.

2.4 Construction Work Permit

Not required for this project.

2.5 Assignment of Contractor's Responsible Persons to Manage Health and Safety on Site

The Contractor shall submit management and supervisory appointments as well as any relevant appointments in writing (as stipulated by the Construction Regulations 2014 and the Occupational Safety and Health Act 1993), prior to commencement of work (refer to **Annexure B** at the end of this Health and Safety Specification).

2.6 Competency for Contractor's Responsible Persons

The Contractor's responsible persons shall be competent in health and safety and be familiar with the Occupational Health and Safety Act 1993, and applicable regulations. Valid proof of pertinent health and safety courses attended by such persons will be required to be presented to the Client.

2.7 Compensation of Occupational Injuries and Diseases Act 130 of 1993 (COIDA)

The successful Contractor shall submit to the Client a valid letter of good standing with the Compensation Insurer prior to appointment.

2.8 Occupational Health and Safety Policy

The Contractor shall submit their Health and Safety Policy, prior to construction commencement, signed by the Chief Executive Officer. The Policy must outline objectives and how they will be achieved and implemented within the company operations. The Policy must be communicated to all employees and proof thereof must be available in the Safety File.

2.9 Health and Safety Organogram

The Contractor shall submit an organogram, prior to construction commencement, outlining the Health and Safety Site Team that will be assigned to the project, if successful with the tender. In cases where appointments have not been made, the organogram shall reflect the position. The organogram shall be updated when there is a change in the site team.

2.10 Risk Assessments

Baseline Risk Assessment

The Client shall cause a baseline risk assessment to be conducted by a competent person before the design process and tender process commence, and the assessed risks shall form part of the health and safety specifications.

The Contractor must, before commencement of any construction work, and during construction work, have risk assessments performed by a competent person appointed in writing, which risk assessments form part of the health and safety plan to be applied on the site and must include:

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

The Contractor must ensure that, as far as is reasonably practicable, ergonomic related hazards are analysed, evaluated, and addressed in a risk assessment.

The Contractor must ensure that all employees under his control are informed, instructed, and trained by a competent person regarding any hazard and the related work procedures and/or control measures **before any work commences** and thereafter **at the times determined in the risk assessment monitoring and review plan of the relevant site.**

The Principal Contractor must ensure that all contractors are informed regarding any hazard that is stipulated in the risk assessment **before any work commences** and thereafter **at the times determined in the risk assessment monitoring and review plan of the relevant site.**

The Contractor must consult with the health and safety committee or with a representative trade union or representative group of employees if no health and safety committee exists, on the monitoring and review of the risk assessments for the site.

The Contractor must ensure that copies of risk assessment for this site are available on site for inspection purposes by interested parties (inspector, the Client, Client's Safety Agent, any contractor, any employee, a representative trade union, a health and safety representative or safety committee member.

A Contractor must review the relevant risk assessment where changes are effected to the design and/or construction that result in a change to the risk profile, or when an incident has occurred.

Preventative measures must first address the elimination of the hazard or risk. Should PPE be required to reduce risk, the equipment or clothing to be used must be SABS approved.

In general, the Contractor must ensure that the Risk Assessment involves identifying the hazards present in a work activity on site. This is followed by an evaluation of the extent of the risk involved taking into account those precautions already being taken.

The following general principle should be followed when conducting a risk assessment:

- All relevant risks and/or hazards should be systematically addressed;
- The risk assessment should address what actually happens in the workplace during the work activity;
- All employees and those who may be affected must be considered, including maintenance staff, security guards, visitors, and Contractors;
- The risk assessment should highlight those groups and individuals who may be required to work alone or who have disabilities;
- The risk assessment process should take into account the existing safety measures and controls.
- The level of detail on a risk assessment should be appropriate to the level of risk.

2.11 Health and Safety Representative(s)

The Contractor shall ensure that Health and Safety Representative(s) is/are elected and trained to carry out his / her functions. The Safety Representative(s) must be democratically nominated, elected, and appointed in writing. The Health and Safety Representative(s) shall carry out regular inspections, keep records and report to the supervisor to take appropriate action. The Safety Representative(s) shall attend Health and Safety Committee Meetings. The Health and Safety Representative shall be part of the team that will investigate incidents, accidents, and non-conformances. The Safety Representative(s) must be (a) full time employee(s) who is/are acquainted with conditions and activities at that workplace or section thereof. The Safety Representatives must have Safety Representative training and must be capable of performing their duties.

2.12 Health and Safety Committee

Where two or more health and safety representatives have been appointed on site, the Contractor shall ensure that monthly health and safety meetings are held with such representatives and minutes are kept on record. Meetings must be organized and chaired by the Contractor's Health and Safety Committee Chairperson. Minutes of these meetings must be available for the employees of the contractor to refer to.

PLEASE NOTE THAT THE SAFETY AGENT MAY REQUIRE THAT THE PRINCIPAL CONTRACTOR CONVENES A SAFETY COMMITTEE MEETING ON SITE IN THE INTERESTS OF HEALTH AND SAFETY ON SITE. SUCH COMMITTEE MEETING MAY REQUIRE ATTENDANCE OF CONTRACTORS SAFETY OFFICERS/SAFETY REPRESENTATIVES, CONSTRUCTION SUPERVISION AND THE SAFETY AGENT.

2.13 Medical Certificate of Fitness

The contractor must ensure that their employees on site have a valid medical certificate of fitness, specific to the construction work being performed, issued by an occupational health

practitioner in the form of an Annexure 3 template (refer to the Construction Regulations 2014 on the Department of Labour website for a sample of this form).

Employees required to perform work at heights or from fall risk position must be medically fit to perform such work, such employee's medicals must specify "Fall Risk" or "Working at heights" in the exposure section of the annexure 3 template.

2.14 Health and Safety Training

The Contractor shall quarterly conduct a training needs analysis to ascertain what health and safety training is required. A plan of action should be devised and forwarded to the Client for records. Once the identified people have attended the training, the Contractor must provide the Client with copies of certificates obtained.

2.14.1 Induction

No Contractor may allow or permit any employee or person to enter site unless they have undergone health and safety induction training pertaining to the hazards prevalent on site at the time of entry. This includes visitors to site. The Contractor must ensure that visitors to site have the necessary protective equipment (PPE). A copy of attendance registers of all employees who attend inductions shall be kept.

2.14.2 Awareness

The Contractor shall conduct periodic toolbox talks on site, weekly or before any hazardous work takes place. The talks shall cover the relevant activity and an attendance register must be signed by all attendees. This record of who attended and the content of the topic will be kept on the site health and safety file as evidence of training.

2.15 Competency

After the Contractor has identified the training to be conducted as part of the competency requirement, and based on Risk Assessment, he shall send the relevant persons on appropriate courses and keep certificates of training for reference. Familiarity with the Health and Safety Act and Regulations is an integral part of the definition of competence. All training must be conducted by an accredited training provider and the certificates must display the applicable unit standards and the expiry dates thereof.

2.16 General Record Keeping

The Contractor shall keep and maintain Health and Safety records to demonstrate compliance with the Health and Safety Specification and the Occupational Health and Safety Act. The contractor shall ensure that all records of incidents, spot fines, training, etc. are kept on site. All documents shall be available for inspection by the Client, or the Department of Labour's Inspectors.

2.17 General Inspection, Monitoring and Reporting

The Contractor shall carry out inspections as required by this Health and Safety Specification, as well as by health and safety legislation.

2.18 Emergency Procedures

The Contractor shall submit a detailed Emergency Procedure for approval by the Client prior to commencement on site. The procedure shall detail the response plan including the following:

- List of key personnel;
- Details of emergency services;

- Actions or steps to be taken in the event of the emergency; and
- Information on hazardous materials / situations, including each material's hazardous potential impact or risk on the environment or human and measures to be taken in the event of an accident.

Emergency procedure(s) shall include, but shall not be limited to, fire, spills, accidents to employees, use of hazardous substances, dangers as a result of riot / service delivery protests / intimidation, etc. The Contractor shall advise the Client in writing of any on-site emergencies, together with a record of action taken, within 24 hours of the emergency occurring. A contact list of all service providers (Fire Department, Ambulance, Police, Medical and Hospital, etc.) must be maintained and available to site personnel.

2.19 First Aid Box and First Aid Equipment

The Contractor shall provide first aid box/es and appoint, in writing, First Aider(s) for this project in line with the results of the Contractor's risk assessment for the project, this health and safety specification as well as the provisions of the General Safety Regulations. The appointed First Aider(s) are to be sent for accredited first aid training before starting on site. Valid certificates are to be kept on site.

- First Aid box/es must be adequately stocked at all times, accessible and be controlled by a qualified First Aider.
- Perishables to be checked and replaced when expired.
- Stock per content list as per the General Safety Regulations Annexure.
- Signage to be in place.
- To be numbered and sealed with name of first aider on or above the First aid box.
- Dressing logbook to be available in the first aid box.
- If more than 5 employees are present, there must be a first aid box available.
- Register to be checked by a Competent person.

If required by the Client, the Contractor shall have a stretcher on site to be used in case of a serious incident.

2.20 Accident / Incident Reporting and Investigation

The Contractor shall, in addition to the prescribed requirements of the Occupational Health and Safety Act and General Safety Regulations, investigate, record, and report all Section 24 reportable incidents to the Client within 24 hours of the incident occurring. Incident investigations shall be conducted by the Contractor's appointed Accident Investigator - this Investigator must be a competent person or persons who have sufficient knowledge to carry out an investigation.

In the event of a fatality or a permanent disabling injury the Contractor must submit proof of reporting of incident to Department of Labour as well as proof of preventative measures to the Client. The Client reserves the right to conduct investigations into any incidents that they deem fit, and the Contractor is required to provide full co-operation in this regard.

2.21 Hazards and Potential Situations

The Contractor shall immediately notify other Contractors of any hazardous or potentially hazardous situations, which may arise during performance of the activities.

2.22 Occupational Health and Safety Signage

The Contractor shall ascertain and provide adequate on-site health and safety signage. This signage shall include, but shall not be limited to, Hard Hat / Helmet Area; Safety Shoes to be worn on site; Dust Masks to be worn in areas where there might be exposure to excessive

dust; Ear Plugs / Muffs to be worn where there might be noise exposure over 85 dB; Gloves; Safety Goggles; Safety Harness, Workers in Excavation, traffic management, etc. The Contractor shall be responsible to maintain the quality and replacement of signage. Signage must comply with the requirements of SABS.

2.23 Management of Contractors by Principal Contractor

The Principal Contractor shall ensure that all contractors under his control are complying with the respective Health and Safety Plans, as well as Health and Safety Legislation.

2.24 Stacking of Materials

In addition to the provisions for the stacking of articles in the General Safety Regulations, 2003, the contractor must ensure that –

- a competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- adequate storage areas are provided;
- there are demarcated storage areas; and
- storage areas are kept neat and under control.

2.25 Housekeeping and General Safeguarding on Construction Sites

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, promulgated by Government Notice No. R. 2281 of 16 October 1987, ensure that suitable housekeeping is continuously implemented on each construction site, including-

- the proper storage of materials and equipment;
- the removal of scrap, waste, and debris at appropriate intervals;
- ensuring that materials required for use, are not placed on the site so as to obstruct means of access to and egress from workplaces and passageways;
- ensuring that materials which are no longer required for use, do not accumulate on, and are removed from the site at appropriate intervals;
- ensuring that waste and debris are not disposed of from a high place with a chute, unless the chute complies with the requirements set out in the regulations;
- ensuring that construction sites in built-up areas adjacent to a public way are suitably and sufficiently fenced off and provided with controlled access points to prevent the entry of unauthorized persons; and
- ensuring that a catch platform or net is erected above an entrance or passageway or above a place where persons work or pass under or fencing off the danger area if work is being performed above such entrance, passageway, or place so as to ensure that all persons are kept safe in the case of danger or possibility of persons being struck by falling objects.

2.26 Construction Vehicles and Mobile Plant

A contractor must ensure that all construction vehicles and mobile plant -

- are of an acceptable design and construction;
- are maintained in a good working order;
- are used in accordance with their design and the intention for which they were designed, having due regard to safety and health;
- are operated by a person who-
 - has received appropriate training, is certified competent and in possession of proof of competency and is authorised in writing to operate those construction vehicles and mobile plant;
 - has a medical certificate of fitness to operate those construction vehicles and mobile plant, issued by an occupational health practitioner in the form of Annexure



3.

- have safe and suitable means of access and egress;
- are properly organized and controlled in any work situation by providing adequate signalling or other control arrangements to guard against the dangers relating to the movement of vehicles and plant, in order to ensure their continued safe operation;
- are prevented from falling into excavations, water, or any other area lower than the working surface by installing adequate edge protection, which may include guard-rails and crash barriers;
- are fitted with structures designed to protect the operator from falling material or from being crushed should the vehicle or mobile plant overturn;
- are equipped with an acoustic warning device which can be activated by the operator;
- are equipped with an automatic acoustic reversing alarm;
- are equipped with fire extinguishers (2.5 – 4.5 kg); and
- are inspected by the authorised operator or driver on a daily basis using a relevant checklist prior to use and that the findings of such inspection are recorded in a register kept in the construction vehicle or mobile plant.

A contractor must ensure that -

- no person rides or is required or permitted to ride on a construction vehicle or mobile plant otherwise than in a safe place provided thereon for that purpose;
- every construction site is organized in such a way that, as far as is reasonably practicable, pedestrians and vehicles can move safely and without risks to health;
- the traffic routes are suitable for the persons, construction vehicles or mobile plant using them, are sufficient in number, in suitable positions and of sufficient size;
- every traffic route is, where necessary, indicated by suitable signs;
- all construction vehicles and mobile plant left unattended at night, adjacent to a public road in normal use or adjacent to construction areas where work is in progress, have appropriate lights or reflectors, or barricades equipped with appropriate lights or reflectors, in order to identify the location of the vehicles or plant;
- all construction vehicles or mobile plant when not in use, have buckets, booms, or similar appendages, fully lowered, or blocked, controls in a neutral position, motors stopped, wheels chocked, brakes set, and ignition secured;
- whenever visibility conditions warrant additional lighting, all mobile plant are equipped with at least two headlights and two taillights when in operation;
- tools, material, and equipment are secured and separated by means of a physical barrier in order to prevent movement when transported in the same compartment with employees;
- vehicles used to transport employees have seats firmly secured and adequate for the number of employees to be carried; and
- all construction vehicles or mobile plant travelling, working, or operating on public roads comply with the requirements of the National Road Traffic Act, 1996.
- all plant and vehicles are fitted with amber rotating beacons and reverse alarms.
- ALL construction site vehicles must be inspected daily especially if it has dangerous "items" (fuel, explosives, etc.) on vehicle, completed inspection registers must also be available for inspection.
- the vehicles must resemble the original manufacturer's product. Levers, alarms, and amber lights to be fitted to construction vehicle for notification of vehicle.
- fire extinguishers, signage, and licence disc to be correctly mounted and displayed.
- when the vehicle is stationary no key to be left in or on vehicle or plant.
- Drip tray must be present when stationary.

2.27 Electrical Installations and Machinery on Construction Sites

Not required for this project.

2.28 Use and Temporary Storage of Flammable Liquids on Construction Sites

A contractor must, in addition to compliance with the provisions for the use and storage of flammable liquids in the General Safety Regulations, 2003, ensure that –

- where flammable liquids are being used, applied, or stored at the workplace concerned, it is done in a manner that does not cause a fire or explosion hazard, and that the workplace is effectively ventilated;
- no person smokes in any place in which flammable liquid is used or stored, and the contractor must affix a suitable and conspicuous notice at all entrances to any such areas prohibiting such smoking;
- an adequate amount of efficient fire-fighting equipment is installed in suitable locations around the flammable liquids store with the recognized symbolic signs;
- only the quantity of flammable liquid needed for work on one day is taken out of the store for use;
- all containers holding flammable liquids are kept tightly closed when not in actual use and, after their contents have been used up, are removed from the construction site, and safely disposed of;
- where flammable liquids are decanted, the metal containers are bonded and earthed; and
- no flammable material, including cotton waste, paper, cleaning rags or similar material is stored together with flammable liquids
- proper containers are to be used for fuel. Marked and labelled as per the content.
- diesel on site; more than 800 litres must have a certificate, fire safe certificate. Locked in a ventilated, secure area with a drip tray and have a designated, responsible person to use it.

2.29 Water Environments

Not applicable to this project.

2.30 Fire Precautions on Construction Sites

A contractor must, in addition to compliance with the Environmental Regulations for Workplaces, 1987, ensure that –

- all appropriate measures are taken to avoid the risk of fire;
- sufficient and suitable storage is provided for flammable liquids, solids, and gases;
- smoking is prohibited and notices in this regard are prominently displayed in all places containing readily combustible or flammable materials;
- in confined spaces and other places in which flammable gases, vapours or dust can cause danger-
 - only suitably protected electrical installations and equipment, including portable lights, are used;
 - there are no flames or similar means of ignition;
 - there are conspicuous notices prohibiting smoking;
 - oily rags, waste, and other substances liable to ignite are without delay removed to a safe place; and
 - adequate ventilation is provided;
- combustible materials do not accumulate on the construction site;
- welding, flame cutting, and other hot work are done only after appropriate precautions have been taken to reduce the risk of fire;
- suitable and sufficient fire-extinguishing equipment is placed at strategic locations or as may be recommended by the Fire Chief or local authority concerned, and that such equipment is maintained in a good working order;
- the fire equipment contemplated above is inspected by a competent person, who has been appointed in writing for that purpose, in the manner indicated by the manufacturer thereof;
- a sufficient number of workers are trained in the use of fire-extinguishing equipment;



- where appropriate, suitable visual signs are provided to clearly indicate the escape routes in the case of a fire;
- the means of escape is kept clear at all times;
- there is an effective evacuation plan providing for all -
 - persons to be evacuated speedily without panic;
 - persons to be accounted for; and
 - plant and processes to be shut down; and
- a siren is installed and sounded in the event of a fire.

2.31 Construction Employees' Facilities

A contractor must, in terms of the Construction Regulations 2014, provide:

- Shower facilities after consultation with the employees or employees' representatives, or at least one shower facility for every 15 persons;
- at least one sanitary facility for each sex and for every 30 workers;
- Toilets to be within walking distance
- Hygiene registers to be completed
- Proof of safe disposal of effluent waste disposal certificates to be obtained
- changing facilities for each sex;
- and sheltered/shaded eating area.
- Protection from the Elements and raised off the ground.
- Every employer shall provide sanitary facilities at the workplace in accordance with the provisions of Parts F, P and Q of the National Building Regulations.
- Sufficient clean water for all employees. 500ml to each employee every hour.

A contractor must provide reasonable and suitable living accommodation for the workers at construction sites who are far removed from their homes and where adequate transportation between the site and their homes, or other suitable living accommodation, is not available.

2.32 Fall Protection

Not applicable to this project.

2.33 Temporary Works

Not applicable to this project.

2.34 Excavation

A contractor must-

- ensure that all excavation work is carried out under the supervision of a competent person who has been appointed in writing for that purpose; and
- evaluate, as far as is reasonably practicable, the stability of the ground before excavation work begins.

A contractor who performs excavation work-

- must take reasonable and sufficient steps in order to prevent, as far as is reasonably practicable, any person from being buried or trapped by a fall or dislodgement of material in an excavation;
- may not require or permit any person to work in an excavation which has not been adequately shored or braced: Provided that shoring and bracing may not be necessary where-
 - the sides of the excavation are sloped to at least the maximum angle of repose measured relative to the horizontal plane; or



- such an excavation is in stable material: Provided that-
 - permission has been given in writing by the appointed competent person contemplated above upon evaluation by him or her of the site conditions; and
 - where any uncertainty pertaining to the stability of the soil still exists, the decision from a professional engineer or a professional technologist competent in excavations is decisive and such a decision must be noted in writing and signed by both the competent person and the professional engineer or technologist, as the case may be;
- must take steps to ensure that the shoring or bracing contemplated above is designed and constructed in a manner that renders it strong enough to support the sides of the excavation in question;
- must ensure that no load, material, plant, or equipment is placed or moved near the edge of any excavation where it may cause its collapse and consequently endangers the safety of any person, unless precautions such as the provision of sufficient and suitable shoring or bracing are taken to prevent the sides from collapsing;
- must ensure that where the stability of an adjoining building, structure or road is likely to be affected by the making of an excavation, steps are taken to ensure the stability of such building, structure or road and the safety of persons;
- must cause convenient and safe means of access to be provided to every excavation in which persons are required to work, and such access may not be further than six metres from the point where any worker within the excavation is working;
- must ascertain, as far as is reasonably practicable, the location and nature of electricity, water, gas, or other similar services which may in any way be affected by the work to be performed, and must before the commencement of excavation work that may affect any such service, take the steps that are necessary to render the circumstances safe for all persons involved;
- must ensure that every excavation, including all bracing and shoring, is inspected-
 - daily, prior to the commencement of each shift;
 - after every blasting operation;
 - after an unexpected fall of ground;
 - after damage to supports; and
 - after rain,by the competent person, in order to ensure the safety of the excavation and of persons, and those results must be recorded in a register kept on site and made available on request to an inspector, the Client, the Client's Safety Agent, any other contractor or any employee;
- must cause every excavation which is accessible to the public or which is adjacent to public roads or thoroughfares, or whereby the safety of persons may be endangered, to be -
 - adequately protected by a barrier or fence of at least one metre in height and as close to the excavation as is practicable; and
 - provided with warning illuminants or any other clearly visible boundary indicators at night or when visibility is poor, or have resort to any other suitable and sufficient precautionary measure where this is not practicable;
- must ensure that all precautionary measures stipulated for confined spaces as determined in the General Safety Regulations, 2003, are complied with by any person entering any excavation;
- must, where the excavation work involves the use of explosives, appoint a competent person in the use of explosives for excavation, and must ensure that a method statement is developed by that person in accordance with the applicable explosive's legislation; and
- must cause warning signs to be positioned next to an excavation within which or where persons are working or carrying out inspections or tests.

2.35 Demolition Work

Not applicable to this project.

2.36 Tunnelling

No person may enter a tunnel which has a height dimension of less than 800 mm.

2.37 Scaffolding

Not applicable to this project.

2.38 Bulk Mixing Plant

Not applicable to this project.

2.39 Rope Access Work

Not applicable to this project.

2.40 Hazardous Chemical Substances (HCS)

In addition to the requirements in the HCS Regulations, the principal contractor must provide proof in the Health and Safety Plan that:

- Material Safety Data Sheets (MSDS's) of the relevant materials / hazardous chemical substances are available prior to use by the contractor. All MSDS's shall be available for inspection by the agent at all times.
- Risk assessments are done at least once every 6 months.
- Exposure monitoring is done according to OESSM and by an Approved Inspection Authority (AIA) and that the medical surveillance programme is based on the outcomes of the exposure monitoring.
- How the relevant HCS's are being/going to be controlled by referring to:
 - Limiting the amount of HCS
 - Limiting the number of employees
 - Limiting the period of exposure
 - Substituting the HCS
 - Using engineering controls
 - Using appropriate written work procedures
- The correct PPE is being used.
- HCS are stored and transported according to SABS 072 and 0228.
- Training with regards to these regulations was given.

The Health and Safety plan should make reference to the disposal of hazardous waste on classified sites and the location thereof (where applicable).

The First Aider must be made aware of the MSDS and trained in how to treat HCS incidents appropriately.

2.41 Noise Induced Hearing Loss

Where noise is identified as a hazard the requirements of the NIHL regulations must be complied with and the following must be included / referred to in the Health and Safety Plan:

- Proof of training with regards to these regulations.
- Risk assessment done within 1 month of commencement of work.
- That monitoring carried out by an AIA and done according to SABS 083.
- Medical surveillance programme established and maintained for the necessary employees.
- Control of noise by referring to:

- Engineering methods considered
- Admin control (number of employees exposed) considered
- Personal protective equipment considered/decided on
- Describe how records are going to be kept for 40 years.

2.42 Explosives and Blasting

Not applicable to this project.

2.43 Personal Protective Equipment (PPE)

The Contractor shall carry out PPE or clothing needs analysis in accordance with his risk assessment, to determine the necessary PPE or clothing to be used during construction. The Contractor shall make provision to keep adequate quantities of appropriate, SABS approved PPE or clothing on site at all times.

The Contractor must ensure that personnel are trained in the correct use of PPE to be used.

The Contractor must ensure that lost, stolen, worn out or damaged PPE is replaced as required and receipt signed for by employees on site.

2.44 Asbestos

Not applicable to this project.

2.45 Pressure Equipment (Including Gas Bottles)

The Contractor shall comply with Pressure Equipment Regulations, including:

- Providing competency and awareness training to the operators;
- Providing PPE or clothing;
- Providing and maintain appropriate signage in areas where pressure equipment is used, as applicable;
- Inspect equipment regularly and keep records of inspections;
- Providing appropriate fire fighting equipment (Fire Extinguishers).
- Under pressure equipment to have the following in place;
 - Service date
 - Seals on valves with no leaks and not broken
 - flash arrestors
 - Should be stored and chained together
 - Oxygen / Acetylene bottles to have clips
 - Signage to be visible
 - Gauges in working condition and be visible
 - Permits for use
- Pressure Equipment Regs 6. (1) The user shall ensure that the pressure equipment is operated and maintained within its design and operating parameters.

2.46 Fire Extinguishers and Fire Fighting Equipment

The Contractor shall provide adequate, regularly serviced fire extinguishers located at strategic points on site. The Contractor shall keep spare serviced portable fire extinguishers. The Contractor shall have adequate persons trained or competent to use the Fire Fighting Equipment.

Safety signage shall be posted up in all areas where fire extinguishers are located.



2.47 Lifting Machinery and Tackle

The Contractor shall ensure that lifting machinery and tackle is inspected before use and on a monthly basis. The Contractor shall have lifting machinery and tackle inspector who will inspect the equipment at intervals required by the Driven Machinery Regulations, taking into account that:

- All lifting machinery and tackle have a safe working load clearly indicated
- Regular inspection and servicing are carried out
- Records are kept of inspections and of service certificates
- Thorough examinations are carried out by competent personnel at the frequencies required by legislation
- There is proper supervision in terms of guiding the loads which includes a trained banks man to direct and check lifting tackle if it is safe for use
- Forklift to be inspected every year and lift plan every 2 years
- Load test certificate to be no older than 6 months
- Sufficient props to be used and max weight to be displayed
- Slings to be checked regarding integrity, chains, serial numbers, checked for tears, cuts links and all other materials
- Hooks to be oiled, not in a fixed position and closed to prevent materials from slipping/falling off
- Lifting equipment must be used for the scope of work carried out

2.48 Ladders and Ladder Work

Not applicable to this project.

2.49 General Machinery

The Contractor shall comply with the Driven Machinery Regulations, which include inspecting machinery regularly, appointing a competent person to inspect and ensure maintenance, issuing PPE or clothing and training those that use machinery and enforce compliance.

2.50 Portable Electrical Tools

The Contractor shall ensure that use and storage of all explosive actuating fastening devices and portable electrical tools are in compliance with relevant legislation.

The Contractor shall consider that:

- A competent person undertakes routine inspections;
- Only authorised persons use the tools;
- There are safe working procedures applied;
- Awareness training is carried out and compliance is enforced at all times; and
- PPE and clothing are provided and maintained.

2.51 High Voltage Electrical Equipment

Not applicable to this project.

2.52 Public Health and Safety

The Contractor shall ensure that each person working on or visiting a site, and the surrounding community, shall be made aware of the dangers likely to arise from onsite activities and the precautions to be observed to avoid or minimise those dangers. Appropriate health and safety signage shall be posted at all times.



2.53 Night Work

Not applicable to this project.

2.54 Environmental Conditions and Flora and Fauna

The Contractor must be mindful of adverse weather conditions upon the health and safety of the workforce. This includes inclement weather, strong wind, heat stress, extreme cold, etc. The Contractor's risk assessment process must take into account the risks associated with such weather conditions. The same is true when working in an environment where there is a risk to employees' health and safety from presence of poisonous flora, or wildlife (including bees, snakes, etc.). The Contractor's risk assessment process must take these risks into account.

2.55 Occupational Health

Exposure of workers to occupational health hazards and risks are quite common in any work environment, especially in construction. Occupational health hazards and risks exposure is a major problem, and all Contractors are to ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards and risks.

The occupational hazards and risks may enter the body in three ways:

- Inhalation through breathing e.g., cement dust;
- Ingestion through swallowing maybe through food intake;
- Absorption through the skin (pores) e.g., painting or use of thinners.

The contractor is required to ensure that all his personnel are medically fit prior to being allowed onto the work site.

All Contractors should ensure that Occupational Hygiene surveys are conducted as per the Occupational Health and Safety Act to ensure employees are not exposed to hazards. Risk Assessments should identify areas where surveys are to be conducted.

2.56 Suspended Platforms

Not applicable to this project.

2.57 Material Hoists

Not applicable to this project.

2.58 Explosive Actuated Fastening Device

Not applicable to this project.

2.59 Confined Spaces

Not applicable to this project.

2.60 Alcohol and Drugs (GSR 2)

1. A contractor shall not permit any person who is or who appears to be under the influence of intoxicating liquor or drugs, to enter or remain at a site.
2. No employee shall be under the influence of or have in his or her possession or partake of or offer any other person intoxicating liquor or drugs.

3. An employer or a user, as the case may be, shall, in the case where a person is taking medicines, only allow such person to perform duties at the site if the side effects of such medicine do not constitute a threat to the health or safety of the person concerned or other persons at such site.

2.61 General Practices when Working at Heights

Not applicable to this project.

2.62 Traffic Accommodation

All traffic signs must be displayed as per the traffic management plan drawings.
Size of signs used must be as per the traffic management drawings and all signs to be visible and in good condition.

- Traffic management Plan issued per Road and Traffic act (chapter 13). Must be approved by the Traffic Chief and professional team.
- Plans for signage deployment must be in order and must be placed correctly.
- Traffic management plan must be submitted and must be suitable for the tasks being performed.
- Traffic plan must be implemented and controlled by the sites Traffic safety officer and flag persons.
- Jersey barriers, where used, to be linked.
- No signs to be obstructed.
- STOP/GO structures must be protected against being struck by vehicles (e.g., new jersey barriers)
- Road marking buggies/vehicles must be protected by escort vehicles front and rear.
- Displayed traffic signs must be maintained in a daily register to be checked morning and evenings after works have been finalised.

Night work:

- Signage, traffic accommodation and personnel must be visible (reflective / illuminated).
- Certified, competent traffic officer and flag persons to be used during night operations.

Traffic Safety Officer must check signage daily and Engineer must sign it off daily.

2.63 Ventilation and Lighting in the Workplace

Every employer shall cause every workplace in his undertaking to be lighted in accordance with the illuminance values specified in the Schedule to the General Safety Regulations:

Provided that where specialised lighting is necessary for the performance of any particular type of work, irrespective of whether that type of work is listed in the Schedule or not, the employer of those employees who perform such work shall ensure that such specialised lighting is available to and is used by such employees.

The Contractor must ensure that:

- the average illuminance at any floor level in a workplace within five metres of a task is not less than one fifth of the average illuminance on that task;
- glare in any workplace is reduced to a level that does not impair vision;
- lighting on rotating machinery in such that the hazard of stroboscopic effects is eliminated; and

- luminaires and lamps are kept clean and, when defective, are replaced or repaired forthwith.

With a view to the emergency evacuation of indoor workplaces without natural lighting or in which persons habitually work at night, every employer shall, in such workplaces, provide emergency sources of lighting which are such that, when activated, an illuminance of not less than 0.3 lux is obtained at floor level to enable employees to evacuate such workplaces: Provided that where it is necessary to stop machinery or shut down plant or processes before evacuating the workplace, or where dangerous materials are present or dangerous processes are carried out, the illuminance shall be not less than 20 lux.

The contractor must ensure that the emergency sources of lighting prescribed above:

- are capable of being activated within 15 seconds of the failure of the lighting prescribed by sub-regulation (1);
- will last long enough to ensure the safe evacuation of all indoor workplaces;
- are kept in good working order and tested for efficient operation at intervals of not more than three months; and
- where directional luminaires are installed, these are mounted at a height of not less than two metres above floor level and are not aimed between 10° above and 45° below the horizontal line on which they are installed.

The contractor must ensure that all rooms, stairways, passageways, gangways, basements, and other places where danger may exist through lack of natural light, to be lighted such that it will be safe.

The contractor must ensure that every workplace in his undertaking is ventilated either by natural or mechanical means in such a way that –

- the air breathed by employees does not endanger their safety;
- the time-weighted average concentration of carbon dioxide therein, taken over an eight-hour period, does not exceed one half per cent by volume of air;
- the carbon dioxide content thereof does not at any time exceed three per cent by volume of air;
- the prescribed exposure limits for airborne substances therein are not exceeded; and
- the concentration therein of any explosive or flammable gas, vapour or dust does not exceed the lower explosive limit of that gas, vapour, or dust.

2.64 Nuclear Density Gauge (Troxler)

The use of a Troxler on site must be in line with the SANS 3001 of March 2014. The SANS consists of 5 sections

The in-situ density of road construction materials is only determined in civil engineering using indirect methods such as the nuclear density gauge and sand replacement methods.

This method forms part of a set of methods used to operate nuclear gauges, and includes the following:

- a) administration, handling, and maintenance (see SANS 3001-NG1);
- b) validation of standard calibration blocks (see SANS 3001-NG2);
- c) calibration of a nuclear gauge (see SANS 3001-NG3);
- d) verification of a nuclear gauge (see SANS 3001-NG4);
- e) in situ density determination using a nuclear gauge (see SANS 3001-NG5)

When used Troxlers must be:

- Stored in a dedicated, lockable area and must have a warning signage displayed.
- Must only be transported in a dedicated vehicle with the required signage displayed and by an authorised employee that has been appointed in writing.
- Must have a Troxler Calibration Certificate in place.

- Must have a Troxler Technician Appointment on file and signed and proof of competency within the safety file.

2.65 Ergonomics Regulation of 2019

"competent person" in relation to ergonomics, means a person who- (a) has in respect of the work or task to be performed the required knowledge, training and experience in ergonomics and, where applicable, qualifications specific to ergonomics: provided that where appropriate qualifications and training are registered in terms of the provisions of the National Qualifications Framework Act, 2008 (Act No. 67 of 2008), those qualifications and that training must be regarded as the required qualifications and training; and (b) is familiar with the Act and the applicable regulations made under the Act;

"ergonomic risk" means a characteristic or action in the workplace, workplace conditions, or a combination thereof that may impair overall system performance and human well-being;

"ergonomic risk assessment" means a programme, process, or investigation to identify, analyse, value and prioritise any risk from exposure to ergonomic risks associated with the workplace;

"ergonomics" means the scientific discipline concerned with the fundamental understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimise human well-being and overall system performance;

The ergonomics regulations will apply to any employer or self-employed person who carries out work at the workplace who may expose any person to an ergonomic risk in the workplace and any designer, manufacturer, importer or supplier of machinery, plant, or work systems for the work place.

An employer must, before the commencement of any work that may expose employees to ergonomic risks, have an ergonomic risk assessment performed by a competent person.

The ergonomic risk assessment must be done at intervals not exceeding two years and must include the following;

- a complete hazard identification and all persons who may be affected by the ergonomic risk.
- how employees may be affected by the ergonomic risks;
- the analysis and evaluation of the ergonomic risks;
- the prioritisation of ergonomic risks.

An employer must review the relevant ergonomic risk assessment if:

- such assessment is no longer valid;
- control measures are no longer effective;
- technological or scientific advances allow for more effective control methods;
- there has been a change in -
 - the work methods;
 - the type of work carried out; or
 - the type of equipment used to control the exposure; and
 - an incident occurs or medical surveillance reveals an adverse health effect, where ergonomic risks are identified as a contributing factor.

An employer must ensure that an employee is placed under medical surveillance, which is overseen by an occupational medicine practitioner, if-

- the ergonomic risk assessment referred to in regulation 6 indicates the need for the employee to be placed under medical surveillance; or

- an occupational health practitioner recommends that relevant employees must be under medical surveillance, in which case the employer may call upon an occupational medicine practitioner to ratify the appropriateness of such recommendation.

An employer must ensure that the medical surveillance consists of-

- in the case of a new employee, an initial health examination before the employee commences employment or within 30 days of commencement of such employment;
- a periodic health examination informed by the ergonomic risk assessment, at intervals specified by an occupational medicine practitioner, but not exceeding two years; and
- an exit health examination informed by the ergonomic risk assessment.

2.66 Hazardous Biological Agents

"HBA" means a hazardous biological agent which may cause an infection, allergy or toxicity or otherwise create a risk to human health, subdivided into the following groups:

- (a) Group 1 HBA, an HBA that is unlikely to cause human disease;
- (b) Group 2 HBA, an HBA that may cause human disease and be a hazard to exposed persons, which is unlikely to spread to the community and for which effective prophylaxis and treatment is usually available;
- (c) Group 3 HBA, an HBA that may cause severe human disease, which presents a serious hazard to exposed persons and which may present a risk of spreading to the community, but for which effective prophylaxis and treatment is available; and
- (d) Group 4 HBA, an HBA that cause severe human disease and is a serious hazard to exposed persons and which may present a high risk of spreading to the community, but for which no effective prophylaxis and treatment is available;

Regulations for Hazardous Biological Agents, 2022

HBA reg. 5 Duties of persons who might be exposed to HBAs

5(1) Any person who is or might be exposed to HBAs must obey any lawful instruction given by or on behalf of the employer or a self-employed person regarding—

- (a) the prevention of an uncontrolled release of an HBA;
- (b) the adherence to instructions regarding environmental and health practices, personal hygiene and good housekeeping;
- (c) the appropriate use of personal protective equipment and clothing as prescribed by these Regulations and the documented risk assessment;
- (d) the appropriate wearing of personal samplers, when necessary, to measure personal exposure to airborne HBAs;
- (e) the disposal of materials containing HBAs and the disinfection and decontamination of any workplace contaminated by an HBA;
- (f) the reporting during normal working hours for such medical examination or tests as contemplated in regulation 8(1); and
- (g) information, instruction and training as contemplated in regulation 4.

5(2) Any person must immediately report to the employer, the health and safety representative or self-employed person any possible exposure to an HBA at the workplace.

HBA reg. 6 Risk assessment for HBAs

6(1) A self-employed person must conduct and document the risk assessment to determine if any person could be exposed to an HBA.

6(2) An employer must—



- (a) conduct and document the risk assessment to determine if any person could be exposed to an HBA; and
- (b) ensure that the HBA risk assessment contemplated in paragraph (a) is conducted by a competent person.

6(3) When conducting the risk assessment, as contemplated in subregulation (1) and (2), the employer or self-employed person must take into account, as a minimum, the following matters:

- (a) The nature of the HBA and the possible route of exposure;
- (b) where the HBA might be present and in what form it is likely to be;
- (c) the nature of the work and work processes;
- (d) current control measures in place, effectiveness of control measures and any reasonable deterioration in, or failure thereof; and
- (e) what effects the HBA can have on an employee, including pregnant, immunocompromised and vulnerable employees.

6(4) An employer or a self-employed person must conduct the risk assessment on the basis of all available information, including—

- (a) classification of the HBA into the relevant risk group according to its level of risk of infection as contained in Annexure A;
- (b) recommendations from the manufacturer, supplier or a competent person regarding additional control measures necessary in order to protect the health of persons against such agents as a result of their work;
- (c) information on diseases that may be contracted as a result of the activities at the workplace;
- (d) potential allergenic, infectious or toxic effects that may result from the activities at the workplace; and
- (e) knowledge of diseases from which employees might be suffering and which may be aggravated by conditions at the workplace.

(5) An employer must, in terms of the risk assessment—

- (a) consider the recommendations identified in the risk assessment; and
- (b) develop a documented action plan for the implementation of the recommendations.

6(6) An employer must review the assessment required by subregulation (1)—

- (a) at intervals not exceeding 24 months;
- (b) forthwith, if—
 - (i) the previous assessment is no longer valid;
 - (ii) there has been a change in a process involving an HBA;
 - (iii) there has been a change in the methods, plant or machinery, procedures in the use, handling, control or processing of an HBA;
 - (iv) an incident occurs involving an HBA; or
 - (v) medical surveillance reveals an adverse health effect, where an HBA is identified as a contributing factor. [Please note: numbering as in original.]

6(7) The employer must ensure that all employees, the relevant health and safety representative and health and safety committee are informed of the results of the risk assessment, who may comment thereon.

Both the Client and the Contractor have a duty in terms of health and safety legislation to do all that is reasonably practicable to make members of the public and others being affected by the construction processes aware of possible risks and put preventative measures in place to mitigate the risks. The public and/or visitors shall go through a brief health and safety induction detailing hazards and risks they may be exposed to and what measures are in place to control these hazards and risks.

OTHER HEALTH AND SAFETY SPECIFICATION REQUIREMENTS

The contractor must be aware of the following additional requirements:

What	When	Output
Awareness training (Toolbox Talks)	At least weekly and before hazardous work is carried out	Attendance Register
Health and Safety Committee Meetings	Monthly	Minutes signed by the employer (Contractor) covering: a) Health and Safety Representative Checklist b) Safety report from Safety Officer and Safety Agent
Health and Safety Reports	Monthly	Report covering: a) Incidents/Accidents and Investigations b) Non-conformance c) Health and Safety Training d) HIRA Updates e) Internal and External Audits
General Inspections	As per Health and Safety Specification and OHSA	Report on Health and Safety Specification and OHSA compliance: a) Scaffolding b) Lifting Machinery c) Excavation
General Inspections	Monthly	Covering: a) Firefighting Equipment b) Portable Electrical Equipment c) Ladders
Record keeping	Ongoing	Covering: a) General complaints b) Fines c) General incidents d) MSDS e) Surveillance Medicals f) Inspection Register g) Dept of Labour Notices
Permits	Before commencement with certain activities	As stipulated by the Health and Safety Specification and the OHSA / Construction Regulations

Key:

OHSA – Occupational Health and Safety Act, 1993

ANNEXURE A - REQUIREMENTS FOR THE SAFETY PLAN ASSESSMENT

The Contractor must note that the information below is pertinent to the compilation of their safety plan response to this site-specific safety specification and it would be preferred if the Safety Plan is written in the order of the assessment documented below.

No	Item	Notes
1	Project Directory	Please state details of Project Client, Project Manager / Principal Agent, Safety Agent, Consulting Engineer, etc. (Name, address, contact details).
2	Contractors Directory	Please indicate if you will be using Contractors on this project, if yes, include their details, trade, and FEM details.
3	Other Parties Directory	Please indicate contact details for any services applicable (electricity, water, etc.) as well as Department of Labour and Emergency Services.
4	Project Safety Statement	The Project Safety Statement must be included in the Safety Plan.
5	Health and Safety standards for the project (OHS Act, construction regulations, basic conditions of employment, etc.)	Health and Safety standards must be included in the Safety Plan.
6	Project Particulars	Scope of works must be included in the Safety Plan. This is critical.
7	Existing environment - Structures and Surroundings, Services (Electrical, Water, Sewerage, etc.), Traffic Arrangements, Parking, Access to Site, Storage of Plant and Materials	Please include these items in the plan. The items must be Site Specific, the location of services and services that will be affected must be mentioned.
8	Management Structure for safety on the Project	A structured organogram with names of the responsible people must be included.
9	Appointed Persons, Supervision	The required appointments must be identified. A list of the appointed persons must be included in the Safety Plan.
10	Security Procedures	Please indicate if a security company will be appointed and include the contact information in the Safety Plan.
11	Registers list and inspection frequency	A list of the Inspection Registers that will be on file must be included in the Safety Plan.
12	Design Co-ordination	Please indicate your procedure for implementation of design changes by designer on the project, and the procedures for liaison and implementation of temporary works design on the project.
13	Contractor Co-ordination	Mention must be made of how Contractors will be co-ordinated on site to ensure that they work together

No	Item	Notes
		and not adversely affected health and safety.
14	Housekeeping, stacking and storage	Housekeeping policies and procedures must be included in the Safety Plan.
15	Waste Disposal Arrangements	Waste disposal arrangements procedures must be included in the Safety Plan.
16	Noise and dust control	Please indicate if any noisy operations (more than 85 decibels) will be carried out and what measures will be used to reduce noise exposure to workforce.
17	Training Requirements	Training requirements must be identified and recorded.
18	Plant and Equipment	A list of plant and equipment to be used on site must be included in the Safety Plan.
19	Safety Monitoring Arrangements	The name, contact details and SACPCMP registration status of the Safety Officer must be included in the Safety Plan. State how often the Safety officer will be on site (note safety specification requirement in section 1.7).
20	Information for Contractors	State how information will be given to Contractors on site.
21	Consultation/communication arrangements with Employees	State how information will be given to employees e.g., notice board.
22	Selection of Contractors Procedures	Principal contractor must state what health and safety procedures they will use to assess the competence and resources of their contractors on site.
23	Activities with risk to Health and Safety (Risk Assessment)	A Baseline Risk Assessment must be included in the Safety Plan, it must address the Risks identified in the Safety Specification as well as the risk of any other hazards that the Principal Contractor is aware of that are relevant to the site.
24	Hazardous Substances	Must be listed in the Safety Plan and addressed in the Risk Assessment.
25	First Aid and Medical Procedures	Please indicate name of first aider, position of first aid box, location of nearest medical facility and emergency numbers.
26	Fire and Emergency Procedures	List of emergency telephone numbers must be drawn up and included in the Safety Plan. The position of Fire Extinguishers, Assembly Point location, fire drill frequencies, numbers of fire marshals, etc.
27	Accident and Incident Reporting and investigation	State the Accident and Incident Reporting and investigation procedures of your company.
28	Welfare and Site Facilities	Elaborate on toilets and eating areas, water provision, how will workers be protected during wet weather conditions etc.
29	Site Rules	The Site Rules must be included in the Safety Plan.

No	Item	Notes
30	Personal Protective Equipment	The necessity must be identified by Risk Assessments.
31	Health & Safety File arrangements	Please indicate arrangements for the return of the Health and Safety File to the safety agent at the end of the project.
No	Item	Notes
32	Method Statements/Safe System of Works	A list of Method Statements/Safe System of Works must be included in Safety Plan for all High-risk activities
33	Permits and wayleaves	List of activities that Principal Contractor anticipates will require permits and wayleaves (including those stated in the safety specification) to be included.
34	Fall Prevention and Protection Plan and Fall Rescue Plan	A copy of the Fall Prevention and Protection Plan, fall rescue plan and fall risk assessment must be included in the Safety Plan.
35	Demolition method statement	A copy of the Demolition Method Statement must be included in the Safety Plan.
36	Confined spaces	The Principal Contractors' procedures for managing access, egress and work in confined spaces must be specified in the Safety Plan. Includes permit procedures, air monitoring, PPE, etc.
37	Safety Representatives and Safety Committees	When a project has more than 20 employees a designated employee must be chosen by the labourers to represent them. A safety committee must be established if 2 or more safety representatives are appointed. Please note Safety Specification requirements regarding this section (section 2.12).
38	Have the significant hazards from the safety specification been addressed?	See section 1.9 of the Specifications and ensure practical measures have been detailed in the safety plan.
39	Safety File - Safety Policies in File and Signed by 16(1) CEO.	Safety Policies must be signed and explained to employees.
40	Safety File - A copy of the valid Letter of Good standing from FEM / Workman's Compensation must be on file.	A copy of the valid Letter of Good standing from FEM / Workman's Compensation must be on file.
41	Safety File - Signed copy of the 37.2 Mandatory Agreement	A 37.2 Mandatory Agreement needs to be signed between the Client and the Principal Contractor.
42	Safety File - Appointment letter from Client (as well as 5.1.K)	The Client must appoint the Principal Contractor in writing.
43	Safety File - Notification / Permit	A copy of the Annexure 2 Notification (and proof of submission) to Department of Labour must be available. This can be in the form of a Department stamp, email, or copy of Construction Work Permit.

ANNEXURE B - LEGAL APPOINTMENTS

The contractor shall make the following appointments, as required:

Chief Executive Officer (OSH Act 16(1))
Contract Director/Manager (OSH Act 16(2))
Construction Manager (CR 8(1))
Construction Supervisor (CR 8(7))
Assistant Construction Supervisor (CR 8(8))
Construction Safety Officer (CR 8(5))
Traffic Safety Officer
Safety Representative (where > 20 employees on site)
Construction risk assessor (CR 9(1))
Excavation Supervisor (CR13(1)(a))
Construction Vehicle and Mobile Plant Operator (CR23(1)(d)(i))
Stacking Supervisor (CR28(a))
Fire Extinguishing Equipment Inspector (CR29(h))
Incident Investigator (OSH Act 9(2))

ANNEXURE C - BASELINE RISK ASSESSMENT FOR PROJECT

Irrespective of the risk presented on site, it will be ensured that sufficient supervision is in place on site, that personnel are trained in accordance with legislation, including the requirement for site specific inductions on site to inform personnel on site of the risks and hazards applicable to the site. Site supervision is responsible for ensuring that the control measures required below are implemented on site.

	HAZARD	RISK	MINIMUM CONTROL MEASURES
1.	Asbestos Cement Pipes	Release of asbestos fibres	• Ensure safe access and egress is provided • Erect physical barriers to prevent entry by unauthorised persons, as applicable • damp down exposed area to contain fibre release • Personnel involved to wear asbestos respiratory protection • Exclusion zone may be required • Only Department of Labour registered asbestos contractors may work with asbestos, and strictly in accordance with the requirements of the Asbestos Regulations.
2.	Asbestos Cement Removal	Personnel falling from height Debris falling from height Falls of equipment or tools Release of asbestos fibres	• Notice to be erected informing personnel of fragile roofs, as applicable • Ensure safe access and egress is provided • Erect physical barriers to prevent entry by unauthorised persons and falls from height, as applicable • Roof sheets to be sprayed with water to prevent fibre release, where feasible • Take extreme care to remove sheets whole. Where breakage occurs damp down exposed area to contain fibre release • Personnel involved to wear asbestos respiratory protection • Exclusion zone may be required under area of sheet removal to prevent injury from falls of material from height • Only Department of Labour registered asbestos contractors may work with asbestos, and strictly in accordance with the requirements of the Asbestos Regulations.
3.	Asphalting	Fire Burns to skin Skin disease	• Suitable fire extinguisher to be in place prior to commencement of works • Ensure competent personnel using materials and competent and trained machinery/equipment operators • Ensure there is a safe place of work at all times • Ensure all personnel wear suitable and sufficient personal protective equipment (PPE) including safety boots, reflective vests, and gloves • Health and Safety data sheet required
4.	Compacting and Filling	Contact with tipping materials Contact with moving plant Vehicles/personnel falling into excavations Contact with underground services	• Trained banksman to control vehicles movement • Only trained personnel use plant • Personal Protective Equipment to be worn • Personnel to stand clear as materials are being tipped • Use stop blocks and signs to warn vehicles of excavations, where applicable • Stand clear of plant whilst materials are being compacted • Establish position of underground services and protect services from damage
5.	Compactor Operations	Crushing of feet	• Only trained and competent personnel to use the machine • Ensure operative wears steel toe cap shoes or boots at all times
6.	Cutting Kerbs	Saw slipping, Blade disintegrating, Noise, and Dust	• Only trained operators to use saw and change blades.



	HAZARD	RISK	MINIMUM CONTROL MEASURES
			- Personal Protective Equipment must be worn. Gloves, goggles, dust mask and hearing protection. - People to be kept away from the work area. - Work to cease if people have to pass. - Sparks, etc. to be directed away from people and any flammable material.
7.	Cutting Off Disc	Noise Cuts from machine Fire (particularly at refuelling) Flying debris Blade shattering Contamination by fume created or exhaust fume	- Use competent personnel. - Hot works control- fire extinguisher, fire watchman. (Permit may be required) - PPE to include gloves, eye protection, hearing protection - Solid working position. - Clear working area - Correct grade of blade must be used. - Good ventilation to be provided (forced if necessary). - Changing of wheels to be by competent persons only - Cut off discs must not be used for grinding (grinding disc thicker) - Bystanders to wear hearing protection, as applicable
8.	Excavations (Working in and around)	Toxic fumes Collapse of trench walls/trapping Falling into excavation Collapse of adjacent structures	- Deep excavations / monitor air for toxic fumes - Prevent collapse by battering back sides to a safe angle or install temporary support - Protect vehicles from falling into excavations - provide barriers, signage, etc. as necessary - Beware of undermining of other structures (e.g., buildings, scaffolds) - Record excavation inspections by competent person on daily basis - Provide suitable means of access/egress in case of emergency. - Excavations formed by explosives must be accompanied by method statement approved by Client
9.	Fire	Injuries to workers, pedestrians, residents, road users, damage to property through fire	- No littering on site which could become fire hazard, maintain site in clean condition. - No fires to be lit on site. Have a working fire extinguisher at hand at all times. - No smoking or naked flame near flammable substances or in unauthorised areas - Ensure proper storage/use of Petrol/diesel/flammable substances - post warning notices
10.	Flammable Liquids and Gases (Use of)	Fire Explosion	- No littering on site which could become fire hazard, maintain site in clean condition. - Have a working fire extinguisher at hand at all times. - No smoking or naked flame near flammable substances or in unauthorised areas - Ensure proper storage/use of Petrol/diesel/flammable substances - post warning notices - Equipment must be in good condition, maintained - Personnel using substances must be trained in safe use and risks
11.	Hand tools	Injuries caused by use of hand tool Impact with the tool Falls due to access problems Contamination with substance being worked	- Ensure: - Tool is correct for job - Tool is in good order and suitably sharp - Personnel must be competent/instructed in tool usage and tool safety - Lighting is sufficient - Access is safe, working platform is secure, leading edge is guarded - Operative is wearing all necessary PPE



	HAZARD	RISK	MINIMUM CONTROL MEASURES
12.	Hazardous Substances	Injuries to workers through use of hazardous substances, e.g. injuries to eyes, skin, etc.	- Use substances in accordance with data sheet, particularly reference protective clothing required (example: gloves, goggles, etc.) - Know what First Aid measures are - Have welfare facilities available for washing of hands, etc.
13.	Kerb Laying	Nips at joints Crushing by kerbs Caustic burns	- Impervious gloves and barrier cream to be used to protect hands. - Personnel should be aware of safe manual handling techniques when handling kerbs.
14.	Manhole Rings and Pipes Storage	Rolling of rings Collapse of pipes Crushing of persons Stockpile collapse	- Manhole rings must be stored flat to prevent them being rolled. - Banks of pipe stockpiles are not to be broken until they are ready for use. - Personnel must stand to the side when breaking bands so as not to be hit by falling pipes. - Pipes must be wedged to prevent rolling
15.	Manual Handling of General Items	Muscular skeletal injuries if the load is too heavy or awkward Operative falling/ tripping Contamination from the substance being carried Fall of material being carried	- Personnel should be aware of safe manual handling techniques - Personnel to wear Personal Protective Equipment when carrying items, e.g. safety footwear and gloves. - Ensure good housekeeping against tripping/fall hazards. - Operative to get assistance if load too heavy- team lift if necessary. - Utilise mechanical lifting and carrying aids where possible. - Personnel to ensure access equipment, ladders will take weight of operative and load being carried. - Personnel to ensure item being carried is properly bonded or is not liable to break apart whilst being manually handled.
16.	Members of Public - Protection of	Injury to member of public and road users from site works	- Barriers and signage to be in place - Workers must warn away any members of public from the works - Footpaths and bridges which are open to public must be closed off if in area of works or otherwise made safe so that no injury occurs to members of public - Traffic turning into site - traffic management and signage as required. - Signage to be on road at site entrance warning motorists that construction traffic turning into/out of site access. Keep roads free of mud where possible - Refer to plant risk assessment for details on plant safety precautions - NOTE: SIGNAGE TO BE POSTED ON SITE TO WARN OF CONSTRUCTION TRAFFIC MOVEMENTS. SAFE MEANS OF ACCESS FOR BOTH CONSTRUCTION TRAFFIC TO SITE AND PRIVATE HOMEOWNERS MUST BE AGREED.
17.	Noise and Dust	Breathing in dust can cause long term health problems, noise can damage hearing	- Wear respiratory and hearing protection - Dampen down and minimise dust where possible.
18.	Overhead Services (Working near)	Contact with live services causing injury to personnel Damage caused to services	- Maintain safe clearance levels - Establish presence of any services via proper walk-through survey of site and/or means of service drawings - Wear personal protective clothing - Ensure height of plant/vehicles does not compromise or exceed clearance levels for overhead services



	HAZARD	RISK	MINIMUM CONTROL MEASURES
			Obtain information on clearance levels from service provider
19.	Paving (Laying)	Impact injuries from tile / mallet Caustic burns Sore knees Cuts from cutter	- Impervious gloves to be worn/ barrier cream to be used - Kneelers or similar to be available - Personal protective equipment to be worn - for example if saw used to cut pavers
20.	Plant or Vehicles and Equipment Operation	Workers injured by passing traffic Road users and pedestrians at risk from plant operation Noise	- Implement traffic protection measures - Trained and competent operators must be used - Check plant and vehicles on daily basis before use and record inspections. Maintain vehicles in safe condition. - Medical certificates of fitness required for construction plant. - Crossing of road by construction vehicles or machines must be limited to the practical minimum - Plant and vehicles must be fitted with amber rotating beacons and reverse alarms. - Wear appropriate protective clothing/equipment, e.g., goggles, gloves, ear defenders, etc. as appropriate.
21.	Pre-cast Slab / Unit Laying and Fixing	Falls Falling materials Manual Handling	- Emergency procedures in place and personnel explained details - Use competent personnel - Ensure suitable and sufficient access and egress is provided - Safe place of work must be provided - Ensure all personnel wear correct personal protective equipment - Exclusion zone may be required for protection against risk of falling objects
22.	Road Construction	Risk of being struck by vehicles	- Ensure traffic management measures in place - No construction activities to commence until adequate provision made to accommodate traffic in accordance with the South African Traffic Signs Manual. - Wear reflective waistcoats when working on or near the road or road shoulder as well as any other required personal protective clothing. - Crossing of road by personnel must be limited to the practical minimum - Use of fencing or other barriers as appropriate
23.	Road Marking	Contact with moving vehicles Fire	- Ensure suitable and sufficient road signs are erected, as applicable - Possible road or lane closure may be required - traffic management may be required - Fire Extinguisher to be situated in a suitable area, use dry powder or foam
24.	Road Working - working in or next to road	Injury to workers caused by passing traffic Injury to road users and pedestrians by works	- Flagmen to be used where interface with construction plant with passers-by or where hazard posed by delivery vehicles turning into/out of site. - Traffic management plan to be approved by Municipality and, if necessary, traffic department - No construction activities to commence until adequate provision made to accommodate traffic in accordance with the South African Traffic Signs Manual. - Use safety signage to warn traffic and pedestrians of construction works - Where existing walkways/pavements affected by works, must direct pedestrian traffic away to safe walking area. - Wear reflective waistcoats when working on or near the road or road shoulder as well as any other required personal protective clothing. - Crossing of road by personnel must be limited to the practical minimum - Use of fencing or other barriers as appropriate



	HAZARD	RISK	MINIMUM CONTROL MEASURES
25.	Snakes	Snake bite	• Qualified first aider required for site who can treat snakebite • Snake bite kit to be on hand • Check area before working • Find out nearest hospital and get emergency telephone numbers.
26.	Troxler - use of	Radiation exposure Transportation and storage of nuclear equipment Working in road	Ensure • Training of Troxler gauge operators in basic radiation safety and correct operating procedure to satisfactory level of competence • An enclosed vehicle must be used for transport of the gauge • After use and before storing the gauge, a visual check to be carried out to confirm shutter is properly closed • Warning signage to be displayed at entrance to store indicating presence of radioactive material • Wear reflective vests when working in or near the road or road shoulder as well as any other required personal protective clothing.
27.	Underground Services	Striking of buried services	• Make all necessary enquiries to establish what services are in the area. Consult drawings and advice from service provider (e.g., Municipality or ESKOM) when planning work. • Assume all service to be live (Unless confirmation is received to confirm that services are isolated or otherwise made safe). Do not work near live services without authorisation from site management. • Comply with the requirements of the safe system of work for underground services. • Where available, locate services with a locator • Hand dig around services
28.	Working with Effluent	Contact with effluent causing sickness or disease	• ensure good hygiene facilities • personnel to be competent in work activity • personnel to wear appropriate personal protective equipment such as goggles, overall, gloves and goggles
29.	Hazardous Biological Agents	Serious health effects Fatality Pandemic Epidemic	• Any person who is or might be exposed to HBAs must obey any lawful instruction given by or on behalf of the employer or a self-employed person regarding— • (a) the prevention of an uncontrolled release of an HBA; • (b) the adherence to instructions regarding environmental and health practices, personal hygiene and good housekeeping; • (c) the appropriate use of personal protective equipment and clothing as prescribed by the HBA Regulations and the documented risk assessment; • (d) the appropriate wearing of personal samplers, when necessary, to measure personal exposure to airborne HBAs; • (e) the disposal of materials containing HBAs and the disinfection and decontamination of any workplace contaminated by an HBA; • (f) the reporting during normal working hours for such medical examination or tests as contemplated in the HBA regulations and • (g) information, instruction and training as contemplated in the HBA regulations. • Any person must immediately report to the employer, the health and safety representative or selfemployed person any possible exposure to an HBA at the workplace.



ANNEXURE D - GUIDELINES TO HEALTH AND SAFETY BILL OF QUANTITIES

DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
				R	C
Preparation of principal contractor's site-specific health and safety plan, safety file, risk assessments, fall prevention/protection plan, Annexure 2 notification to Dept of Labour, demolition method statement, other method statements requested to be prepared for safety reasons, permits, amendments to safety plan during course of project, traffic management / accommodation plans, and any other legally required health and safety documentation	Lump sum	Lump sum			
Provision of safety documentation required of the principal contractor for Construction Work Permit application by the safety agent of Dept of Labour, if applicable (note section 2.4 of this safety specification document)	Lump sum	Lump sum			
Provision of current workman's compensation cover for employees for the project, and ensuring that contractors appointed have such cover too	Lump sum	Lump sum			
Health and safety management of principal contractor's employees, visitors, and contractors' employees on site	Lump sum	Lump sum			
Provision of full time Construction Manager for site, provision of Alternate Construction Manager in absence of Construction Manager and provision of sufficient safety supervision on site	Lump sum	Lump sum			
Provision of full time/ part time SACPCMP registered Construction Health & Safety Officer for site (refer to safety specification for full time / part time requirement) and preparation of safety reports after each safety inspection	Lump sum	Lump sum			
Competence assessment, appointment and required competence and safety training of all principal contractor's legally required appointments for site	Lump sum	Lump sum			
Maintenance of principal contractor's plant and equipment on site so as to be in safe condition, including inspection registers, inspections by competent persons, thorough examination certificates, hand over certificates and related documentation	Lump sum	monthly			
Provision of general safety signage (e.g., first aid, firefighting, traffic safety, excavations, PPE, Assembly Point, noise zones, etc.)	Lump sum	monthly			



DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
				R	C
Provision of medical certificates of fitness for employees on site (Annexure 3)	Lump sum	Lump sum			
Provision of personal protective equipment (PPE) by principal contractor to employees and, as applicable, visitors to site, incl. • reflective vests • hard hats • protective footwear • hearing protection • respiratory protection • safety eyewear • gloves • overalls • Safety harnesses and lanyards • Sunblock • UV Protective clothing / hats / eye wear • Protective thermal wear (heat / wind / cold / rain) • Protective firefighting clothing • Arc flash and electrical protective clothing	Lump sum	Lump sum			
Provision of Fall Prevention and Protection Equipment including. • Rope • Lifelines & Self-Retracting Lifelines (SRL) • Anchor Points • Warning Lines & Area demarcation • Fall Arrest Accessories • Fall Rescue Equipment • Passive Fall Protection Equipment • Confined Space Rescue and Retrieval (In elevated work situations) • Etc.	Lump sum	Lump sum			
Provision of Confined Space work equipment & Training • Training • Air Monitoring Equipment • Ventilation Equipment • Entry Equipment • Personal Protective Equipment • Confined Space Rescue and Retrieval Equipment • Communication Equipment • Etc.	Lump sum	Lump sum			
Holding of safety meetings with safety representatives and safety officers on site on at least monthly basis	Lump sum	monthly			



DESCRIPTION	UNIT	QTY	RATE	AMOUNT	
				R	C
Principal contractor construction safety management attendance at health and safety meetings called by client, professional team, or safety agent	Lump sum	monthly			
Provision of site-specific health and safety induction training for all on site	Lump sum	Lump sum			
Conducting of toolbox talks to employees on health and safety issues on a weekly basis	Lump sum	Lump sum			
Provision of sufficient First Aiders for site as per legal requirements	Lump sum	Lump sum			
Provision of First Aid Boxes for site as per legal requirements	Lump sum	Lump sum			
Provision of sufficient fire extinguishing equipment for site	Lump sum	Lump sum			
Fire drills on site at least 6-monthly basis for duration of project	Lump sum	Lump sum			
Provision of welfare facilities for site (drinking water, toilets, soap, means of drying hands, toilets paper, sheltered eating areas, etc.)	Lump sum	Lump sum			
Provision for safe disposal of waste, spill kits, safe housekeeping, and storage practices	Lump sum	Lump sum			
Provision of leading-edge protection, covers to prevent falls	Lump sum	Lump sum			
Provision of fencing at site camp and to protect excavations	Lump sum	Lump sum			
Compilation of consolidated Safety File at Close Out stage and handover of file to safety agent in hard copy or digital format	Lump sum	Lump sum			
Supply of safety caps on all exposed re-bar	Lump sum	Lump sum			
Any other compliance item in site specific safety specification issued by project client/ safety agent with potential cost implication	Lump sum	Lump sum			
• Item 1					
• Item 2					
• Item 3					
• Item 4					
• Item 5					
Principal contractor's general compliance with respect to the Occupational Health and Safety Act, Construction and other health and safety Regulations apart from other provisions in this bill.	Lump sum	Lump sum			
SUMMARY TOTAL OHS COST PROVISION					

**ANNEXURE E - SAFETY SPECIFICATION AND BASELINE RISK ASSESSMENT
ISSUE REGISTER**

Date of Original Safety Specification Compilation	Compiled By	Issue Date
26 November	John McGregor	27 November 2024

Revision Summary	Revised By	Revision Date

Acknowledgement:

I, _____ representing
_____ (Contractor), have satisfied myself with the content of this Health and Safety Specification and shall ensure that our employees and contractors on site comply with the requirements of this document, our safety documentation and health and safety legislation.

Signature of Contractor Date

Comments:

LANGEBERG MUNICIPALITY

TENDER NO. 64/2024

CONSTRUCTION FOR THE UPGRADING OF VARIOUS ROADS IN ASHTON AND MONTAGU

Part C7: Drawings

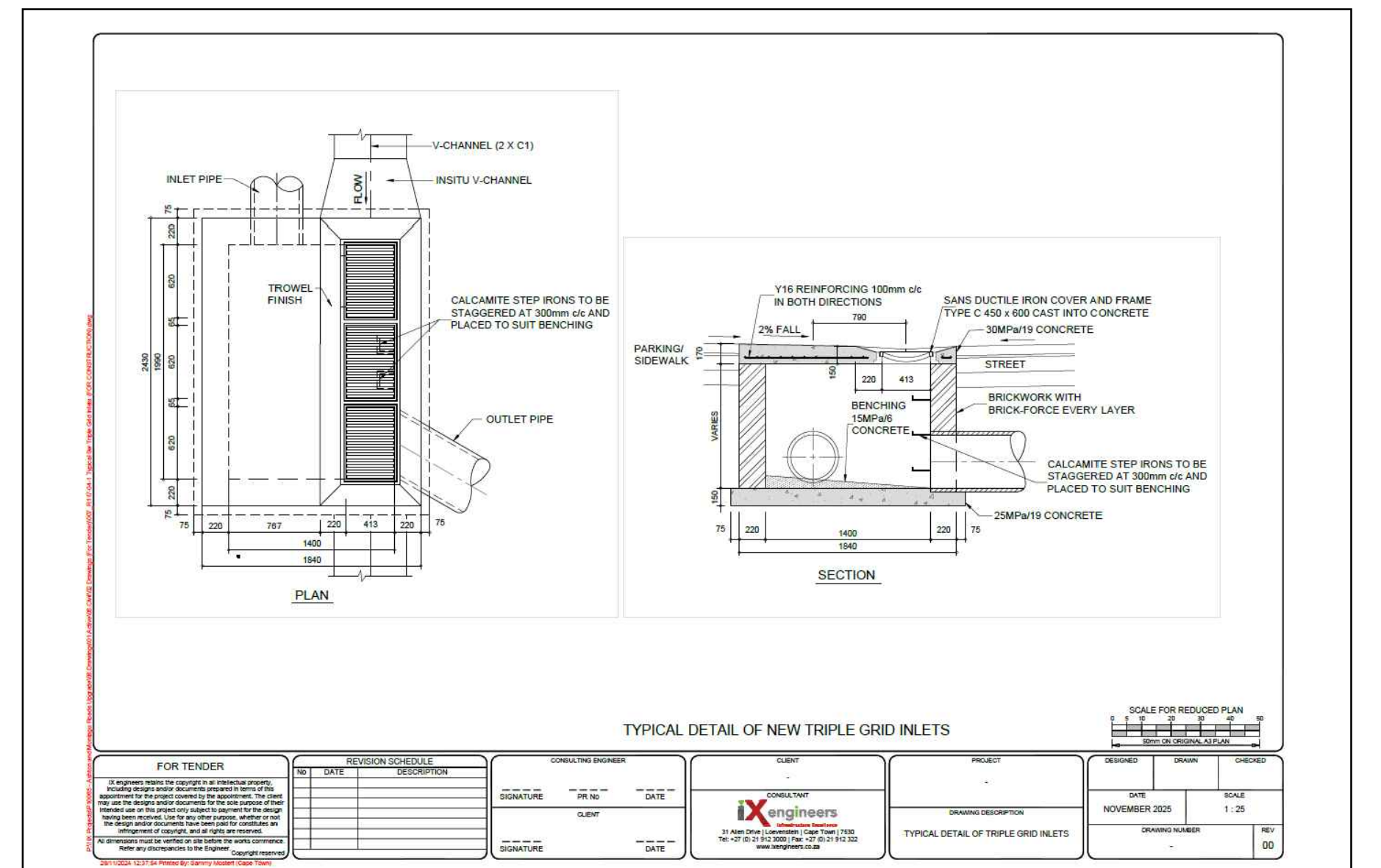
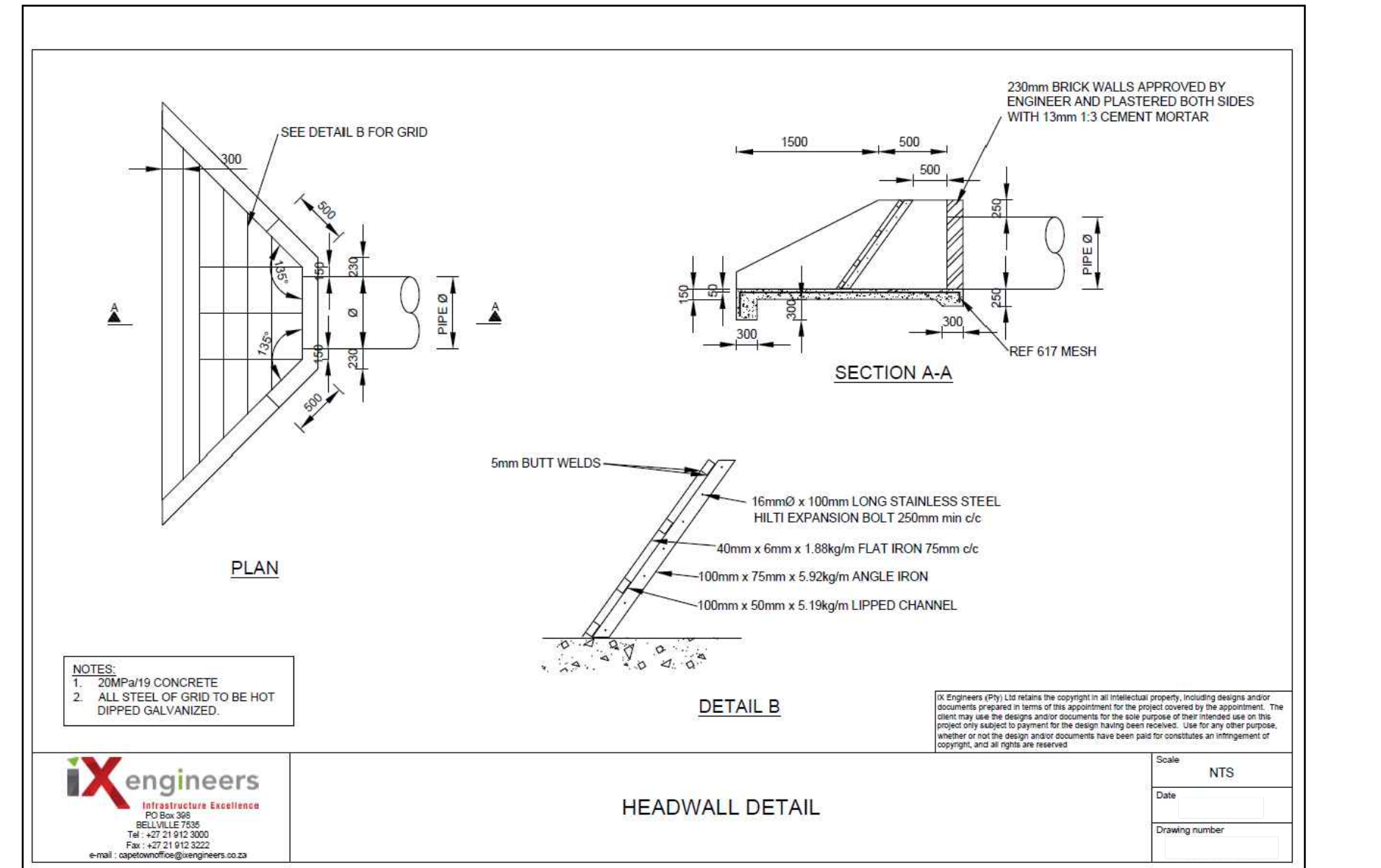
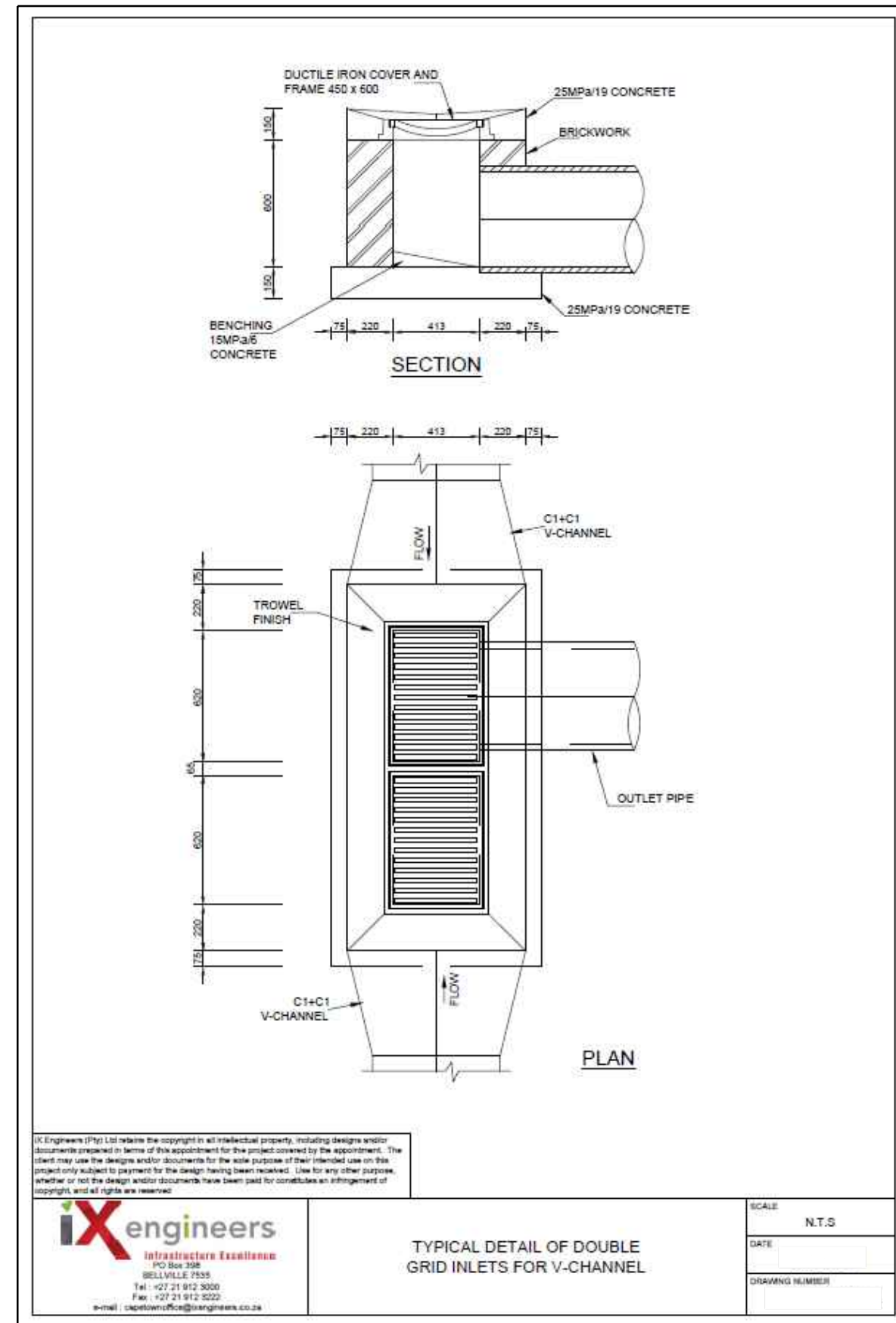
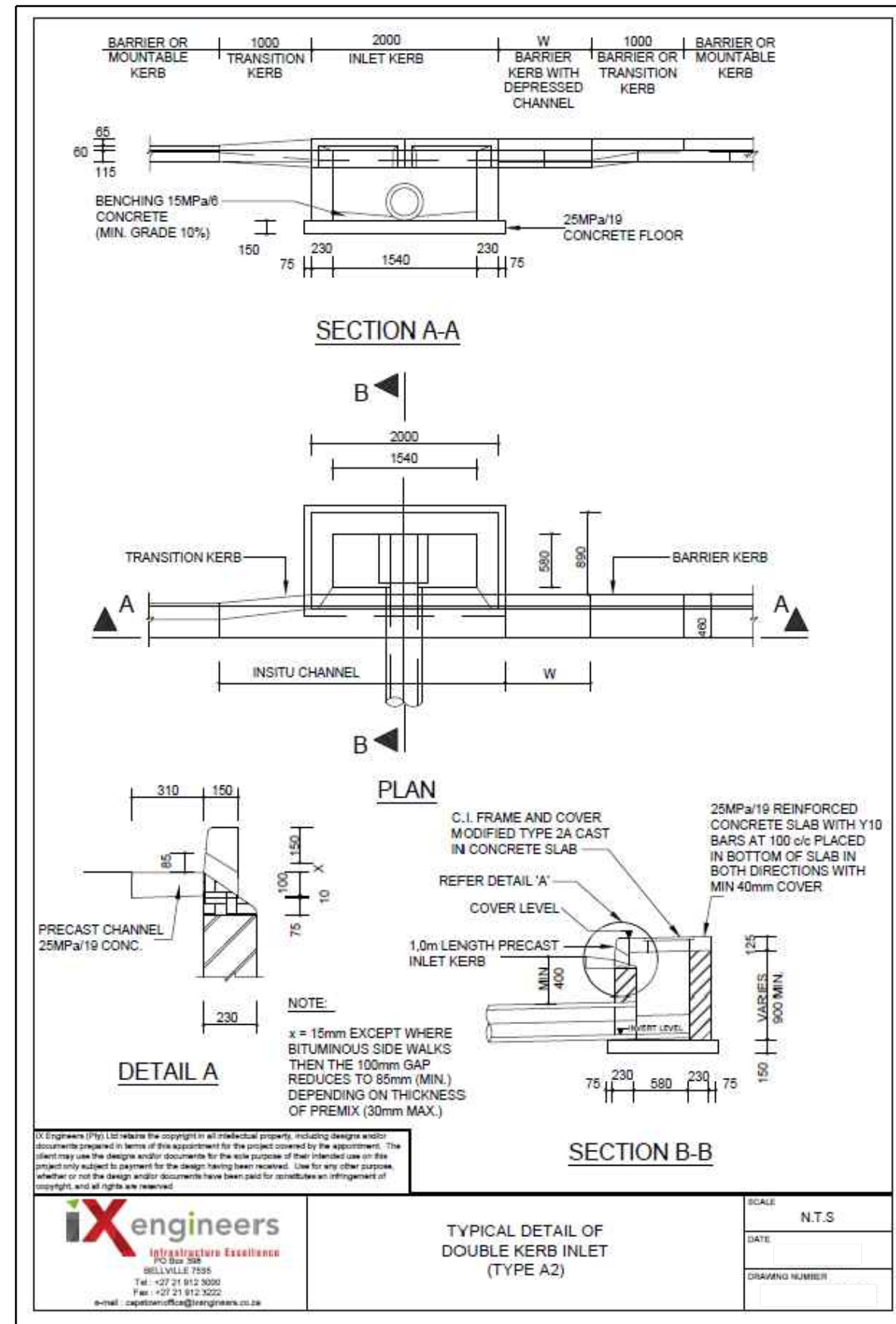
PART C7: DRAWINGS271

The Works shall be carried out in accordance with the following drawings which are included in Part C7: Drawings and form part of the contract documents:

Table 3.2.1: List of Drawings

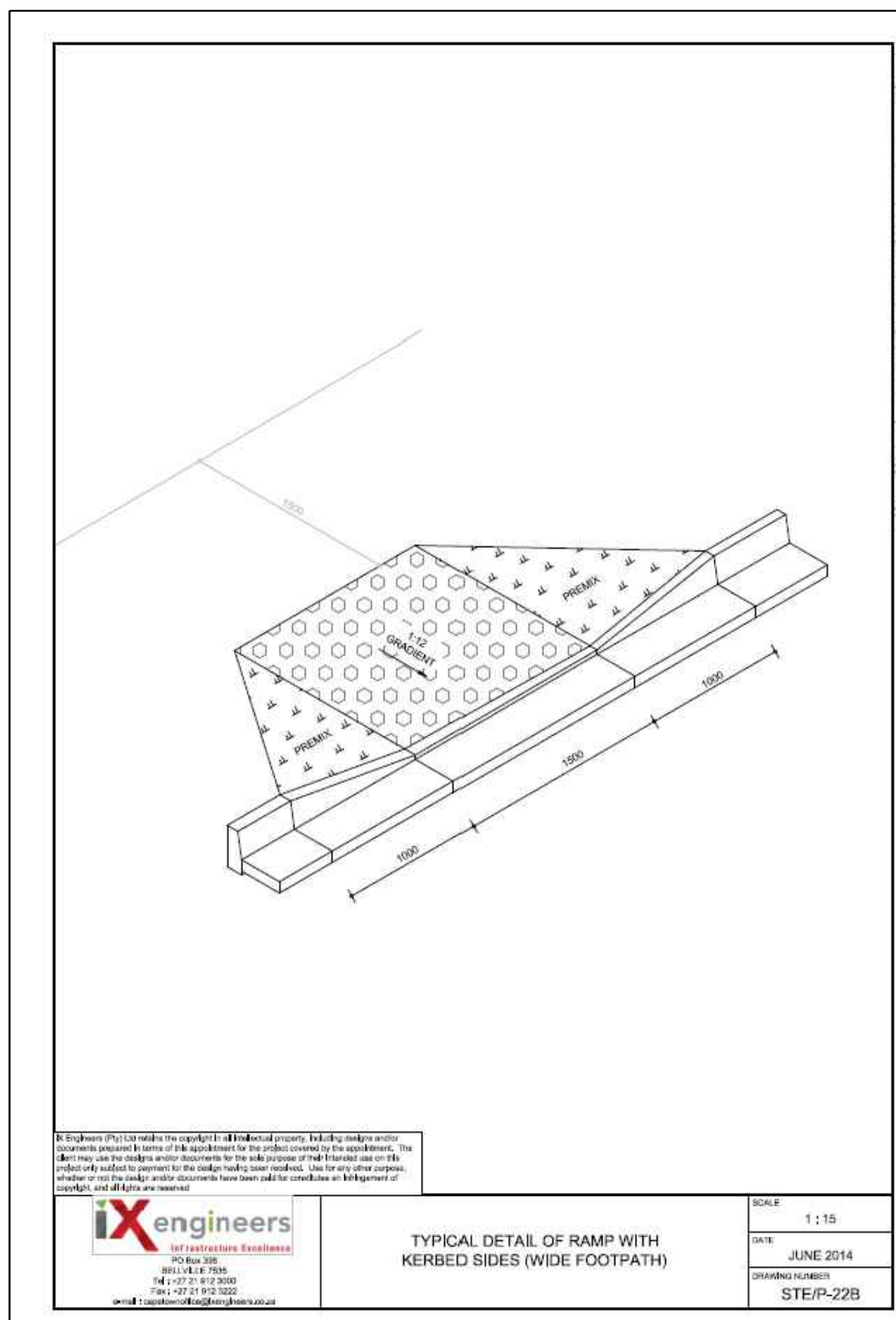
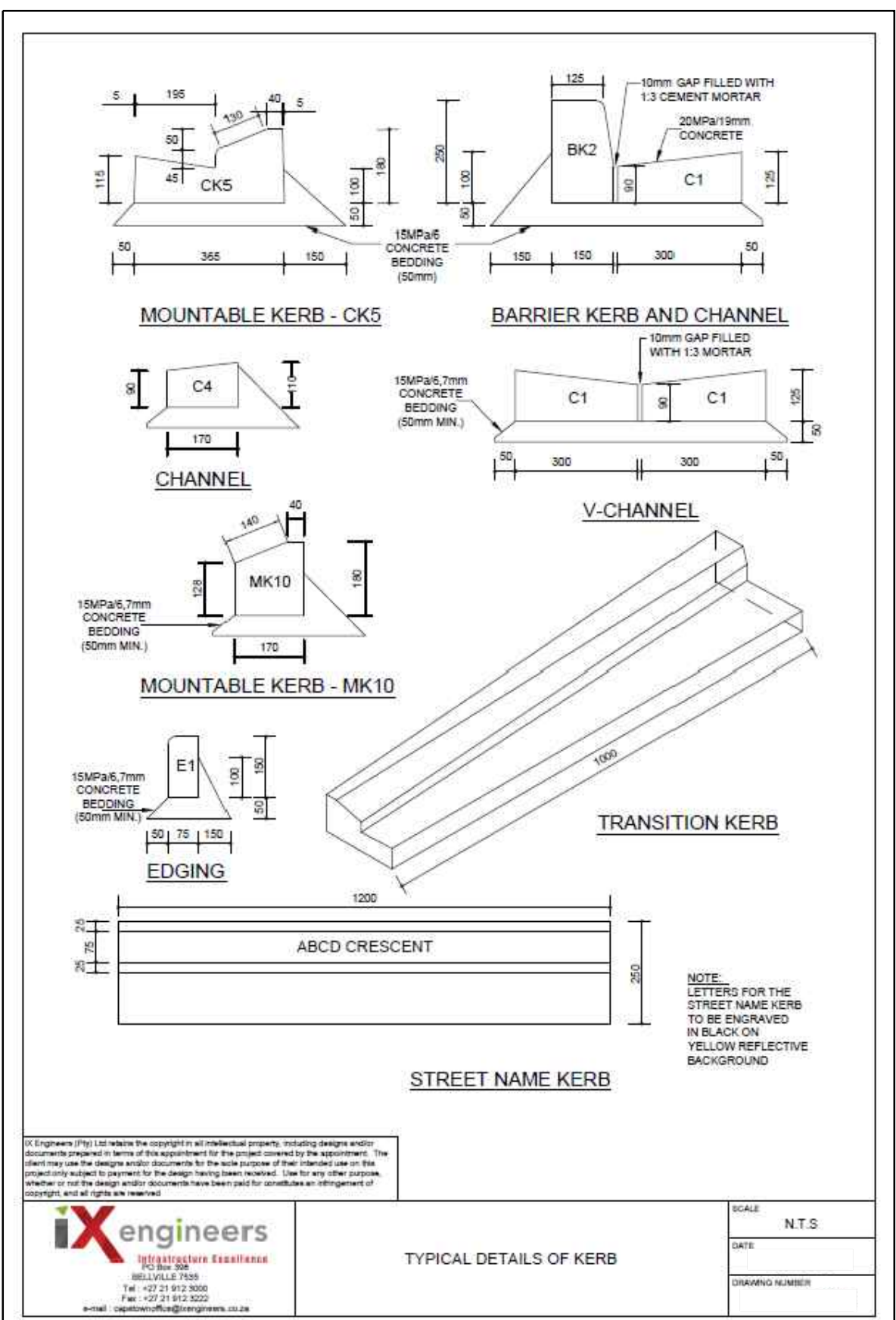
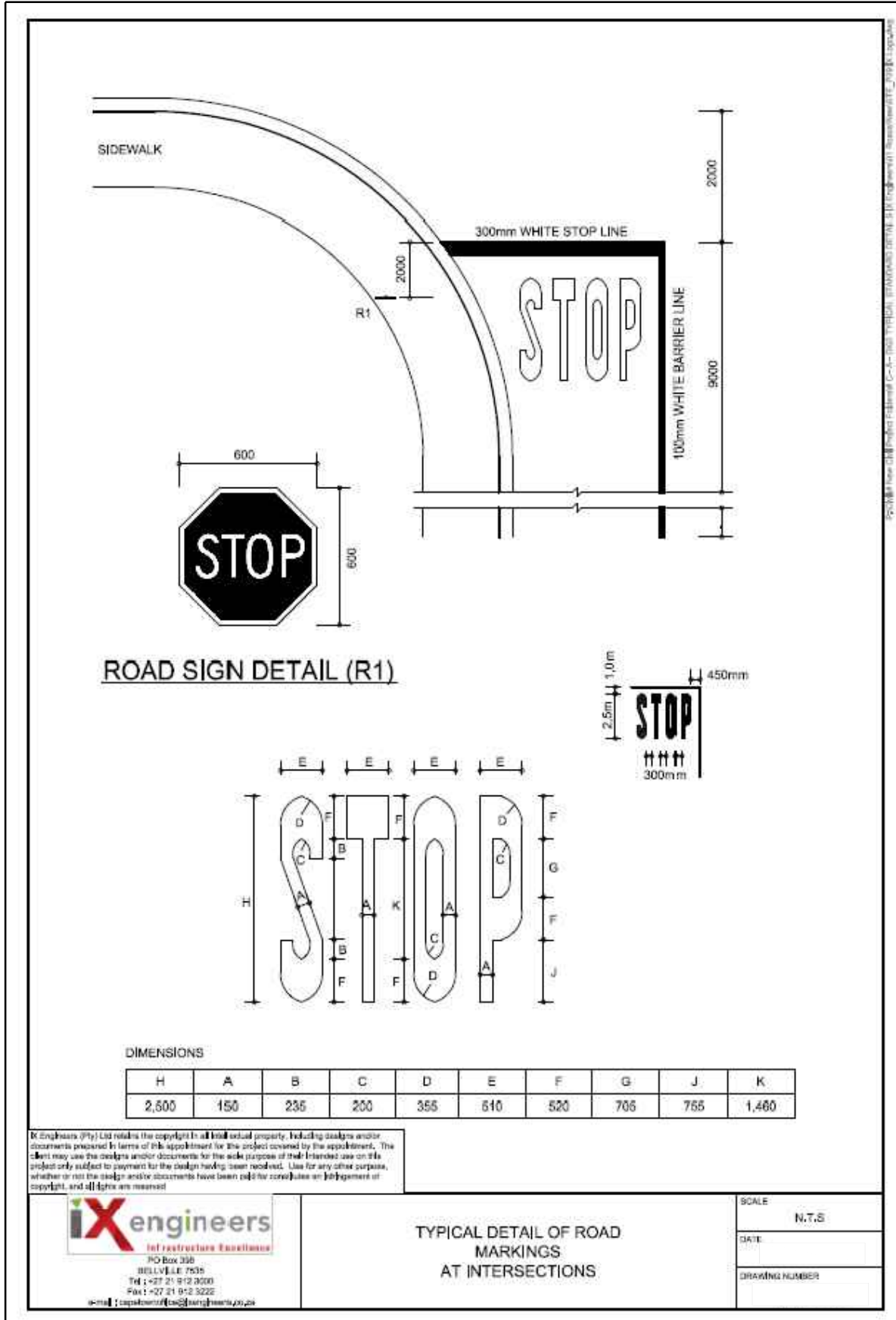
DRAWING NUMBER	DESCRIPTION	SIZE
P10065-00-CIV-LA-001	Locality Plan	A1
P10065-00-CIV-DRD-002	Typical Stormwater Details	A1
P10065-00-CIV-DRD-003	Typical Road Details	A1
P10065-00-CIV-DRD-004	Road Cross Sections	A1
P10065-01-CIV-LA-001	Aalwyn Street – Existing Services	A1
P10065-01-CIV-LA-002	Aalwyn Street – Proposed Road Layout	A1
P10065-01-CIV-LA-003	Aalwyn Street – Proposed Stormwater Layout	A1
P10065-02-CIV-LA-001	Industrial Road – Existing Services	A1
P10065-02-CIV-LA-002	Industrial Road – Proposed Road Layout	A1
P10065-02-CIV-LA-003	Industrial Road – Proposed Stormwater Layout	A1
P10065-03-CIV-LA-001	Zolani – Existing Services	A1
P10065-03-CIV-LA-002	Zolani – Proposed Road Layout	A1
P10065-03-CIV-LA-003	Zolani – Proposed Stormwater Layout	A1
P10065-04-CIV-LA-001	Barlinka Street – Existing Services	A1
P10065-04-CIV-LA-002	Barlinka Street – Proposed Road Layout	A1
P10065-04-CIV-LA-003	Barlinka Street – Proposed Stormwater Layout	A1

(The drawings will be made available electronically by Langeberg Municipality to all tenderers present at the compulsory Site Clarification Meeting)



FOR TENDER					REVISION SCHEDULE <table border="1"> <thead> <tr> <th>No</th> <th>DATE</th> <th>DESCRIPTION</th> <th>DRW</th> <th>CHK</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>					No	DATE	DESCRIPTION	DRW	CHK																																									CONSULTING ENGINEER <table border="1"> <tr> <td colspan="2">SIGNATURE</td> <td colspan="2">PR No</td> <td colspan="2">DATE</td> </tr> <tr> <td colspan="6">CLIENT</td> </tr> <tr> <td colspan="2">SIGNATURE</td> <td colspan="2"></td> <td colspan="2">DATE</td> </tr> <tr> <td colspan="2">DESIGNED</td> <td colspan="2">DRAWN</td> <td colspan="2">CHECKED</td> </tr> <tr> <td colspan="2">B.D.W</td> <td colspan="2">S.M</td> <td colspan="2">F.v.L</td> </tr> <tr> <td colspan="2">-----</td> <td colspan="2">-----</td> <td colspan="2">-----</td> </tr> </table>					SIGNATURE		PR No		DATE		CLIENT						SIGNATURE				DATE		DESIGNED		DRAWN		CHECKED		B.D.W		S.M		F.v.L		-----		-----		-----		CONSULTANT  31 Allen Drive Loevenstein Cape Town 7530 Tel: +27 (0) 21 912 3000 Fax: +27 (0) 21 912 332 www.ixengineers.co.za					CLIENT  MUNISIPALITEIT MUNICIPALITY MASIPALA					PROJECT UPGRADE OF ROADS IN ASHTON AND MONTAGU					DRAWING DESCRIPTION TYPICAL STORMWATER DETAILS					SCALE FOR REDUCED PLAN  <table border="1"> <tr> <td>DATE</td> <td>SCALE</td> <td>ORIGINAL SIZE</td> </tr> <tr> <td>NOV 2024</td> <td>NTS</td> <td>A1</td> </tr> <tr> <td colspan="2">DRAWING NUMBER</td> <td>REV</td> </tr> <tr> <td colspan="2">P10065-00-CIV-DRD-002</td> <td>00</td> </tr> </table>					DATE	SCALE	ORIGINAL SIZE	NOV 2024	NTS	A1	DRAWING NUMBER		REV	P10065-00-CIV-DRD-002		00
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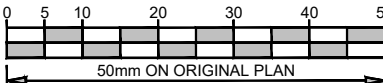
PROJECT

UPGRADE OF ROADS IN
ASHTON AND MONTAGU

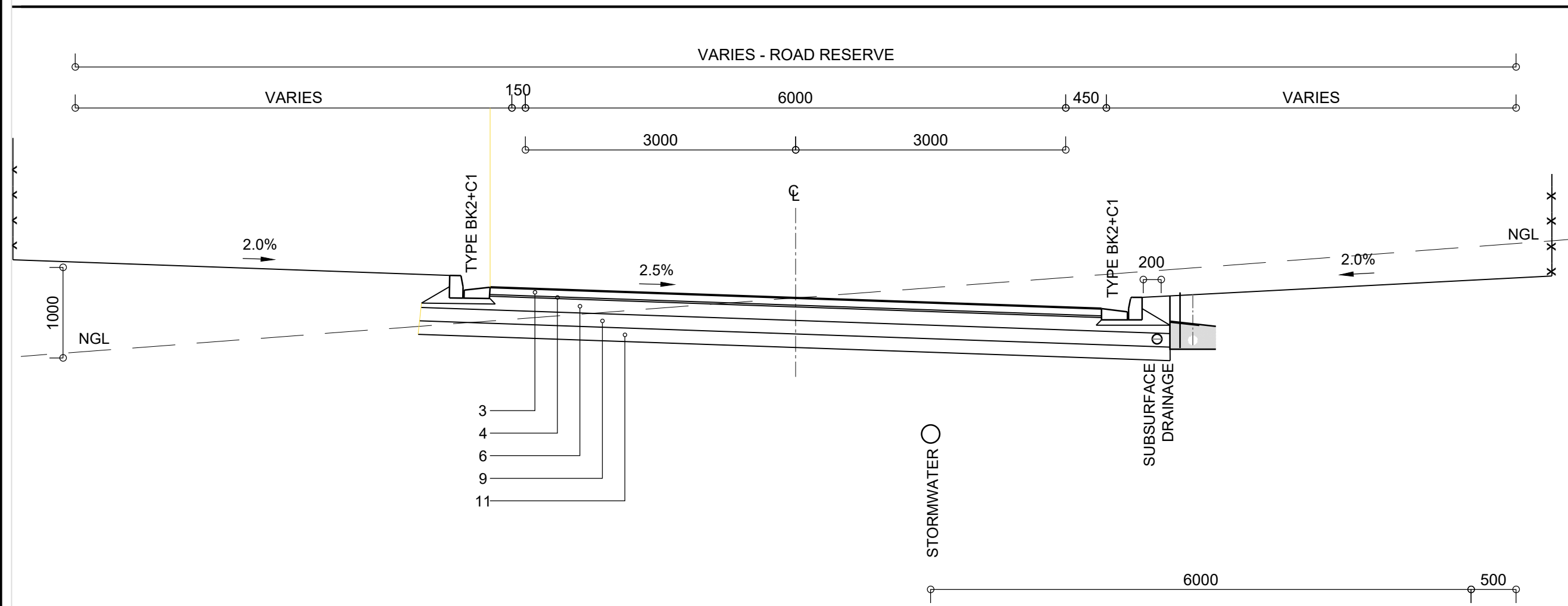
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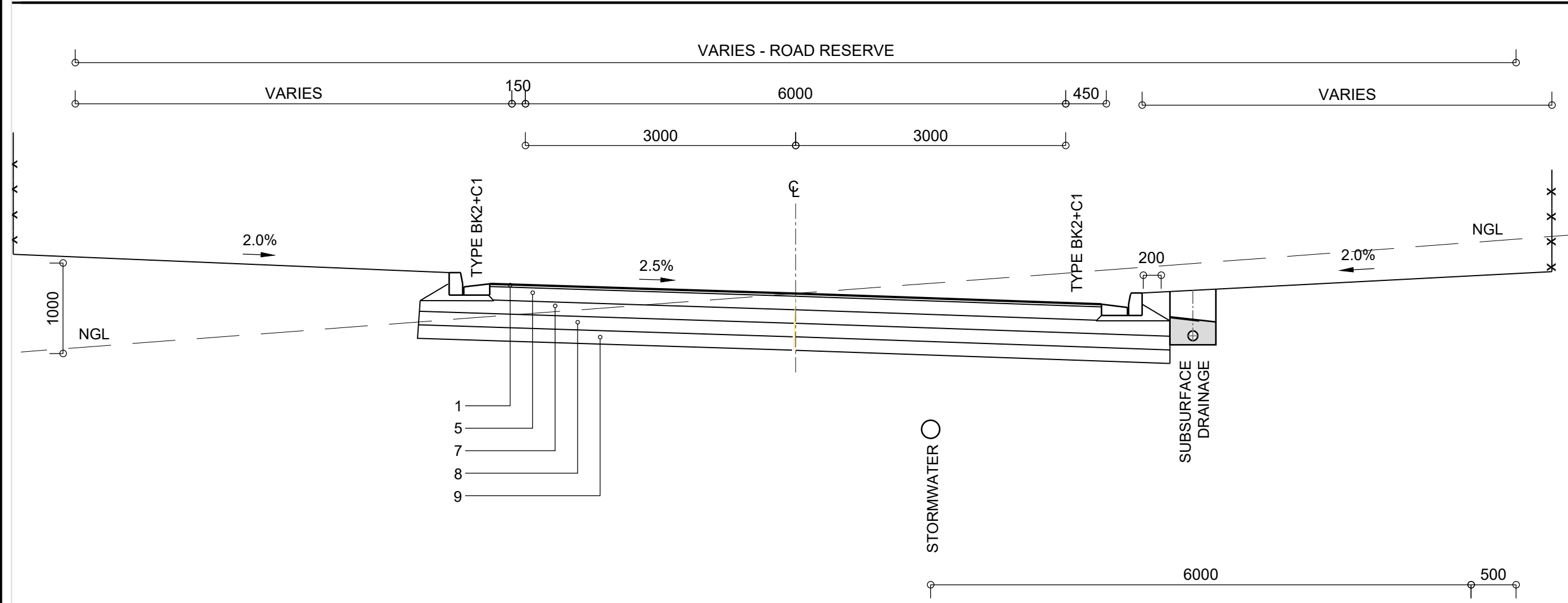
SCALE FOR REDUCED PLAN



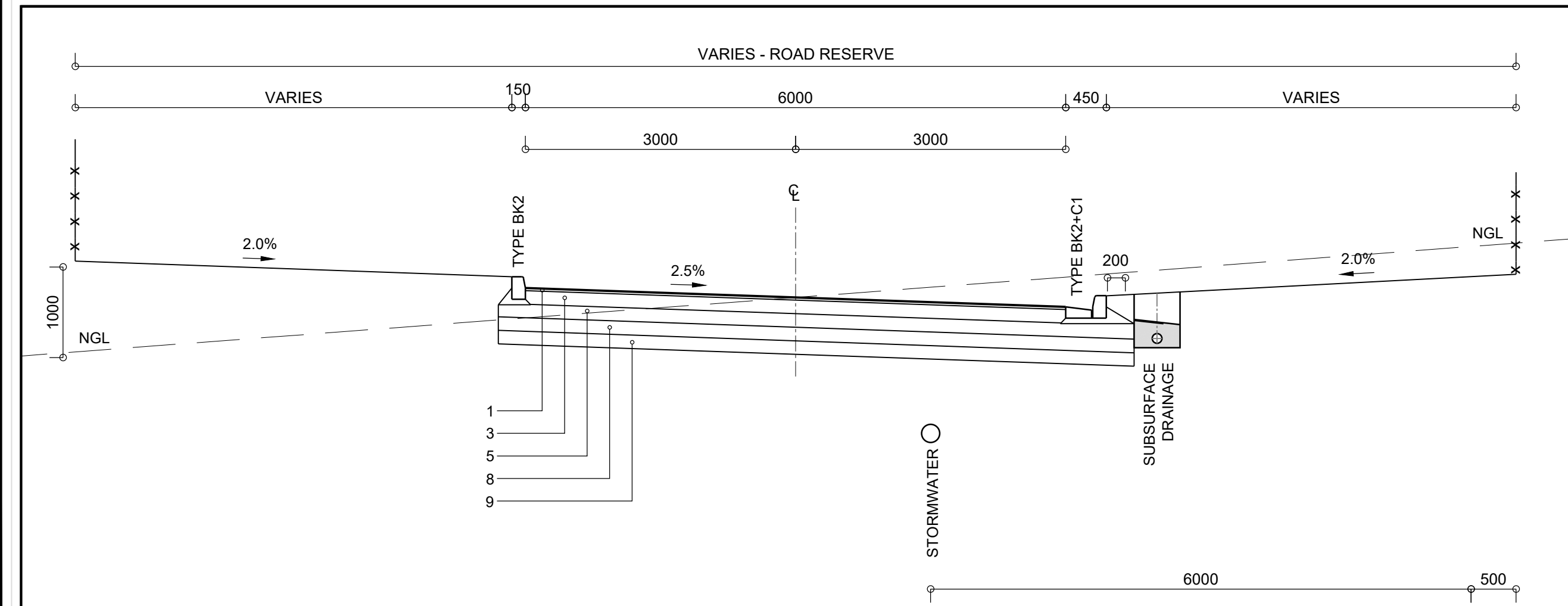
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NOV 2024	NTS	A1
DRAWING NUMBER		REV
P10065-00-CIV-DRD-003		00



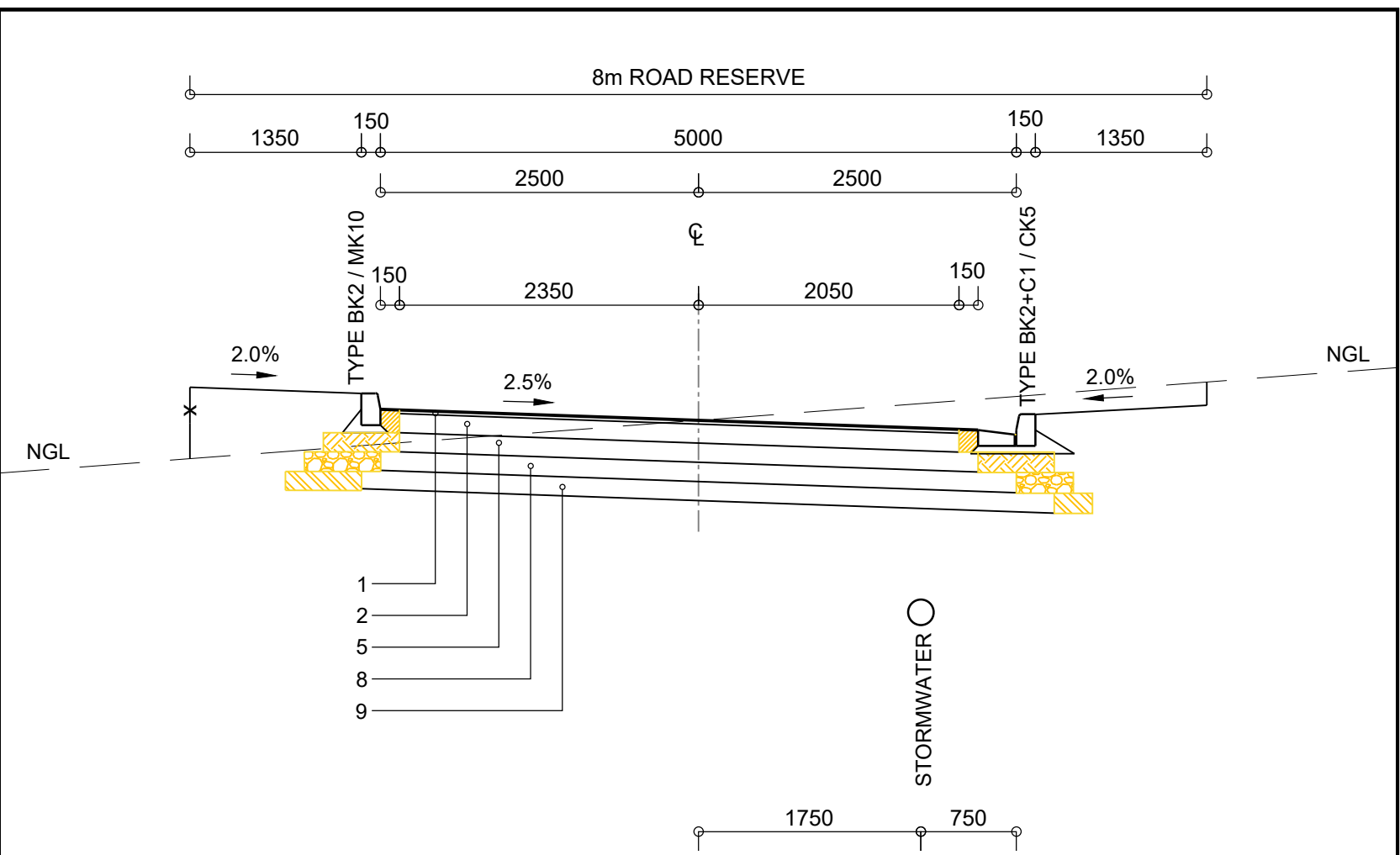
TYPICAL ROAD CROSS SECTION OF
BARLINKA STREET - INTERLOCKING PAVING



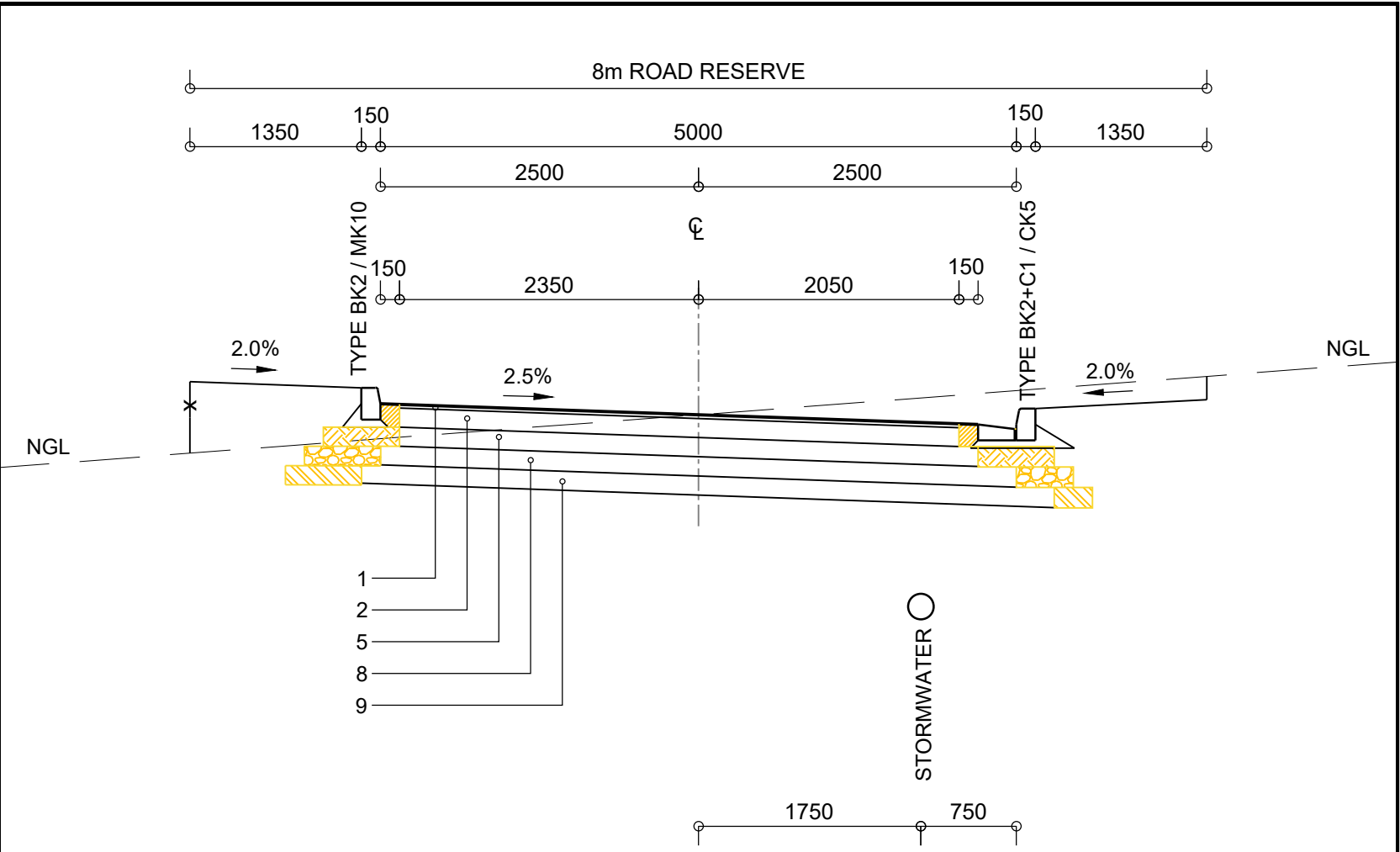
TYPICAL ROAD CROSS SECTION OF
BARLINKA STREET - ASPHALT SURFACING



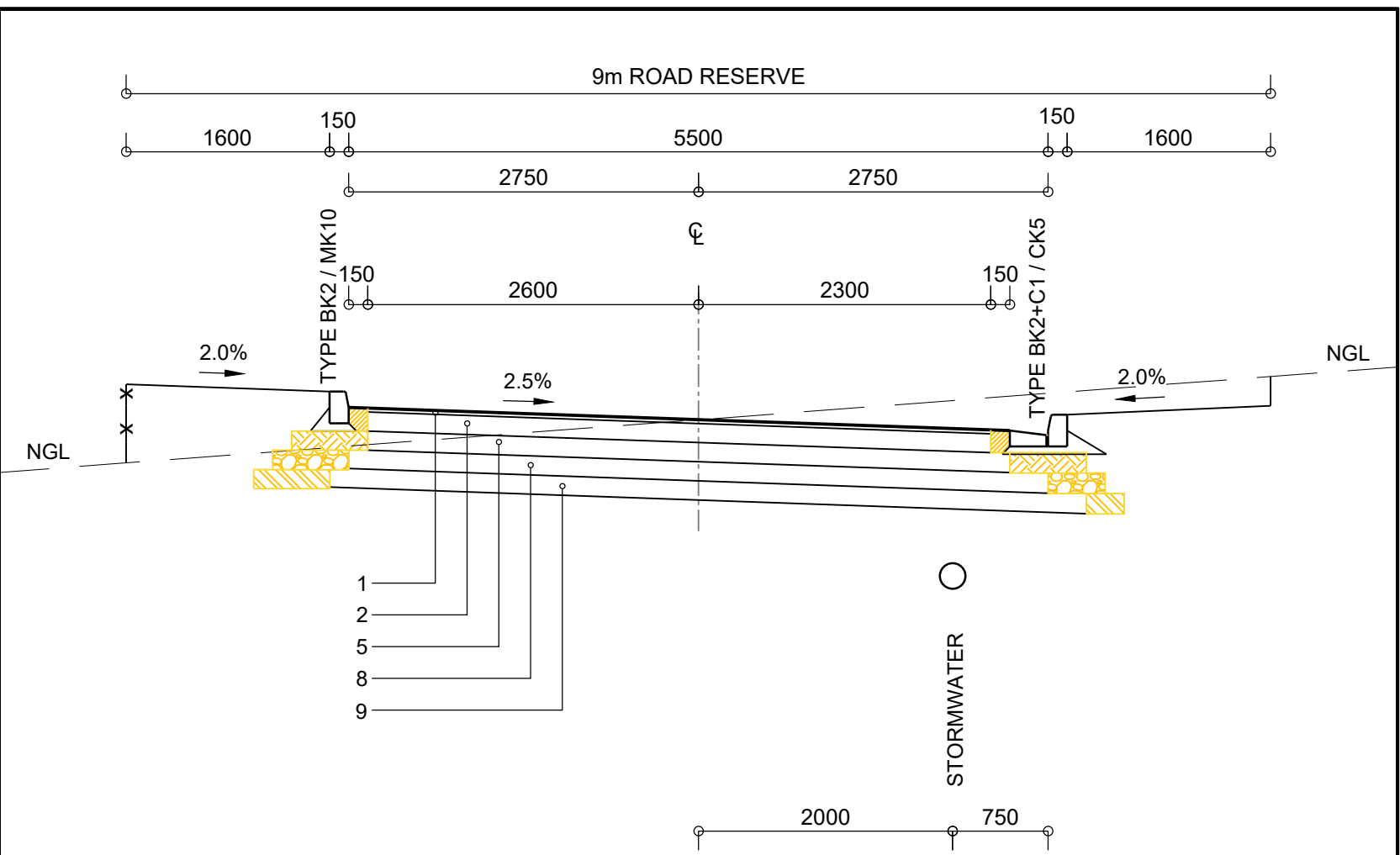
TYPICAL ROAD CROSS SECTION OF
INDUSTRIAL ROAD - ASPHALT SURFACING



TYPICAL ROAD CROSS SECTION OF AALWYN
STREET - ASPHALT SURFACING



TYPICAL ROAD CROSS SECTION OF ROADS IN
ZOLANI - ASPHALT SURFACING



TYPICAL ROAD CROSS SECTION OF ROADS IN
ZOLANI - ASPHALT SURFACING

- LEGEND
- 40mm MEDIUM CONTINUOUSLY GRADED ASPHALT SURFACING (COLTO TYPE, 50/70 PEN GRADE BINDER), 93% MOD AASHTO DENSITY.
 - 30mm FINE CONTINUOUSLY GRADED ASPHALT SURFACING (COLTO TYPE, 50/70 PEN GRADE BINDER), 93% MOD AASHTO DENSITY.
 - 80mm INTERLOCKING CONCRETE PAVING.
 - 20mm SAND BEDDING.
 - 150mm G4 BASE COMPACTED TO 98% MOD AASHTO DENSITY.
 - 150mm C4 STABILIZED SUBBASE COMPACTED TO 98% MOD AASHTO DENSITY
 - 150mm G5 SUBBASE COMPACTED TO 95% MOD AASHTO DENSITY.
 - 125mm G5 SUBBASE COMPACTED TO 95% MOD AASHTO DENSITY.
 - 150mm G7 UPPER SELECTED LAYER COMPACTED TO 93% MOD AASHTO DENSITY (100% FOR SAND)
 - 150mm G9 LOWER SELECTED LAYER (RIP AND RE-COMPACTED) COMPACTED TO 93% MOD AASHTO DENSITY (100% FOR SAND)
 - 150mm IN-SITU (RIP AND RE-COMPACTED) LAYER COMPACTED TO 93% MOD AASHTO DENSITY (100% FOR SAND)

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CONSULTING ENGINEER

SIGNATURE	PR No	DATE

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B.D.W	S.M	F.v.L

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MUNICIPALITEIT MUNICIPALITY MASIPALA

PROJECT

UPGRADE OF ROADS IN
ASHTON AND MONTAGU

DRAWING DESCRIPTION

PROPOSED TYPICAL ROAD
CROSS SECTIONS

SCALE FOR REDUCED PLAN



DATE	SCALE	ORIGINAL SIZE
NOV 2024	1 : 50	A1

DRAWING NUMBER	REV
P10065-00-CIV-DRD-004	00



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NOTES

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SIGNATURE	PR No	DATE
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PROJECT

UPGRADE OF ROADS IN ASHTON AND MONTAGUE

DRAWING DESCRIPTION

LOCALITY PLAN

DATE	SCALE	ORIGINAL SIZE
NOV 2024	1 : 15 000	A1
DRAWING NUMBER		REV
P10065-00-CIV-LA-001		00



LEGEND	
ITEM	EXISTING
WATER	
WATER PIPE	
AIR VALVE	
WATER VALVE	
FIRE HYDRANT	
WATER METER	
SINGLE ERF CONNECTION	
DOUBLE ERF CONNECTION	
WATER ENDCAP	
SEWER	
SEWER PIPE	
ERF CONNECTION	
DISTANCE GRADIENT	
MANHOLE	
MANHOLE NUMBER	
COVER LEVEL	
INVERT LEVEL	
DEPTH	
INCOMING LEVEL	
STORMWATER	
STORMWATER PIPE	
MANHOLE	
CATCHPIT	
IN-OR OUTLET	
DISTANCE GRADIENT	
MANHOLE WITH PIPE	
MANHOLE NUMBER	
COVER LEVEL	
INVERT LEVEL	
DEPTH	
INCOMING LEVEL	
GENERAL	
TREES	
NAME / SIGN BOARD	
LAMP POST	
TRAFFIC ROBOT	
WATER SCOUR VALVE	
POWER BOX	
BUS STOP SHADE	
BENCHMARK	

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PROJECT

UPGRADE OF ROADS IN ASHTON AND MONTAGU

DRAWING DESCRIPTION

ALWYN STREET - EXISTING SERVICES

SCALE FOR REDUCED PLAN

DATE

NOV 2024

SCALE

1:250

ORIGINAL SIZE

A1

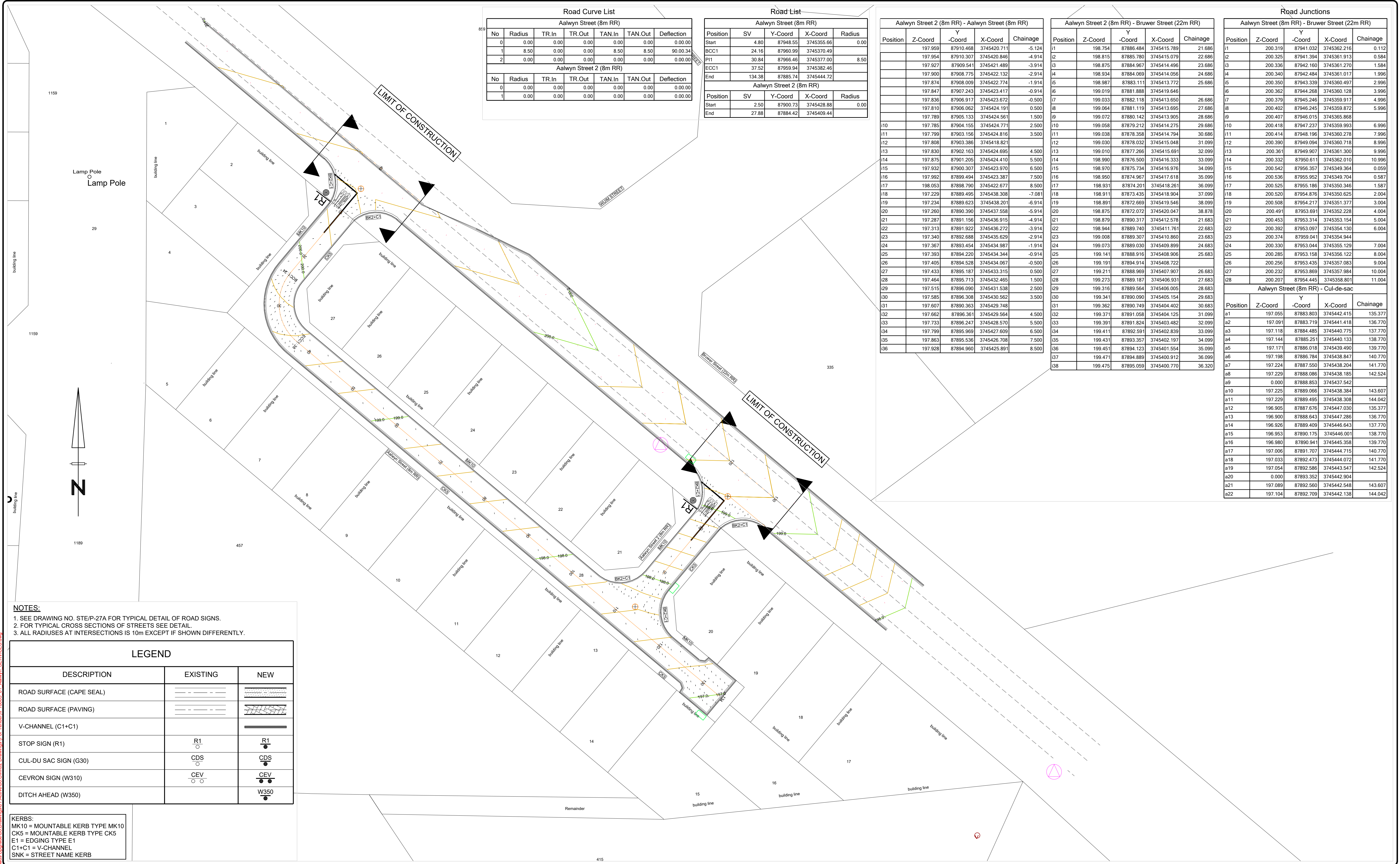
DRAWING NUMBER

P10065-01-CIV-LA-001

REV

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P:\IX Projects\IP10065 - Ashton and Montagu Roads Upgrade\08 Drawings\01 As-built Services.dwg 27/11/2024 11:05:13 Printed By: Sammy Mostert (Cape Town)



NOTES:
1. SEE DRAWING NO. STE/P-27A FOR TYPICAL DETAIL OF ROAD SIGNS.
2. FOR TYPICAL CROSS SECTIONS OF STREETS SEE DETAIL.
3. ALL RADIUSSES AT INTERSECTIONS IS 10m EXCEPT IF SHOWN DIFFERENTLY.

LEGEND		
DESCRIPTION	EXISTING	NEW
ROAD SURFACE (CAPE SEAL)		
ROAD SURFACE (PAVING)		
V-CHANNEL (C1+C1)		
STOP SIGN (R1)		
CUL-DU SAC SIGN (G30)		
CEVRON SIGN (W310)		
DITCH AHEAD (W350)		

KERBS:
MK10 = MOUNTABLE KERB TYPE MK10
CK5 = MOUNTABLE KERB TYPE CK5
E1 = EDGING TYPE E1
C1+C1 = V-CHANNEL
SNK = STREET NAME KERB

Road Curve List						
Aalwyn Street (8m RR)						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0.00.00
1	8.50	0.00	0.00	8.50	8.50	90.00.34
2	0.00	0.00	0.00	0.00	0.00	0.00.00
Aalwyn Street 2 (8m RR)						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0.00.00
1	0.00	0.00	0.00	0.00	0.00	0.00.00

Road List				
Aalwyn Street (8m RR)				
Position	SV	Y-Coord	X-Coord	Radius
Start	4.80	87948.55	3745355.66	0.00
BCC1	24.16	87960.99	3745370.49	
PI1	30.84	87966.46	3745377.00	8.50
ECC1	37.52	87959.94	3745382.46	
End	134.38	87885.74	3745444.72	
Aalwyn Street 2 (8m RR)				
Position	SV	Y-Coord	X-Coord	Radius
Start	2.50	87900.73	3745428.88	0.00
End	27.88	87884.42	3745409.44	

Aalwyn Street 2 (8m RR) - Aalwyn Street (8m RR)				
Position	Z-Coord	Y-Coord	X-Coord	Chainage
1	197.959	87910.468	3745420.711	-5.124
2	197.954	87910.307	3745420.846	-4.914
3	197.927	87909.541	3745421.489	-3.914
4	197.900	87908.775	3745422.132	-2.914
5	197.874	87908.009	3745422.774	-1.914
6	197.847	87907.243	3745423.417	-0.914
7	197.836	87906.917	3745423.672	-0.500
8	197.810	87906.062	3745424.191	0.500
9	197.789	87905.133	3745424.561	1.500
10	197.785	87904.155	3745424.771	2.500
11	197.799	87903.156	3745424.816	3.500
12	197.808	87903.386	3745418.821	
13	197.830	87902.163	3745424.695	4.500
14	197.875	87901.205	3745424.410	5.500
15	197.932	87900.307	3745423.970	6.500
16	197.992	87899.494	3745423.387	7.500
17	198.053	87898.790	3745422.677	8.500
18	197.229	87898.495	3745438.308	-7.081
19	197.234	87889.623	3745438.201	-6.914
20	197.260	87890.390	3745437.558	-5.914
21	197.287	87891.156	3745436.915	-4.914
22	197.313	87891.922	3745436.272	-3.914
23	197.340	87892.688	3745435.629	-2.914
24	197.367	87893.454	3745434.987	-1.914
25	197.393	87894.220	3745434.344	-0.914
26	197.405	87894.528	3745434.067	-0.500
27	197.433	87895.187	3745433.315	0.500
28	197.464	87895.713	3745432.465	1.500
29	197.515	87896.090	3745431.538	2.500
30	197.585	87896.308	3745430.562	3.500
31	197.607	87890.363	3745429.748	
32	197.662	87896.361	3745429.564	4.500
33	197.733	87896.247	3745428.570	5.500
34	197.799	87895.969	3745427.609	6.500
35	197.863	87895.536	3745426.708	7.500
36	197.928	87894.960	3745425.891	8.500

Aalwyn Street 2 (8m RR) - Bruwer Street (22m RR)				
Position	Z-Coord	Y-Coord	X-Coord	Chainage
1	198.754	87886.484	3745415.789	21.686
2	198.815	87885.780	3745415.079	22.686
3	198.875	87884.967	3745414.496	23.686
4	198.934	87884.069	3745414.056	24.686
5	198.987	87883.111	3745413.772	25.686
6	199.019	87881.888	3745419.646	
7	199.033	87882.118	3745413.650	26.686
8	199.064	87881.119	3745413.695	27.686
9	199.072	87880.142	3745413.905	28.686
10	199.058	87879.212	3745414.275	29.686
11	199.038	87878.358	3745414.794	30.686
12	199.030	87878.032	3745415.048	31.099
13	199.010	87877.266	3745415.691	32.099
14	198.990	87876.500	3745416.333	33.099
15	198.970	87875.734	3745416.976	34.099
16	198.950	87874.967	3745417.618	35.099
17	198.931	87874.201	3745418.261	36.099
18	198.911	87873.435	3745418.904	37.099
19	198.891	87872.669	3745419.546	38.099
20	198.875	87872.072	3745420.047	38.878
21	198.879	87890.317	3745412.578	21.683
22	198.944	87889.740	3745411.761	22.683
23	199.008	87889.307	3745410.860	23.683
24	199.073	87889.030	3745409.899	24.683
25	199.141	87888.916	3745408.906	25.683
26	199.191	87894.914	3745408.722	
27	199.211	87888.969	3745407.907	26.683
28	199.273	87889.187	3745406.931	27.683
29	199.316	87889.564	3745406.005	28.683
30	199.341	87890.090	3745405.154	29.683
31	199.362	87890.749	3745404.402	30.683
32	199.371	87891.058	3745404.125	31.099
33	199.391	87891.824	3745403.482	32.099
34	199.411	87892.591	3745402.839	33.099
35	199.431	87893.357	3745402.197	34.099
36	199.451	87894.123	3745401.554	35.099
37	199.471	87894.889	3745400.912	36.099
38	199.475	87895.059	3745400.770	36.320

Road Junctions				
Aalwyn Street (8m RR) - Bruwer Street (22m RR)				
Position	Z-Coord	Y-Coord	X-Coord	Chainage
1	200.319	87941.032	3745362.216	0.112
2	200.325	87941.384	3745361.913	0.584
3	200.336	87942.160	3745361.270	1.584
4	200.340	87942.484	3745361.017	1.996
5	200.350	87943.339	3745360.497	2.996
6	200.362	87944.268	3745360.128	3.996
7	200.379	87945.246	3745359.917	4.996
8	200.402	87946.245	3745359.872	5.996
9	200.407	87946.015	3745365.868	
10	200.418	87947.237	3745359.993	6.996
11	200.414	87948.196	3745360.278	7.996
12	200.390	87949.094	3745360.718	8.996
13	200.361	87949.907	3745361.300	9.996
14	200.332	87950.611	3745362.010	10.996
15	200.642	87956.357	3745349.364	0.059
16	200.536	87955.952	3745349.704	0.587
17	200.525	87955.186	3745350.346	1.587
18	200.520	87954.876	3745350.625	2.004
19	200.508	87954.217	3745351.377	3.004
20	200.491	87953.691	3745352.228	4.004
21	200.453	87953.314	3745353.154	5.004
22	200.392	87953.097	3745354.130	6.004
23	200.374	87959.041	3745354.944	
24	200.330	87953.044	3745355.129	7.004
25	200.285	87953.158	3745356.122	8.004
26	200.256	87953.435	3745357.083	9.004
27	200.232	87953.869	3745357.984	10.004
28	200.207	87954.445	3745358.801	11.004
Aalwyn Street (8m RR) - Cul-de-sac				
Position	Z-Coord	Y-Coord	X-Coord	Chainage
a1	197.055	87883.803	3745442.415	135.377
a2	197.091	87883.719	3745441.418	136.770
a3	197.118	87884.485	3745440.775	137.770
a4	197.144	87885.251	3745440.133	138.770
a5	197.171	87886.018	3745439.490	139.770
a6	197.198	87886.784	3745438.847	140.770
a7	197.224	87887.550	3745438.204	141.770
a8	197.229	87888.086	3745438.185	142.524
a9	0.000	87888.853	3745437.542	
a10	197.225	87889.066	3745438.384	143.607
a11	197.229	87889.495	3745438.308	144.042
a12	196.905	87887.676	3745447.030	135.377
a13	196.900	87888.643	3745447.286	136.770
a14	196.926	87889.409	3745446.643	137.770
a15	196.953	87890.175	3745446.001	138.770
a16	196.980	87890.941	3745445.358	139.770
a17	197.006	87891.707	3745444.715	140.770
a18	197.033	87892.473	3745444.072	141.770
a19	197.054	87892.586	3745443.547	142.524
a20	0.000	87893.352	3745442.904	
a21	197.089	87892.560	3745442.548	143.607
a22	197.104	87892.709	3745442.138	144.042

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SIGNATURE	DATE	
DESIGNED	DRAWN	CHECKED

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PROJECT

UPGRADE OF ROADS IN
ASHTON AND MONTAGU

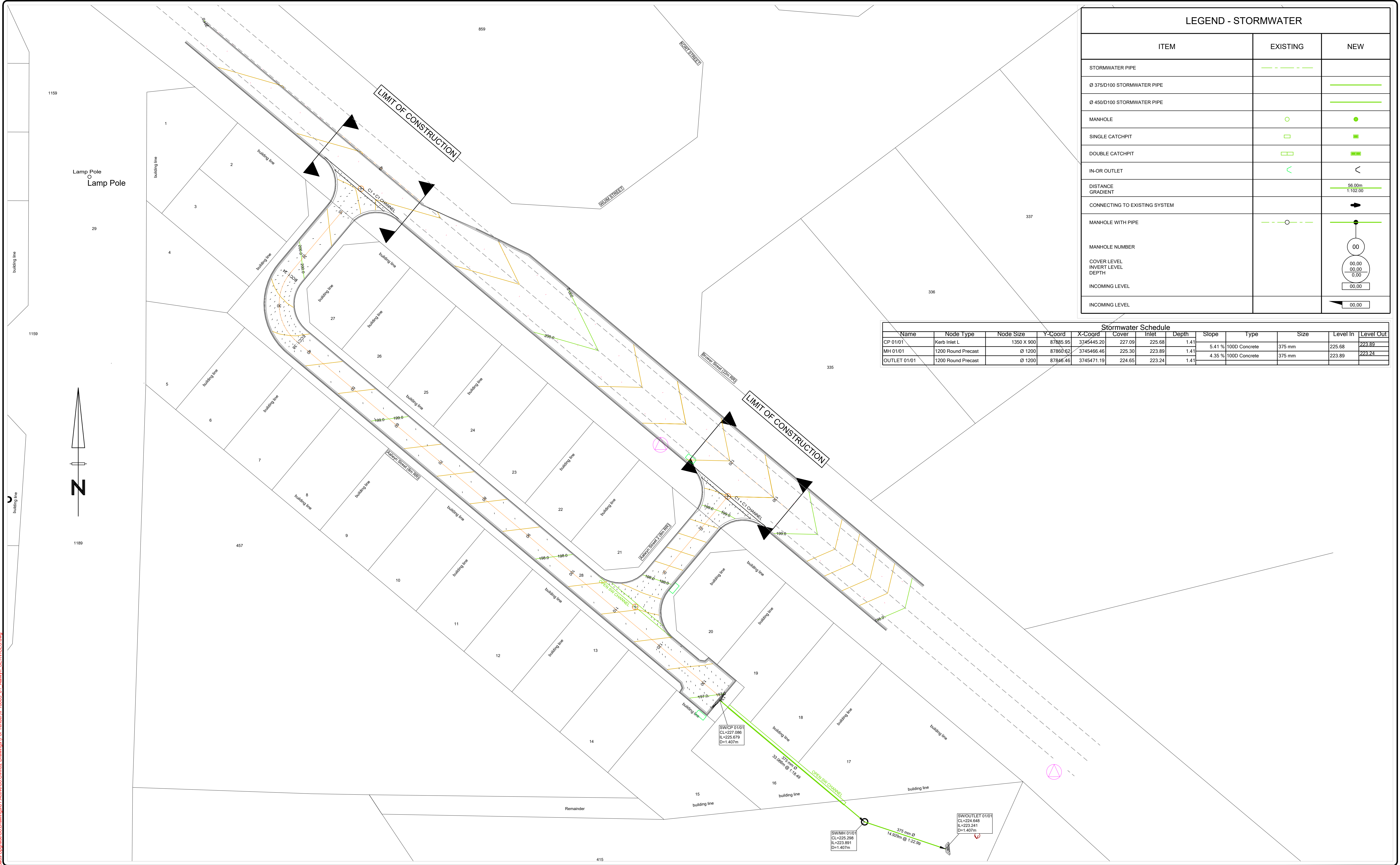
DRAWING DESCRIPTION

AALWYN STREET -
PROPOSED ROAD LAYOUT

SCALE FOR REDUCED PLAN

DATE	SCALE	ORIGINAL SIZE
NOV 2024	1:250	A1
DRAWING NUMBER		REV
P10065-01-CIV-LA-002		00

27/11/2024 3:22:45 Printed By: Sammy Mostert (Cape Town)



LEGEND - STORMWATER		
ITEM	EXISTING	NEW
STORMWATER PIPE		
Ø 375/D100 STORMWATER PIPE		
Ø 450/D100 STORMWATER PIPE		
MANHOLE		
SINGLE CATCHPIT		
DOUBLE CATCHPIT		
IN-OR OUTLET		
DISTANCE		56.00m
GRADIENT		1:102.00
CONNECTING TO EXISTING SYSTEM		
MANHOLE WITH PIPE		
MANHOLE NUMBER		00
COVER LEVEL		00.00
INVERT LEVEL		00.00
DEPTH		0.00
INCOMING LEVEL		00.00

Stormwater Schedule											
Name	Node Type	Node Size	Y-Coord	X-Coord	Cover	Inlet	Depth	Slope	Type	Size	Level In
CP 01/01	Kerb Inlet L	1350 X 900	87885.95	3745445.20	227.09	225.68	1.41	5.41 %	100D Concrete	375 mm	225.68
MH 01/01	1200 Round Precast	Ø 1200	87860.62	3745466.46	225.30	223.89	1.41	4.35 %	100D Concrete	375 mm	223.89
OUTLET 01/01	1200 Round Precast	Ø 1200	87846.46	3745471.19	224.65	223.24	1.41				223.24

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DESIGNED	DRAWN	CHECKED

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CLIENT

LANGEBERG
MUNICIPALITEIT MUNICIPALITY MASIPALA

PROJECT

UPGRADE OF ROADS IN
ASHTON AND MONTAGU

DRAWING DESCRIPTION

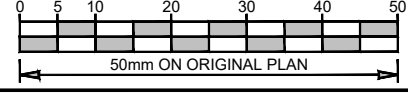
AALWYN STREET -
PROPOSED STORMWATER
LAYOUT

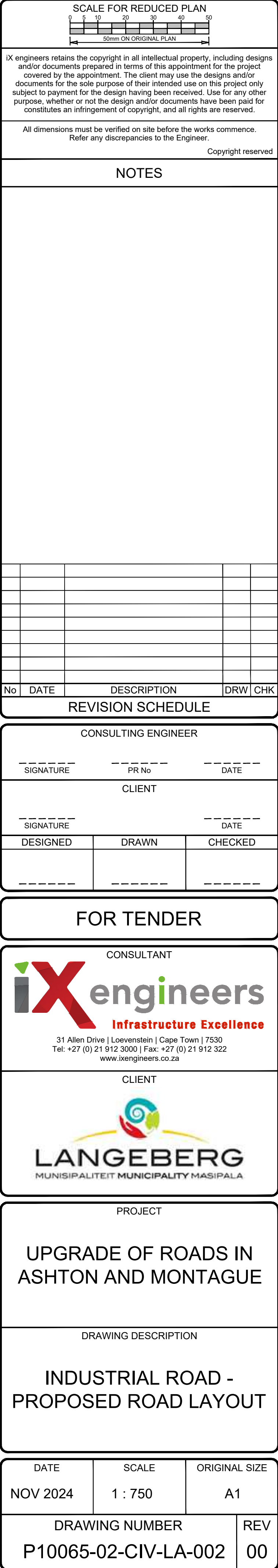
SCALE FOR REDUCED PLAN

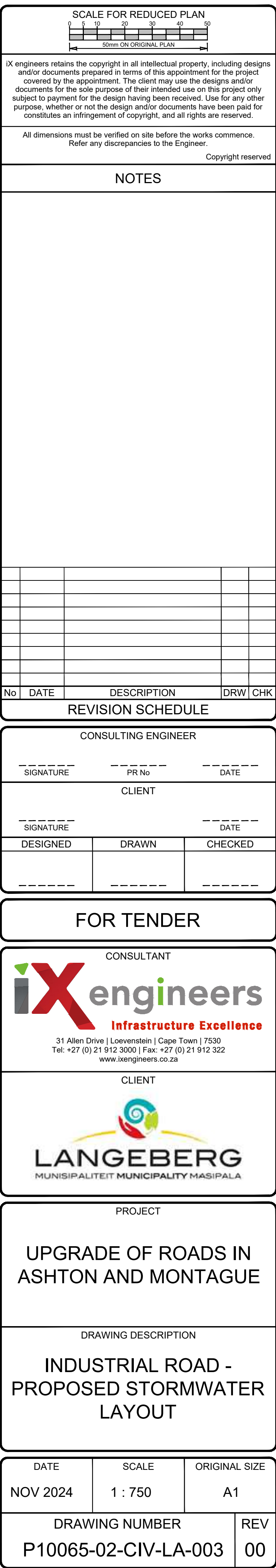
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50mm ON ORIGINAL PLAN

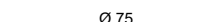
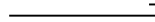
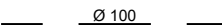
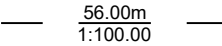
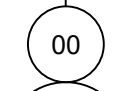
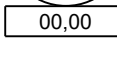
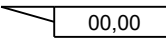
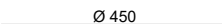
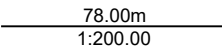
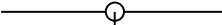
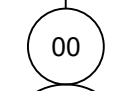
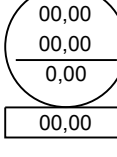
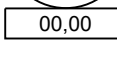
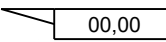
DATE	SCALE	ORIGINAL SIZE
NOV 2024	1:250	A1
DRAWING NUMBER		REV
P10065-01-CIV-LA-003		00

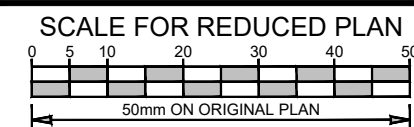


SCALE FOR REDUCED PLAN					
					
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NOTES					
No	DATE	DESCRIPTION		DRW	CHK
REVISION SCHEDULE					
CONSULTING ENGINEER					
SIGNATURE		PR No		DATE	
CLIENT					
SIGNATURE		DATE			
DESIGNED		DRAWN		CHECKED	
-----		-----		-----	
FOR TENDER					
CONSULTANT					
 Infrastructure Excellence 31 Allen Drive Loventstein Cape Town 7530 Tel: +27 (0) 21 912 3000 Fax: +27 (0) 21 912 322 www.ixengineers.co.za					
CLIENT					
 LANGEBERG MUNISIPALITEIT MUNICIPALITY MASIPA					
PROJECT					
UPGRADE OF ROADS IN ASHTON AND MONTAGUE					
DRAWING DESCRIPTION					
INDUSTRIAL ROAD - EXISTING SERVICES					
DATE		SCALE		ORIGINAL SIZE	
NOV 2024		1 : 750		A1	
DRAWING NUMBER					REV
P10065-02-CIV-LA-001					00





LEGEND	
ITEM	EXISTING
WATER	
WATER PIPE	
AIR VALVE	
WATER VALVE	
FIRE HYDRANT	
WATER METER	
SINGLE ERF CONNECTION	
DOUBLE ERF CONNECTION	
WATER ENDCAP	
SEWER	
SEWER PIPE	
ERF CONNECTION	
DISTANCE GRADIENT	
MANHOLE	
MANHOLE NUMBER	
COVER LEVEL INVERT LEVEL DEPTH	
INCOMING LEVEL	
INCOMING LEVEL	
STORMWATER	
STORMWATER PIPE	
MANHOLE	
CATCHPIT	
IN-OR OUTLET	
DISTANCE GRADIENT	
MANHOLE WITH PIPE	
MANHOLE NUMBER	
COVER LEVEL INVERT LEVEL DEPTH	
INCOMING LEVEL	
INCOMING LEVEL	
GENERAL	
TREES	
NAME / SIGN BOARD	
LAMP POST	
TRAFFIC ROBOT	
WATER SCOUR VALVE	
POWER BOX	
BUS STOP SHADE	
BENCHMARK	



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NOTES

[illegible]

No	DATE	DESCRIPTION	DRW	CHK
REVISION SCHEDULE				

CONSULTING ENGINEER		
_____ SIGNATURE	_____ PR No	_____ DATE
CLIENT		
_____ SIGNATURE	_____ DATE	
DESIGNED	DRAWN	CHECKED
_____ _____	_____ _____	_____ _____

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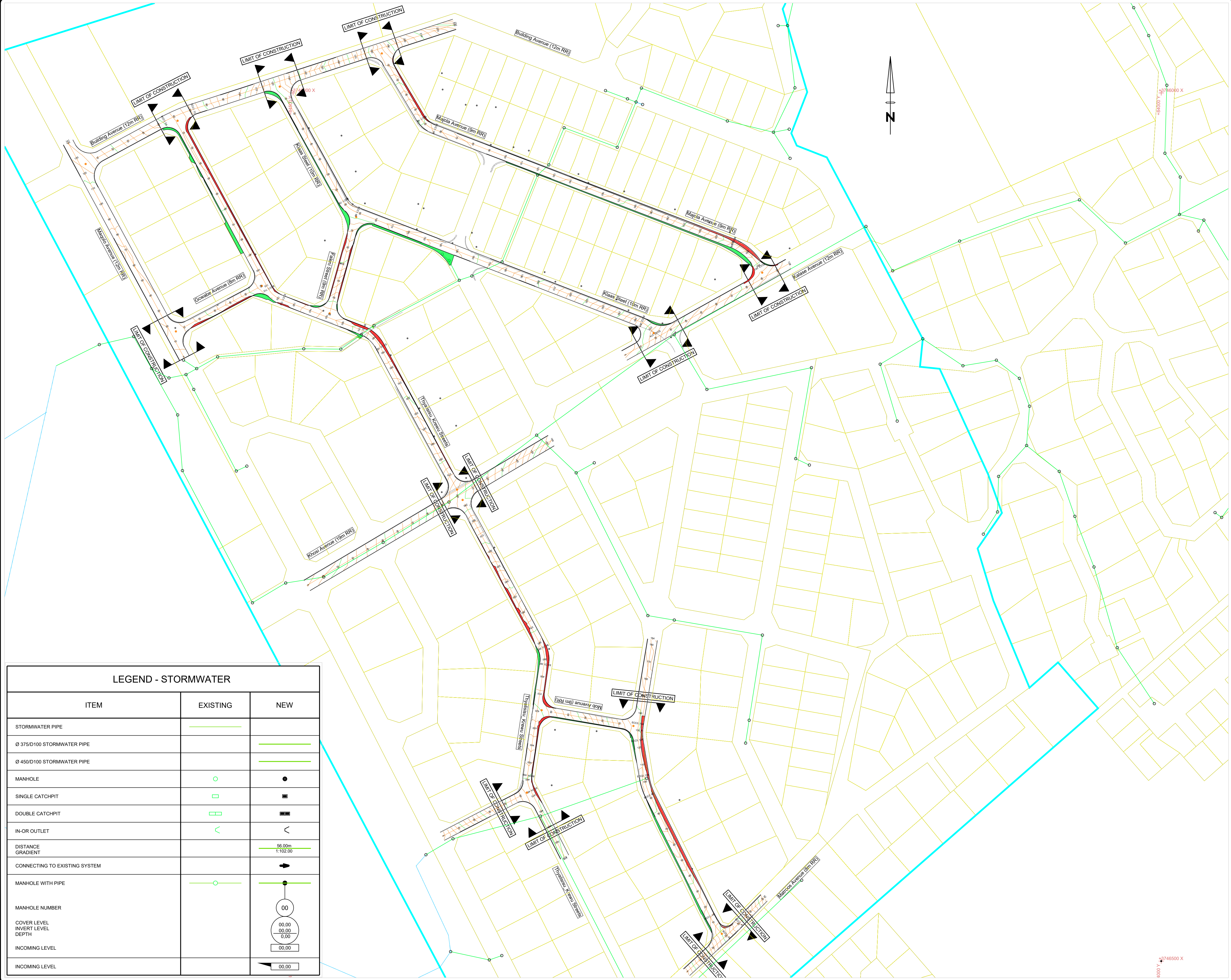
PROJECT

UPGRADE OF ROADS IN ASHTON AND MONTAGUE

DRAWING DESCRIPTION

ZOLANI - EXISTING SERVICES

DATE	SCALE	ORIGINAL SIZE
NOV 2024	1 : 1000	A1
DRAWING NUMBER		REV
P10065-03-CIV-LA-001		00



P:\1\IX Projects\10065 - Ashton and Montague Roads Upgrade\01 Active\06 Civil\02 Drawings (For Tender)\P10065_03_Zolani_SERVICES.dwg

LEGEND - STORMWATER		
ITEM	EXISTING	NEW
STORMWATER PIPE		
Ø 375/D100 STORMWATER PIPE		
Ø 450/D100 STORMWATER PIPE		
MANHOLE		
SINGLE CATCHPIT		
DOUBLE CATCHPIT		
IN-OR OUTLET		
DISTANCE GRADIENT		
CONNECTING TO EXISTING SYSTEM		
MANHOLE WITH PIPE		
MANHOLE NUMBER		
COVER LEVEL INVERT LEVEL DEPTH		
INCOMING LEVEL		
INCOMING LEVEL		

SCALE FOR REDUCED PLAN



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No	DATE	DESCRIPTION	DRW / CHK

REVISION SCHEDULE

CONSULTING ENGINEER		
SIGNATURE	PR No	DATE
CLIENT		
SIGNATURE	DATE	
DESIGNED	DRAWN	CHECKED
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PROJECT

UPGRADE OF ROADS IN
ASHTON AND MONTAGUE

DRAWING DESCRIPTION

ZOLANI - PROPOSED
STORMWATER LAYOUT

DATE	SCALE	ORIGINAL SIZE
NOV 2024	1 : 1000	A1
DRAWING NUMBER		REV
P10065-03-CIV-LA-003		00

P:\1\IX Projects\SP10065 - Ashton and Montagu Roads Upgrade\08 Drawings\01 Aerial\02 Pdf Printed For Tender\IP10065_04 Barlinka SERVICES & Sections.dwg



LEGEND	
ITEM	EXISTING
WATER	
WATER PIPE	Ø 75
AIR VALVE	⊥
WATER VALVE	⊥
FIRE HYDRANT	⊗
WATER METER	⊗
SINGLE ERF CONNECTION	—
DOUBLE ERF CONNECTION	—
WATER ENDCAP	—
SEWER	
SEWER PIPE	— Ø 100 —
ERF CONNECTION	— / —
DISTANCE GRADIENT	56.00m 1:100.00
MANHOLE	⊙
MANHOLE NUMBER	00
COVER LEVEL	00.00
INVERT LEVEL	00.00
DEPTH	0.00
INCOMING LEVEL	00.00
INCOMING LEVEL	00.00
STORMWATER	
STORMWATER PIPE	— Ø 450 —
MANHOLE	⊙
CATCHPIT	⊙
IN-OR OUTLET	<
DISTANCE GRADIENT	78.00m 1:200.00
MANHOLE WITH PIPE	⊙
MANHOLE NUMBER	00
COVER LEVEL	00.00
INVERT LEVEL	00.00
DEPTH	0.00
INCOMING LEVEL	00.00
INCOMING LEVEL	00.00
GENERAL	
TREES	⊙
NAME / SIGN BOARD	⊙
LAMP POST	⊙
TRAFFIC ROBOT	⊙
WATER SCOUR VALVE	⊙
POWER BOX	⊙
BUS STOP SHADE	⊙
BENCHMARK	⊙

FOR TENDER		REVISION SCHEDULE					CONSULTING ENGINEER			CONSULTANT		CLIENT		PROJECT		DRAWING DESCRIPTION		SCALE FOR REDUCED PLAN		
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							SIGNATURE DATE			DATE			DATE			DATE				
							DESIGNED DRAWN CHECKED			DESIGNED DRAWN CHECKED			DESIGNED DRAWN CHECKED			DESIGNED DRAWN CHECKED				
							B.D.W S.M F.v.L			B.D.W S.M F.v.L			B.D.W S.M F.v.L			B.D.W S.M F.v.L				
																		0 5 10 20 30 40 50 50mm ON ORIGINAL PLAN		
																		DATE SCALE ORIGINAL SIZE		
																		NOV 2024 1:1000 A1		
																		DRAWING NUMBER REV		
																		P10065-04-CIV-LA-001 00		



- NOTES:**
- SEE DRAWING NO. STE/P-27A FOR TYPICAL DETAIL OF ROAD SIGNS.
 - FOR TYPICAL CROSS SECTIONS OF STREETS SEE DETAIL.
 - ALL RADIUSSES AT INTERSECTIONS IS 10m EXCEPT IF SHOWN DIFFERENTLY.

LEGEND		
DESCRIPTION	EXISTING	NEW
ROAD SURFACE (CAPE SEAL)		
ROAD SURFACE (PAVING)		
V-CHANNEL (C1+C1)		
STOP SIGN (R1)		
CUL-DE-SAC SIGN (G30)		
CEVRON SIGN (W310)		
DITCH AHEAD (W350)		

KERBS:
MK10 = MOUNTABLE KERB TYPE MK10
CK5 = MOUNTABLE KERB TYPE CK5
E1 = EDGING TYPE E1
C1+C1 = V-CHANNEL
SNK = STREET NAME KERB

Road Curve List						
Barlinka Street (16m19m RR)						
No	Radius	TR.In	TR.Out	TAN.In	TAN.Out	Deflection
0	0.00	0.00	0.00	0.00	0.00	0.00.00
1	70.00	0.00	0.00	20.89	20.89	33.14.12
2	15.00	0.00	0.00	12.99	12.99	81.47.12
3	0.00	0.00	0.00	0.00	0.00	0.00.00

Barlinka Street (16m19m RR)				
Position	SV	Y-Coord	X-Coord	Radius
Start	0	80318.80	3739593.20	0.00
BCC1	362.14	80233.06	3739241.36	
PI1	382.44	80228.11	3739221.06	70.00
ECC1	402.74	80212.85	3739206.80	
BCC2	653.27	80029.82	3739035.72	
PI2	663.98	80020.33	3739026.85	15.00
ECC2	674.69	80027.75	3739016.19	
End	819.34	80110.42	3738897.49	

Road Junctions				
Barlinka Street (16m19m RR) - Muskadell Street (16m RR)				
Position	Z-Coord	Y	X-Coord	Chainage
11	234.639	80097.314	3738911.930	800.000
12	234.634	80097.885	3738911.110	801.000
13	234.628	80098.457	3738910.289	802.000
14	234.623	80099.028	3738909.468	803.000
15	234.618	80099.600	3738908.648	804.000
16	234.612	80100.171	3738907.827	805.000
17	234.607	80100.743	3738907.007	806.000
18	234.602	80101.314	3738906.186	807.000
19	234.597	80101.886	3738905.365	808.000
110	234.591	80102.457	3738904.545	809.000
111	234.586	80103.029	3738903.724	810.000
112	234.586	80103.029	3738903.724	810.000
113	234.581	80103.600	3738902.903	811.000
114	234.581	80103.608	3738902.892	811.013
115	234.574	80104.138	3738902.044	812.013
116	234.568	80104.580	3738901.147	813.013
117	234.561	80104.931	3738900.211	814.013
118	234.554	80105.186	3738899.244	815.013
119	234.546	80105.343	3738898.256	816.013
120	234.536	80105.401	3738897.258	817.013
121	234.525	80105.359	3738896.259	818.013
122	234.525	80095.402	3738897.178	
123	234.514	80105.218	3738895.269	819.013
124	234.502	80104.978	3738894.298	820.013
125	234.490	80104.643	3738893.356	821.013
126	234.477	80104.215	3738892.452	822.013
127	234.465	80103.699	3738891.596	823.013
128	234.452	80103.100	3738890.795	824.013
129	234.439	80102.411	3738890.045	825.031
130	234.425	80101.698	3738889.344	826.031
131	234.411	80100.985	3738888.644	827.031
132	234.397	80100.271	3738887.943	828.031
133	234.393	80100.044	3738887.719	828.350
134	234.728	80105.282	3738909.238	806.763
135	234.724	80105.894	3738908.447	807.763
136	234.720	80106.581	3738907.721	808.763
137	234.716	80107.338	3738907.067	809.763
138	234.712	80108.157	3738906.492	810.763
139	234.709	80109.028	3738905.002	811.763
140	234.707	80109.944	3738905.602	812.763
141	234.706	80110.896	3738905.294	813.763
142	234.706	80111.874	3738905.084	814.763
143	234.706	80113.488	3738914.953	
144	234.707	80112.867	3738904.972	815.763
145	234.709	80113.867	3738904.960	816.763
146	234.715	80114.863	3738905.048	817.763
147	234.722	80115.846	3738905.234	818.763
148	234.732	80116.805	3738905.519	819.763
149	234.745	80117.730	3738905.897	820.763
150	234.759	80118.613	3738906.366	821.763
151	234.774	80119.445	3738906.921	822.763
152	234.788	80120.218	3738907.556	823.763
153	234.794	80120.497	3738907.820	824.148
154	234.798	80120.714	3738908.034	824.452

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REVISION SCHEDULE

No	DATE	DESCRIPTION	DRW	CHK

CONSULTING ENGINEER

SIGNATURE	PR No	DATE
CLIENT		
SIGNATURE	DATE	
DESIGNED	DRAWN	CHECKED
B.D.W	S.M	F.v.L

CONSULTANT

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CLIENT

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PROJECT

UPGRADE OF ROADS IN
ASHTON AND MONTAGU

DRAWING DESCRIPTION

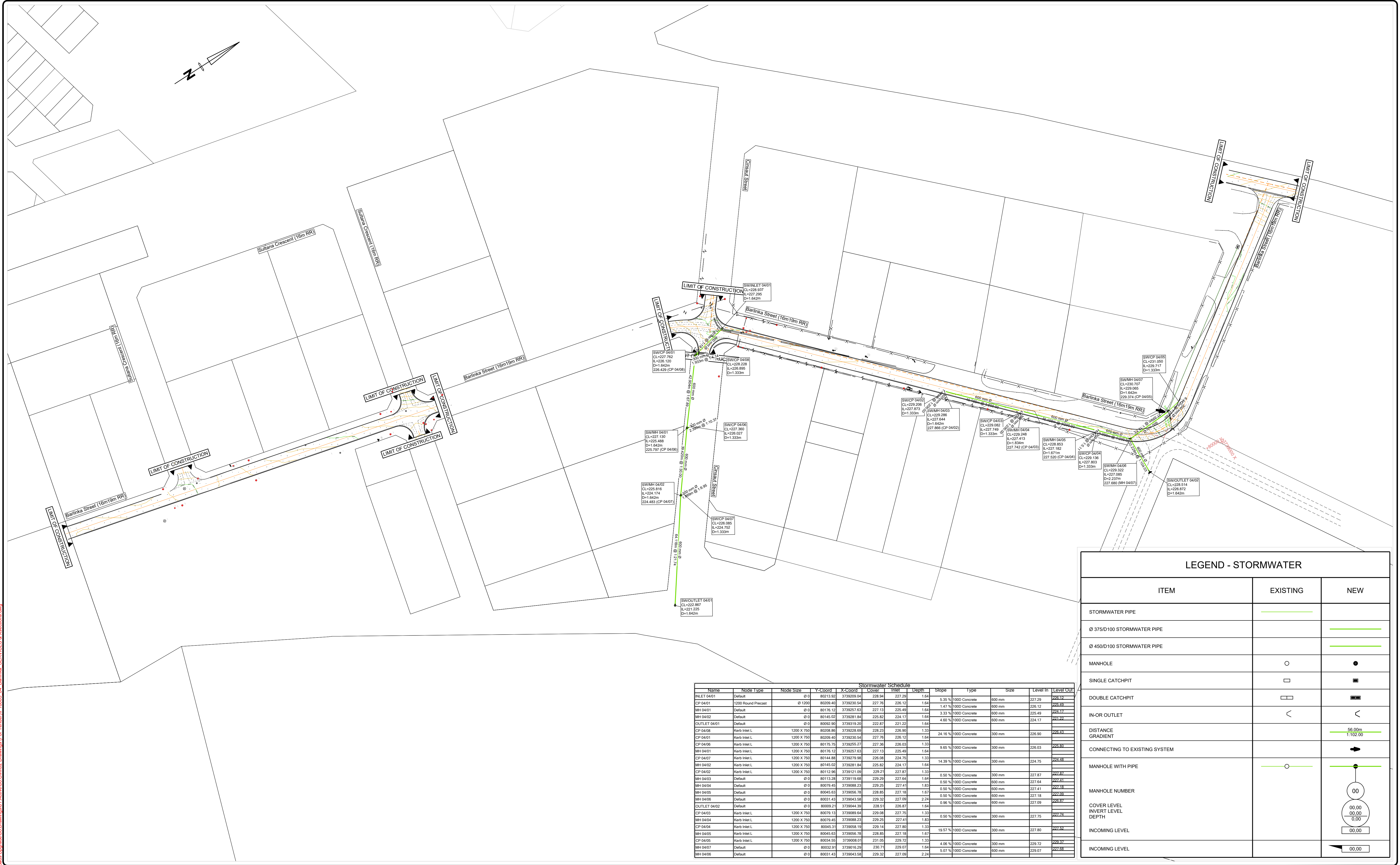
BARLINKA STREET -
PROPOSED ROAD LAYOUT

SCALE FOR REDUCED PLAN

DATE: NOV 2024
SCALE: 1:1000
ORIGINAL SIZE: A1

DRAWING NUMBER: P10065-04-CIV-LA-002
REV: 00

P:\IX Projects\STE\P10065 - Ashton and Montagu Roads Upgrade\08 Drawings\Civil\02 Drawings (For Tenders)\P10065-04-Barlinka_SERVICES & Xsections.dwg
28/11/2024 7:32:23 Printed By: Sammy Mostert (Cape Town)



LEGEND - STORMWATER		
ITEM	EXISTING	NEW
STORMWATER PIPE		
Ø 375/D100 STORMWATER PIPE		
Ø 450/D100 STORMWATER PIPE		
MANHOLE	○	●
SINGLE CATCHPIT	□	■
DOUBLE CATCHPIT	□	■
IN-OR OUTLET	<	<
DISTANCE GRADIENT		56.00m 1:102.00
CONNECTING TO EXISTING SYSTEM		➔
MANHOLE WITH PIPE	○	○
MANHOLE NUMBER		00
COVER LEVEL INVERT LEVEL DEPTH		00.00 00.00 0.00
INCOMING LEVEL		00.00
INCOMING LEVEL		00.00

Stormwater Schedule												
Name	Node Type	Node Size	Y-Coord	X-Coord	Cover	Inlet	Depth	Slope	Type	Size	Level In	Level Out
INLET 0401	Default	Ø 0	80213.92	3739209.04	228.94	227.29	1.64					
CP 0401	1200 Round Precast	Ø 1200	80209.40	3739235.54	227.76	226.12	1.64	5.35 %	1000 Concrete	600 mm	227.29	226.12
MH 0401	Default	Ø 0	80176.12	3739257.63	227.13	225.49	1.64	1.47 %	1000 Concrete	600 mm	226.12	225.49
MH 0402	Default	Ø 0	80145.02	3739281.84	225.82	224.17	1.64	3.33 %	1000 Concrete	600 mm	225.49	224.17
OUTLET 0401	Default	Ø 0	80092.90	3739191.20	222.87	221.22	1.64	4.60 %	1000 Concrete	600 mm	224.17	221.22
CP 0408	Kerb Inlet L	1200 X 750	80208.86	3739228.69	228.23	226.90	1.33	24.16 %	1000 Concrete	300 mm	226.90	226.43
CP 0401	Kerb Inlet L	1200 X 750	80209.40	3739235.54	227.76	226.12	1.64					
CP 0406	Kerb Inlet L	1200 X 750	80175.75	3739255.27	227.36	226.03	1.33	9.65 %	1000 Concrete	300 mm	226.03	225.80
MH 0401	Kerb Inlet L	1200 X 750	80176.12	3739257.63	227.13	225.49	1.64					
CP 0407	Kerb Inlet L	1200 X 750	80144.86	3739279.98	226.08	224.75	1.32	14.39 %	1000 Concrete	300 mm	224.75	224.48
MH 0402	Kerb Inlet L	1200 X 750	80145.02	3739281.84	225.82	224.17	1.64					
CP 0402	Kerb Inlet L	1200 X 750	80112.96	3739121.09	229.21	227.87	1.33	0.50 %	1000 Concrete	300 mm	227.87	227.87
MH 0403	Default	Ø 0	80113.28	3739118.68	229.29	227.84	1.64	0.50 %	1000 Concrete	600 mm	227.84	227.84
MH 0404	Default	Ø 0	80079.45	3739088.23	229.25	227.41	1.83	0.50 %	1000 Concrete	600 mm	227.41	227.18
MH 0405	Default	Ø 0	80045.63	3739056.78	228.85	227.18	1.67	0.50 %	1000 Concrete	600 mm	227.18	227.09
MH 0406	Default	Ø 0	80031.43	3739043.58	229.32	227.09	2.24	0.96 %	1000 Concrete	600 mm	227.09	226.87
OUTLET 0402	Default	Ø 0	80009.21	3739044.39	228.51	226.87	1.64					
CP 0403	Kerb Inlet L	1200 X 750	80079.13	3739089.64	229.08	227.75	1.33	0.50 %	1000 Concrete	300 mm	227.75	227.74
MH 0404	Kerb Inlet L	1200 X 750	80079.45	3739088.23	229.25	227.41	1.82					
CP 0404	Kerb Inlet L	1200 X 750	80045.37	3739058.19	229.14	227.80	1.33	19.57 %	1000 Concrete	300 mm	227.80	227.52
MH 0405	Kerb Inlet L	1200 X 750	80045.63	3739056.78	228.85	227.18	1.67					
CP 0405	Kerb Inlet L	1200 X 750	80034.56	3739008.01	231.05	229.72	1.33	4.06 %	1000 Concrete	300 mm	229.72	229.31
MH 0407	Default	Ø 0	80032.91	3739016.29	230.71	229.07	1.64	5.07 %	1000 Concrete	600 mm	229.07	227.88
MH 0406	Default	Ø 0	80031.43	3739043.58	229.32	227.09	2.24					

FOR TENDER

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All dimensions must be verified on site before the works commence. Refer any discrepancies to the Engineer.

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REVISION SCHEDULE

No	DATE	DESCRIPTION	DRW	CHK

CONSULTING ENGINEER

SIGNATURE

PR No

DATE

CLIENT

SIGNATURE

DATE

DESIGNED

B.D.W

DRAWN

S.M

CHECKED

F.v.L

CONSULTANT

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CLIENT

LANGE BERG

MUNISIPALITEIT MUNICIPALITY MASIPALA

PROJECT

UPGRADE OF ROADS IN ASHTON AND MONTAGU

DRAWING DESCRIPTION

BARLINKA STREET - PROPOSED STORMWATER LAYOUT

SCALE FOR REDUCED PLAN

DATE

NOV 2024

SCALE

1:1000

ORIGINAL SIZE

A1

DRAWING NUMBER

P10065-04-CIV-LA-003

REV

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P:\IX Projects\IP10065 - Ashton and Montagu Roads Upgrade\08 Drawings\01 Ashton\06 Civil\02 Drawings (For Tenders)\IP10065-04 - Barlinka - SERVICES & Sections.dwg 28/11/2024 6:44:38 Printed By: Sammy Mostert (Cape Town)