ROADS & TRANSPORT DEPARTMENT

TRANSPORT INFRASTRUCTURE DESIGN & CONSTRUCTION DIVISION

TENDER REFERENCE: RTD26-2024/25

RTD26-2024/25: TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF STORMWATER SYSTEMS IN RAMOTSE NETWORK 1A, 1C AND 1F – PHASE 2 FOR A DURATION OF 18 MONTHS

VOLUME 1

A Tender for Category 7*CE* or higher CIDB registered Contractors

ISSUED BY:	PREPARED BY:
The Divisional Head **Transport Infrastructure Design & Construction Division** **PO Box 1409** **PRETORIA** **0001** **Tel: 012 358-3768**	**Nevhutalu Consulting Engineers** **521 Zuzette Street** **MORELETA PARK** **0044** **Tel: 012 993-0152**

Registered Name of Tenderer:	
Trading Name of Tenderer:	
Registration No. of Entity:	CoT Vendor No:
CIDB CRS Number (s):	CSD Number (s):
Contact Person:	
Tel. No:	E-Mail Address:
Cell No:	Fax No:

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In compliance with the CIDB Standard for Uniformity

CONTENTS

DESCRIPTION			COLOUR
PORTION 1: TENDER			
PART T1	**TENDERING PROCEDURES**		
	T1.1	Tender Data	Pink
	T1.2	Standard Conditions of Tender	Pink
PART T2	**RETURNABLE DOCUMENTS**		Yellow
PORTION 2: CONTRACT			
PART C1	**AGREEMENTS AND CONTRACT DATA**		
	C1.1	Form of Offer and Acceptance	Yellow
	C1.2	Contract Data	Yellow
	C1.3	Form of Guarantee	White
	C1.4	Guarantee Cash Deposit	White
	C1.5	Health and Safety Agreement	White
	C1.6	Adjudicator's Agreement	White
PART C2	**PRICING DATA**		
	C2.1	Pricing Instructions	Yellow
	C2.2	Bill Of Quantities	Yellow
	C2.3	Summary Of Bill Of Quantities	Yellow
PART C3	**SCOPE OF WORK**		
	C3.1	Description of the Works	Blue
	C3.2	Engineering	Blue
	C3.3	Procurement	Blue
	C3.4	Construction	Blue
	C3.5	Management	Blue
	C3.6	Annexures	Blue
PART C4	**SITE INFORMATION**		
	C4.1	Locality Plan	Green
	C4.2	*Additional Information*	Green

PORTION 1: TENDER

PART T1: TENDER PROCEDURES

TABLE OF CONTENTS

T1.1 TENDER NOTICE AND INVITATION TO TENDER……2
T1.2 TENDER DATA.....3
T1.2 STANDARD CONDITIONS OF TENDER.....194

T1.1 TENDER NOTICE AND INVITATION TO TENDER

RTD 26-2024/25

CITY OF TSHWANE
ROADS AND TRANSPORT DEPARTMENT

TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR UPGRADING OF STORMWATER SYSTEMS IN RAMOTSE NETWORK 1A, 1C & 1F – PHASE 2 FOR A DURATION OF 18 MONTHS

Tenders are hereby invited for the above tender.

Tenderers should have a CIDB contractor grading designation of **7CE** or higher.

The tender documents will be available on the City of Tshwane and national treasury official website (www.tshwane.gov.za) or www.etenders.gov.za

Tenders will be evaluated on the basis of awarding points for the **80/20 *Preference* or 90/10 preferential Point System** will be applied to this tender.

A **COMPULSORY BRIEFING MEETING** with a representative of the Employer will take place at **Sammy Marks Council Chamber, 1st Floor, Sammy Marks Square, cnr Lilian Ngoyi and Madiba Street** on **09 July 2025 at 10h00am.**

The lowest or any tender will not necessarily be accepted, and the Municipality reserves the right to accept any tender as a whole or in part or no tender.

Tenders must remain valid for a period of **90 days** after the closing date for the submission of tenders, during which period a tender may not be amended or withdrawn and may be accepted at any time by the Municipality.

The closing time for receipt of tenders is **10h00 on the 08 August 2025.** Tenders will be received on the closing date and time shown, must be enclosed in sealed envelopes bearing the applicable tender heading and reference number, as well as the closing time and due date, and must be addressed to the Divisional Head, SUPPLY CHAIN MANAGEMENT, PRETORIA, 0001 and must be submitted in the tender box situated at **Tshwane House, 320 Madiba Street, Pretoria, 0002**. Tenders will be opened at the latter address at the time indicated.

The tender documents will be available on the City of Tshwane and national treasury official website (www.tshwane.gov.za) or www.etenders.gov.za

Only bidders registered on the central supplier database (CSD) and with a CSD number will be considered for this tender, as this is a requirement from the National Treasury.
"Note: Bidders are required to submit electronic copies of the bid either by memory stick/USB flash drive together with the hard copy of the Bid/Proposals".

ENQUIRIES: **Ms. Pauline Letsoalo**
Tel (Office): **012 358 2589**
E-Mail: Paulinem@tshwane.gov.za

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in **Annexure C** of **Standard for Uniformity in Engineering and Construction Works Contracts (Board Notice 423 Government Gazette No 42622 of 8 August 2019)**, bound into Section T1.2

The Standard Conditions of Tender makes several references to the Tender Data. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender to which it mainly applies.

CLAUSE NUMBER		TENDER DATA
C.1.1	Actions	The Employer is **City of Tshwane Metropolitan Municipality**
C.1.2	Tender Documents	Volume 1: Tender Document **THE TENDER** **Part T1: Tendering Procedures** T1.1 – Tender Notice and Invitation to Tender T1.2 – Tender data T1.3 – Standard Conditions of Tender **Part T2: Returnable documents** T2.1 – List of returnable documents T2.2 – Returnable schedules **THE CONTRACT** **Part C1: Agreements and contract data** C1.1 – Form of offer and acceptance C1.2 – Contract data C1.3 – Form of guarantee C1.4 – Guarantee or Cash deposit C1.5 – Health and safety agreement C1.6 - Application for a permit to Department of labour to do construction work C1.7 – Adjudicators contract **Part C3: Scope of work** C3 – Scope of work **Part C4: Site information** C4 – Site information *Volume 2: Tender Drawings*
C.1.3 *C.1.3.4*	Interpretation	**Add** the following new clause: *The tender documents have been drafted in English. The contract arising from the invitation to tender shall be interpreted and construed in English*
C.1.4	Communication and Employer's Agent	Agent: **Nevhutalu Consulting Engineers** Address: **521 Zuzette Street** **Moreleta Park** **Pretoria** **0181** Tel: 012 993 0152 E-Mail: admin@nevhutalu.co.za

CLAUSE NUMBER		TENDER DATA
C.2.1	Eligibility	Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contract grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **7CE or higher** class of construction work, are eligible to submit tenders.
		Joint Ventures are eligible to submit tenders provided that: 1. every member of a joint venture is registered with the CIDB not later than 21 working days from the closing date for tenderers; 2. the lead partner has a contractor grading designation in the **6*CE* or higher** class of construction work; and 3. The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor designation in accordance with the sum tendered for a **7CE *or higher*** class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations.
C.2.2	Cost of Tendering	The employer **<u>will not</u>** compensate the tenderer for any costs incurred in attending interviews or making any submissions in the office of the employer.
C.2.5	Reference Documents	**Add the following:** Unless specified otherwise in this document, the following standards and conditions of contract will be applicable under this Contract: • The document ***"Standard Specifications for Municipal Civil Engineering Works", Third Edition, 2005"*** issued by the Divisional Head: Roads and Stormwater of the City of Tshwane. This document is obtainable free of charge on the website www.tshwane.gov.za. • The latest print version as current at 30 days before close of tenders of the document ***"General Conditions of Contract for Construction Works 3rd Edition, 2015"*** including corrections thereto as current at 30 days before close of tenders, as published by the *South African Institution of Civil Engineering.* The document may be purchased in hard copy from the *South African Institution of Civil Engineering* or may be purchased online as an electronic reference document in PDF format by following the relevant links on www.saice.org.za. The corrections may be downloaded from the SAICE website www.saice.org.za.
C.2.7	Briefing meeting	The arrangements for a **<u>compulsory</u>** briefing meeting are as stated in the tender notice and invitation to tender Confirmation of attendance will be recorded on site in the attendance register to be signed by all tenderers. Addenda will be issued to and tenders received from those tendering entities appearing on the attendance register. Tender documents will be made available in the City of Tshwane website(www.tshwane.gov.za).
C.2.8	Seek clarification	**<u>Replace</u>** the clause with the following: *Request clarification of the tender documents, if necessary, by notifying the employer at least <u>7</u>* **<u>(seven) working days</u>** *before the closing time stated in the tender data.*

CLAUSE NUMBER	TENDER DATA
C.2.9 Insurance	**Add** the following to the clause *Accept that the submission of a tender shall be construed as an acknowledgement by the tenderer that he is satisfied with, where applicable, the insurance cover the Employer will affect under the contract.*
C.2.12 Alternative offers	Alternative tender offers will **not** be considered.
C.2.13 Submitting a tender offer	• The tender offer **shall be completed in non-erasable black ink** • Any entry made by the tenderer in the document which the tenderer desires to change, **shall not be erased or painted out**. A line shall be drawn through the incorrect entry and the correct entry shall be written above in **non-erasable black ink** and the **full signature** of the tenderer shall be placed next to the correction.
C.2.13.2 C.2.13.3	**Replace** the contents of the clause with the following: *Return all volumes of the tender document to the Employer after completion of the relevant sections of each volume in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink.* *All volumes are to be left intact in original format and no pages shall be removed or re-arranged* Parts of each tender offer communicated on paper shall be submitted as **an original, plus a scanned copy in PDF format on a Memory stick/flash disc (USB).** **In addition to the hard copy submission, each tenderer is required to submit a scanned copy of the fully completed and signed tender submission document.** **This is to be on a flash disc (USB) attached to the original tender submission documents, adequately identifiable as belonging to the tenderer, be in PDF format scanned, and be in full colour.**
C.2.13.4	**Add** the following to the clause *Only authorised signatories may sign the original and all copies of the tender offer where required.* *In the case of a **ONE-PERSON CONCERN** submitting a tender, this shall be clearly stated.* *In the case of a **COMPANY** submitting a tender, include a copy of a **resolution by its board of directors** authorising a director or other official of the company to sign the documents on behalf of the company.* *In the case of a **CLOSE CORPORATION** submitting a tender, include a copy of a **resolution by its members** authorising a member or other official of the corporation to sign the documents on each member's behalf.* *In the case of a **PARTNERSHIP** submitting a tender, **all the partners** shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case **proof of such authorisation** shall be included in the Tender.* *In the case of a **JOINT VENTURE/CONSORTIUM** submitting a tender, include **a resolution of each company** of the joint venture together with a **resolution by its members**

CLAUSE NUMBER	TENDER DATA
	authorising a member of the joint venture to sign the documents on behalf of the joint venture. ***<u>Accept that failure to submit proof of authorisation to sign the tender shall result in the tender offer being regarded as non-responsive.</u>***
C.2.13.5	The identification details are: Tender/Reference **RTD 26-2024/25** Tender Description: **Tender For The Appointment Of a Contractor For The Upgrading Of Stormwater Systems in Ramotse Network 1A, 1C & 1F – Phase 2 For a Duration Of 18 Months** Closing Time: ***Time: 10:00am*** Closing Date: **Date: 08 August 2025** Each tender shall be enclosed in a sealed envelope, bearing the correct identification details and shall be submitted (HAND DELIVERED) at: **Supply Chain Management** **Tshwane House** **320 Madiba Street** **Pretoria CBD** **0002** Please note that the tender box is open 24 hours. Please ensure that all required compliance documents are included upon submission as no additional documents will be requested from bidders after closing.
C.2.13.9	**Telephonic, telegraphic, telex, facsimile or e-mailed offers will <u>not</u> be accepted**
C.2.13.10	**<u>Add</u>** the following sub- clause C.2.13.10: *Accept that all conditions, which are printed or written upon any stationery used by the Tenderer for the purpose of or in connection with the submission of a tender offer for this Contract, which are in conflict with the conditions laid down in this document shall be waived, renounced and abandoned.*
C.2.14 Information and data to be completed in all respects	**<u>Add</u>** the following to the clause: *The Tenderer is required to enter information in the following sections of the document:* *Section T2.2 : Returnable Schedules* *Section C1.1 : Form of Offer and Acceptance* *Section C1.2 : Contract Data (Part 2)* *Section C2.2 : Pricing Schedule* *The above sections shall be signed by the Tenderer (and witnesses where required). Individual pages should only be initialled by the successful Tenderer and by the witnesses after acceptance by the Employer of the Tender Offer.* *The Tenderer shall complete and sign the Form of Offer prior to the submission of a Tender Offer.*

CLAUSE NUMBER		TENDER DATA
		The Schedule of Deviations (if applicable) shall be signed by the successful Tenderer after acceptance by the Employer of the Tender Offer. *Accept that failure on the part of the Tenderer to submit any one of the Returnable Documents listed in Part T2 – Returnable Documents within the period stipulated, shall be just cause for the Employer to consider the tender offer as being regarded as non-responsive.* *Accept that the Employer shall in the evaluation of tender offers take due account of the Tenderer's past performance in the execution of similar engineering works of comparable magnitude, and the degree to which he possesses the necessary technical, financial and other resources to enable him to complete the Works successfully within the contract period. Satisfy the Employer and the Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, and furnish details in Part T2 – Returnable Documents.* *Accept that submitting inferior and inadequate information relating to health and safety (as required in clause 2.23) shall be regarded as justifiable and compelling reasons not to accept the Tender Offer of the Tenderer scoring the highest number of tender evaluation points.*
C.2.15	Closing time	The closing time for submission of tender offers is stated in the tender notice and invitation to tender.
C.2.16 *C.2.16.5*	Tender offer validity	The tender offer validity period is ***90 days***. **Add** the following new clause *If the tender validity period expires on a Saturday, Sunday or public holiday, the tender offer shall remain valid and open for acceptance until closure of business on the following working day.*
C.2.16.6		**Add** the following new clause: *Accept that should the Tenderer unilaterally withdraw his tender during the tender validity period, the Employer shall, without prejudice to any other rights he may have, be entitled to accept any less favourable tender for the Works from those received, or to call for fresh tenders, or to otherwise arrange for execution of the Works, and the Tenderer shall pay on demand any additional expense incurred by the Employer on account of the adoption of the said courses, as well as either the difference in cost between the tender withdrawn (as corrected in terms of clause 3.9 of the Conditions of Tender) and any less favourable tender accepted by the Employer, or the difference between the tender withdrawn (as corrected) and the cost of execution of the Works by the Employer as well as any other amounts the Employer may have to pay to have the Works completed*
C.2.18	Provide other material	The tenderer shall, when requested by the employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.
C.2.19	Inspections, tests and analysis	**Add** the following at the end of the clause: *….or upon written request.*
C.2.20	Submit securities,	The tenderer is required to submit with his tender a letter of intent from an approved insurer undertaking to provide the performance bond to the format included in **Section C1.3** of Part C1 Agreements and Contract Data of this document.

CLAUSE NUMBER		TENDER DATA
	bonds, policies, etc.	
C.2.23	Certificates	Refer to **Part T2** of this procurement document for a list of the documents that are to be returned with the tender.
C.2.24	*Conditions Associated with the Granting of Preferences*	**Add** the following new clause *The Tenderer, undertakes to:* *a) engage one or more Targeted Enterprises / Targeted Labour in accordance with the provisions of the SANS 1914 as varied in the Procurement Section of the Scope of Works;* *b) deliver to the Employer, within 5 working days of being requested in writing to do so, a Targeted Enterprise Declaration Affidavit in respect of all Targeted Enterprises engaged at prime contract level to satisfy Contract Participation Goal requirements;* *c) accept the sanctions set out in the Scope of Works should such conditions be breached.*
2.25	*Canvassing and obtaining of additional information by tenderers*	**Add** the following new clause *The Tenderer shall not make any attempt either directly or indirectly to canvass any of the Employers' officials or the Employer's agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon.* *The Tenderer shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.*
C2.26	*Prohibitions on awards to persons in service of the state*	**Add** the following new clause *The Employer is prohibited to award a tender to a person -* *a) who is in the service of the state; or* *b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or* *c) a person who is an advisor or consultant contracted with the municipality or municipal entity.* ***In the service of the state** means to be -* *a) a member of:-* *• any municipal council;* *• any provincial legislature; or* *• 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;* *e) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);* *f) a member of the accounting authority of any national or provincial public entity; or* *g) an employee of Parliament or a provincial legislature.* In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.
C2.27	*Awards to close family*	**Add** the following new clause *Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child or parent*

CLAUSE NUMBER		TENDER DATA
	members of persons in the service of the state	*of a person in the service of the state (defined in clause F2.25), or has been in the service of the state in the previous twelve months, including -* *a) the name of that person;* *b) the capacity in which that person is in the service of the state; and* *c) the amount of the award.* In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in Part T2 of this procurement document must be completed.
C2.28	*Vendor registration*	**Add** the following new clause *The contractor will required registering as a supplier/ service provider on the City of Tshwane's vendor register before any payment can be done.* *If the tenderer is already registered as a vendor, it is required to record the vendor number in space provided on the cover page of this Tender document.* *Vendor registration documents are available from the Procurement Advice Centre or can be downloaded from http://www.tshwane.gov.za/procurement.cfm* *All parties of a joint venture or consortium submitting a tender shall comply with the requirements of this* http://www.tshwane.gov.za/business/supplychain/vendor registration *clause.*
C2.29	*Tax*	**Add** the following new clause ***National Treasury SCM Instruction no. 7 of 2017/18 clause 4 application during SCM Processes state that:*** *The designated official(s) must verify the tenderer's tax compliance status prior to the finalisation of the award of the tender or price quotation.* *Where the recommended tenderer is not tax compliant, the tenderer should be notified of their non- compliant status and the tenderer must be requested to submit to the municipality or municipal entity, within 7 working days, written proof from South African Revenue Services of their tax compliance status or proof from SARS that they have made an arrangement to meet their outstanding tax obligations. The proof of tax compliance status submitted by the tenderer to the municipality or municipal entity must be verified via the Central Supplier Database or eFiling* *Accept that the tenderer will be rejected if such tenderer fails to provide proof of tax compliance status in terms of clause 4.2 of National Treasury SCM Instruction no. 7 of 2017/18*
C.3.1 C.3.1.1	Respond to requests from the tenderer	The employer will respond to requests for clarification up to 7 **(seven) working days** before the tender closing time.

CLAUSE NUMBER		TENDER DATA
C.3.4	Opening of tender submissions	Upon request tenders will be opened immediately after the closing time for tenders. Bidders are also requested to refer to the City's website were there closing register will be published.
C.3.8	Test for responsiveness	**Add** the following to the sub-clause: Failure on the part of the Tenderer to submit a tender offer as stipulated in clause C2.13 prior to the closing time as stipulated in clause C2.15 shall be just cause for the Employer to consider the tender offer as being non-responsive. Failure on the part of the Tenderer to submit any one of the returnable documents or certificates listed in clause C2.23 within the period stipulated shall be just cause for the Employer to consider the tender offer as being non-responsive.
C.3.9	Arithmetical errors, omissions and discrepancies	Replace the contents of the clause with the following: Check responsive tender offers for arithmetical errors, correcting them in the following manner: a) If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is an error in the line-item total resulting from the product of the unit rate and the quantity, the unit rate shall govern and the line item total shall be corrected. 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 corrected total of the prices shall govern. c) Where there is a discrepancy between the amount indicated in the Tenderer's tender offer and the corrected amount obtained after completing the above steps, the corrected amount shall govern. Notify a tenderer upon written request received after the closing date of tenders of all arithmetical errors made by that particular tenderer.
C.3.11	Evaluation of tender offers	**Add** the following new clause: **Stages of Evaluation.** The following stages of evaluation will be applicable for this tender Stage 1: Administrative Compliance Stage 2: Mandatory Requirements Stage 3: Preference Points System **1.1 ADMINISTRATIVE COMPLIANCE** All the bids will be evaluated against the administrative responsiveness requirements as set out in the list of returnable documents.

CLAUSE NUMBER	TENDER DATA		
	Compulsory Returnable Documentation (Submission of these are compulsory)	**Submitted (YES or NO)**	**Checklist (Guide for Bidder and the Bid Evaluation Committee)**
	a) To enable The City to verify the bidder's tax compliance status, the bidder must provide; • Tax compliance status PIN. or • Central Supplier Database (CSD)		Tax status must be compliant before the award.
	b) A copy of their Central Supplier Database (CSD) registration; or indicate their Master Registration Number / CSD Number;		CSD must be valid.
	c) Confirmation that the bidding company's rates and taxes are up to date: Original or copy of Municipal Account Statement of the Bidder (bidding company) not older than 3 months and account must not be in arrears for more than ninety (90) days; or ,signed lease agreement or In case of bidders located in informal settlement, rural areas or areas where they are not required to pay Rates and Taxes a letter from the local councillor confirming they are operating in that area		Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder's statement correspond with CIPC document, Address on CSD or Company profile? Are all payment(s) up to date (i.e. not in arrears for more than 90 days?
	d) In addition to the above, confirmation that all the bidding company's owners / members / directors / major shareholders rates and taxes are up to date: • Original or copy of Municipal Account Statement of all the South African based owners / members / directors / major shareholders not older than 3 months and the account/s may not be in arrears for more than ninety (90) days; or a signed lease agreement of owners / members / directors / major shareholders or In case of bidders located in informal settlement, rural areas or areas where they are not required to pay Rates and Taxes a letter from the local councillor confirming they are residing in that area		Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder's statement correspond with CIPC document, Address on CSD or Company profile? Are all payment(s) up to date (i.e. not in arrears for more than 90 days?
	e) Duly Signed and completed MBD forms (MBD 1, 4, 5, 8 and 9) The person signing the bid documentation must be authorized to sign on behalf of the bidder. Where the signatory is not a Director / Member / Owner /		All documents fully completed (i.e. no blank spaces)? All documents fully signed by (any director / member / trustee as indicated on

CLAUSE NUMBER	TENDER DATA		
	Shareholder of the company, an official letter of authorization or delegation of authority should be submitted with the bid document. **NB: Bidders must ensure that the directors, trustees, managers, principal shareholders, or stakeholders of this company, declare any interest in any other related companies or business, whether or not they are bidding for this contract.** ***<u>See Question 3.14 of MBD 4. Failure to declare interest will result in a disqualification</u>***		the CIPC document, alternatively a delegation of authority would be required? Documents completed in black ink (i.e. no "Tippex" corrections, no pencil, no other colour ink, or **non-submission of the MBD forms**, will be considered)?
	f) Audited Financial Statements for the most recent three (3) years or Audited Financial Statements from date of existence for companies less than three years old. **NB**: The bidder must submit signed audited annual financial statements for the most recent three years, or if established for a shorter period, submit audited annual financial statements from date of establishment. If the bidder is not required by law to prepare signed annual financial statements for auditing purposes, then the bidder must submit proof that the bidder is not required by law to prepare audited financial statements.		Applicable for tenders above R10m in conjunction with MBD 5) Are Audited financial statements provided (Audited financials must be signed by auditor) Or proof that the bidder is not required by law to prepare audited financial statements.
	g) Joint Ventures (JV) – (Only applicable when the bidder tenders as a joint venture) Where the bidder bids as a joint venture (JV), the required or relevant documents as per (a) to (f) above must be provided for all JV parties. In addition to the above the bidder must submit a Joint Venture (JV) agreement signed by the relevant parties. **NB**: It is a condition of this bid that the successful bidder will continue with the same Joint Venture (JV) for the duration of the contract unless prior approval is obtained from the City.		If applicable. JV agreement provided? JV agreement complete and relevant? Agreement signed by all parties? All required documents as per (i.e. a to f) must be provided for all partners of the JV.
	h) Bidder attended a compulsory briefing session where applicable		A compulsory briefing register must be signed by the bidder. **Bidders will be disqualified should they**

CLAUSE NUMBER	TENDER DATA

		fail to attend compulsory briefing session
i) Pricing schedule (All items must be quoted for in pricing schedule and if not, all items are quoted the bidder will be disqualified). Unless the tender is awarded per item or per section where the bidder only quoted the items or sections, they are interested in.		Incomplete pricing schedule results in totals being incomparable. Bidder must be disqualified. **Bidder will be disqualified should they make corrections on the price schedule without attaching a signature or initialising thereto.** **Bidder will be disqualified should they use tippex/ correction ink, on the price schedule.**

1.2 MANDATORY REQUIREMENTS

The following information is mandatory, failure to provide any of them, will render the bidder disqualified:

Mandatory criteria	**Supporting evidence**
CIDB Grading of **7CE or higher**.	Valid CIDB grading certificate
Company's Experience	Tendering Company's experience of at least one successfully completed Roads and Stormwater Systems Project of the same CIDB Grading required for this tender. **(Attach an appointment letters and completion certificates as proof).**
Performance Guarantee	Letter of intent – performance guarantee
Construction Manager - The Construction Manager must have a minimum qualification of a National Diploma in Civil Engineering or equivalent qualification coupled with a minimum 5 years' experience.	Curriculum Vitae and certified copy of qualification
Health and Safety Officer must be registered with the South African Council for Project and Construction Management Professions (SACPCMP) as a Construction Health and Safety Officer (CHSO).	Valid copy of SACPCMP Registration Certificate.

CLAUSE NUMBER	TENDER DATA

1.3 PREFERENCE POINT SYSTEM

The preferential point system used will be the 80/20 or 90/10 points system in terms of the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) Regulations 2022

- 80/90 points for price
- 20/10 points for specific goals

Add the following new clause:

The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million:

The following formula must be used to calculate the points for price in respect of tenders with a Rand value below R50 million (all applicable taxes included):

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

Where

P_s = *Points scored for comparative price of tender or offer under consideration;*
Pt = *Comparative price of tender of offer under consideration; and*
$Pmin$ = *Comparative price of lowest acceptable tender or offer.*

- *A maximum of 20 points may be awarded to a tenderer for the specific goal specified for the tender.*
- *The points scored for the specific goal must be added to the points scored for price and the total must be rounded off to the nearest two decimal places.*
- *Subject to section 2(1)(f) of the Act, the contract must be awarded to the tenderer scoring the highest points.*

20 points for Specific goals (service provider to submit the certified copy of the specific goals). Refer to Table 1 below:

Specific goals	80/20 preference point system	Proof of specific goals to be submitted
BB-BEE score of companies • Level 1	• 8 Points • 7 Points	Valid Certified copy of BBBEE certificate. Sworn Affidavit for B-BBEE qualifying small enterprise or

CLAUSE NUMBER	TENDER DATA		
	• Level 2 • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Non-compliant	• 6 Points • 5 Points • 4 Points • 3 Points • 2 Points • 1 Point • 0 Points	Exempt Micro Enterprises or CIPC BBBEE certificate.
	EME and/ or QSE	2 Points	Valid Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate
	At least 51% of Women-owned companies	2 Points	Certified copy of Identity Document/s **and** proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)
	At least 51% owned companies by People with disability	2 Points	Medical Certificate with doctor's details (Practice Number, Physical Address, and contact numbers) and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership
	At least 51% owned companies by Youth	2 Point	Certified copy of Identity Document/s **and** proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership
	Local Economic Participation • City of Tshwane • Gauteng • National	4 Points 2 Points 1 Point	Municipal Account statement/Lease agreement.

CLAUSE NUMBER	TENDER DATA
	Add the following new clause: ***The 90/10 preference point system for acquisition of services, works or goods above a Rand value of R50 million:*** *The following formula must be used to calculate the points for price in respect of tenders (including price quotation) with a Rand value above R50 000 000 (all applicable taxes included):*
	(i) $P_s = 90 \times [1 - (\frac{P_t - P_{min}}{P_{min}})]$ *Where* *P_s = Points scored for comparative price of tender or offer under consideration;* *Pt = Comparative price of tender of offer under consideration; and* *Pmin = Comparative price of lowest acceptable tender or offer.* *(ii) An Employer of state may apply the formula in paragraph (i) for price quotations with a value less than R 30 000, if and when appropriate.* *(b) Subject to subparagraph (c), points must be awarded to a tender for attaining the B-BBEE status level of contributor in accordance with the table below:* *A maximum of 10 points may be allocated in accordance with* *(c) subparagraph (b)* *(d) The points scored by tender in respect of B-BBEE contribution contemplated in subparagraph (b) must be added to the points scored for price a calculated in accordance with subparagraph (a).* *The contract must be awarded to the tender who scores the highest total number of points.*

CLAUSE NUMBER	TENDER DATA

Specific goals	90/10 preference point system	Proof of specific goals to be submitted
BB-BEE score of companies • Level 1 • Level 2 • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 Non- compliant	• 4 Points • 3.5 Points • 3 Points • 2.5 Points • 2 Points • 1.5 Points • 1 Points • 0.5 Point 0 Points	Valid Certified copy of BBBEE certificate. Sworn Affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate.
EME and/ or QSE	1 Point	Valid Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate
At least 51% of Women-owned companies	1 Point	Certified copy of Identity Document/s **and** proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)
At least 51% owned companies by People with disability	1 Point	Medical Certificate with doctor's details (Practice Number, Physical Address, and contact numbers) and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership
At least 51% owned companies by Youth	1 Point	Certified copy of Identity Document/s **and** proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership.
Local Economic Participation • City of Tshwane • Gauteng • National	2 Point 1 Point 1 Point	Municipal Account statement/Lease agreement.

CLAUSE NUMBER		TENDER DATA
C.3.13	Acceptance of Tender Offer	Tender offers will only be accepted if: a.) the tenderer has complied in full with the all eligibility criteria b.) the tenderer is able to provide proof of tax compliance status in terms of clause 4.2 of National Treasury SCM Instruction no.7 of 2017/18 c.) the tenderer submits a letter of intent from an approved insurer undertaking to provide to provide the Performance Bond to the format included in Section C1.3 of this procurement document; d.) the tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation. e.) the tenderer is not in arrears for more than 3 months with municipal rates and taxes and municipal service charges; f.) the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; g.) the tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect. h.) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract; i.) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer; j.) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
C.3.17	Copies of Contract	**One** signed copy of contract shall be provided by the Employer to the successful Tenderer.

T1.2 STANDARD CONDITIONS OF TENDER

TABLE OF CONTENTS

C.1 General 21
C.1.1 Actions 21
C.1.2 Tender Documents 21
C.1.3 Interpretation 21
C.1.4 Communication and Employer's agent 22
C.1.5 Cancellation and re-invitation of tenders 22
C.1.6 Procurement procedures 22
C.1.6.1 General 22
C.1.6.2 Competitive negotiation procedure 22
C.1.6.3 Proposal procedure using the two stage-system 23
C.2 Tenderer's obligations 23
C.2.1 Eligibility 23
C.2.2 Cost of tendering 23
C.2.3 Check documents 23
C.2.4 Confidentiality and copyright of documents 23
C.2.5 Reference documents 24
C.2.6 Acknowledge addenda 24
C.2.7 Clarification meeting 24
C.2.8 Seek clarification 24
C.2.9 Insurance 24
C.2.10 Pricing the tender offer 24
C.2.11 Alterations to documents 24
C.2.12 Alternative tender offers 24
C.2.13 Submitting a tender offer 25
C.2.14 Information and data to be completed in all respects 25
C.2.15 Closing time 25
C.2.16 Tender offer validity 26
C.2.17 Clarification of tender offer after submission 26
C.2.18 Provide other material 26
C.2.19 Inspections, test and analysis 26
C.2.20 Submit securities, bonds, policies, etc. 26
C.2.21 Check final draft 26
C.2.22 Return of other tender documents 27
C.2.23 Certificates 27
C.3 The employer's undertakings 27
C.3.1 Respond to requests from the tenderer 27
C.3.2 Issue addenda 27
C.3.3 Return late tender offers 27
C.3.4 Opening of tender submissions 27
C.3.5 Two-envelope system 28
C.3.6 Non-disclosure 28
C.3.7 Grounds for rejection and disqualification 28
C.3.8 Test for responsiveness 28
C.3.9 Arithmetical errors, omissions and discrepancies 28
C.3.10 Clarification of a tender offer 29
C.3.11 Evaluation of tender offers 29
C.3.11.1 General 30
C.3.12 Insurance provided by the employer 30
C.3.13 Acceptance of tender offer 30
C.3.14 Prepare contract documents 31
C.3.15 Complete adjudicator's contract 31
C.3.16 Notice to unsuccessful tenderers 31
C.3.17 Provide copies of the contracts 31

C.3.18 Provide written reasons for actions taken 31

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

The 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 only required for tender evaluation purposes, shall not 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 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 organisation 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 organisation which 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 organ of state may, prior to the award of the tender, cancel the tender if-

(a) due to changed circumstances, there is no longer a need for the services, works or goods requested; or

(b) funds are no longer available to cover the total envisaged expenditure;

(c) no acceptable tenders are received; or

(d) there is a material irregularity in the tender process.

C.1.5.2 The decision to cancel the tender 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 a 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.3.8 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 not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information.

Notwithstanding the provisions of 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 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 may 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 may only be considered in the event that the main tender 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, services or supply 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, 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, test 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 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:

a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;

b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or

c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the 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.

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.

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.

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

Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.

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 unacceptable commercial risk and only if the tenderer:

a) is not under restrictions, or has principals who are under restrictions, preventing participating in the Employer's procurement,

b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,

c) has the legal capacity to enter into the contract,

d) is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,

e) complies with the legal requirements, if any, stated in the tender data, and

f) is able, in the opinion of the Employer, to perform the contract free of conflicts of interest.

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.3.16.2 After the successful tenderer has been notified of the Employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

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.

PART T2: RETURNABLE DOCUMENTS

TABLE OF CONTENTS

T2.1 LIST OF RETURNABLE DOCUMENTS 2
T2.2 RETURNABLE SCHEDULES 4

T2.1 LIST OF RETURNABLE DOCUMENTS

RD.A MANDATORY RETURNABLE DOCUMENTS

Note: ***Failure to submit, fully complete and sign the applicable documents and submit all required attachments will result in the tender offer being disqualified from further consideration***

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Compulsory Enterprise Questionnaire	Form RD.A.1	
MBD 4: Declaration of interest in tender of persons in service of state	Form RD.A.2	
MBD 8: Declaration of tenderer's past supply chain management practises	Form RD.A.3	
MBD 9: Certificate of independent tender determination	Form RD.A.4	
Certificate of authority of signatory	Form RD.A.5	
Certificate of authority of signatory for joint ventures and consortia	Form RD.A.6	
Bank rating letter	Form RD.A.7	

RD.B RETURNABLE DOCUMENTS REQUIRED FOR PREFERENTIAL PROCUREMENT EVALUATION PURPOSES

Note: ***Failure to submit, fully complete and sign the applicable documents and submit all required attachments will result in the tender offer being awarded 0 (zero) preference points***

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Valid B-BBEE Status Level of Contributor Certificate	Form RD.B.1	
MBD 6.1: Preference points claim form in terms of the Preferential Procurement Regulations, 2022	Form RD.B.2	
B-BBEE Exempted Micro Enterprise – Sworn Affidavit	Form RD.B.3	
Promotion of local enterprises (Local Economic Participation)	Form RD.B.4	
Certified copy of Identity Document/s proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership	Form RD.B.5	
Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers) proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership	Form RD.B.6	

RD.C ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: ***Failure to submit, fully complete and sign the applicable documents and submit all required attachments will result in the tender offer being disqualified from further consideration***

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Proof of registration on CSD with National Treasury	RD.C.1	
MBD 5: Declaration for procurement above R10 million (all applicable taxes included)	RD.C.2	
Proof of Registration with CIDB	RD.C.3	
Compliance with OHSA (Act 85 of 1993)	RD.C.4	
Record of services provided to organs of state	RD.C.5	
Schedule of plant and equipment	RD.C.6	
Status of concern submitting tender	RD.C.8	
Classification of business	RD.C.9	
Letter of intent to provide a performance bond	RD.C.10	

RD.D OTHER DOCUMENTS THAT WILL FORM PART OF THE CONTRACT

Note: ***Failure to submit, fully complete and sign the applicable documents and submit all required attachments will result in the tender offer being disqualified from further consideration***

Document Name	Reference	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender)
Record of addenda to tender documents	RD.D.1	
Mandatory requirements (key Personnel)	RD.D.2	
Curriculum vitae of key personnel	RD.D.3	
Company's experience	RD.D.4	
Form of offer and acceptance	Section C1.1	
Data provided by the contractor	Section C1.2	

T2.2 RETURNABLE SCHEDULES

TABLE OF CONTENTS

FORM RD.A.1 COMPULSORY ENTERPRISE QUESTIONAIRE....5
FORM RD.A.2 MBD 4: DECLARATION OF INTEREST....6
FORM RD.A.3 MBD 8: DECLARATION OF TENDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTISES....9
FORM RD.A.4 MBD 9: CERTIFICATION OF INDEPENDENT TENDER DETERMINATION....11
CERTIFICATE OF INDEPENDENT TENDER DETERMINATION....12
FORM RD.A.5 CERTIFICATE OF AUTHORITY OF SIGNATORY....14
FORM RD.A.6 CERTIFICATE OF AUTHORITY OF SIGNATORY FOR JOINT VENTURES AND CONSORTIA....15
FORMRD.A.7 BANK RATING....16
FORM RD.B.1 VALID B-BBEE STATUS LEVEL OF CONTRIBUTOR CERTIFICATE....17
FORM RD.B.2 MDB 6.1: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022....18
FORM RD.B.3 VALID B-BBEE STATUS LEVEL OF CONTRIBUTOR CERTIFICATE....24
FORM RD.B.3 B-BBEE EXEMPTED MICRO ENTERPRISE – SWORN AFFIDAVIT....25
FORM RD.B.4 PROMOTION OF LOCAL ENTERPRISES....25
FORM RD.B.5 At least 51% Women owned companies and At least 51% owned companies by Youth....26
FORM RD.B.6 At least 51% owned companies by People with disability....27
FORM RD.C.1 PROOF OF REGISTRATION ON CSD WITH NATIONAL TREASURY....29
FORM RD.C.2 MBD 5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION....30
FORM RD.C.3 PROOF OF REGISTRATION WITH THE CIDB....30
FORM RD.C.4 COMPLIANCE WITH OHSA (ACT 85 OF 1993)....31
FORM RD.C.5 RECORD OF SERVICES PROVIDED TO ORGANS OF STATE....32
FORM RD.C.6 SCHEDULE OF PLANT AND EQUIPMENT....34
FORM RD.C.8 STATUS OF CONCERN SUBMITTING TENDER....35
FORM RD.C.9 CLASSIFICATION OF BUSINESS....37
SCHEDULE OF SECTORS....38
FORM RD.C.10 LETTER OF INTENT TO PROVIDE A PERFORMANCE BOND....39
FORM RD.D.1 RECORD OF ADDENDA TO TENDER DOCUMENTS....40
FORM RD.D.2 KEY PERSONNEL....40
FORM RD.D.3 CURRICULUM VITAE OF KEY PERSONNEL....42
FORM RD.D.4 COMPANY EXPERIENCE....43

FORM RD.A.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 4: CSD number:

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 issued by National Treasury must be completed for each tender and be attached as a tender requirement.

Section 9: MBD8 issued by National Treasury must be completed for each tender and be attached as a tender requirement.

Section 10: MBD9 issued by National Treasury must be completed for each tender and be attached as a tender requirement.

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

i) authorizes the employer to verify the tenderers tax clearance status from the South African Revenue Services that it is 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;

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:		**Date:**	
Name:		**Position**	
Enterprise Name:			

FORM RD.A.2 MBD 4: DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state[1].

2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

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

3.1 Full name of bidder or his/her representative: _____

3.2 Identity Number: _____

3.3 Position occupied in Company:
(director, trustee, shareholder[2]) _____

3.4 Company Registration Number: _____

3.5 Tax Reference Number: _____

3.6 VAT Registration Number: _____

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

---

[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) a member of the accounting authority of any national or provincial public entity; or
(f) an employee of Parliament or a provincial legislature

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

3.8 Are you presently in the service of the state?

YES	NO

If yes, furnish particulars _____

3.9 Have you been in the service of the state for the past twelve months?

YES	NO

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

If yes, furnish particulars _____

3.11 Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?

YES	NO

If yes, furnish particulars _____

3.12 Are any of the company's directors, trustees, managers, principal shareholders or stakeholders in service of the state?

YES	NO

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

If yes, furnish particulars _____

3.14 Do you or any of the directors, trustees, managers, principal shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract?

YES	NO

If yes, furnish particulars _____

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

Full Name	Identity Number	State Employee Number

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.A.3 MBD 8: DECLARATION OF TENDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTISES

1. This municipal tender document must form part of all tenders invited.
2. It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.
3. The tender of any tenderer may be rejected if that tenderer, or any of it's directors have:

    a. abused the municipality's/municipal entity's supply 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. wilfully 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, 2004 (Act 12 of 2004).

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

Item	Question	Response	
4.1	Is the tenderer, any of it's directors listed on the National Treasurer's database as a company or persons prohibited from doing business with the public sector? **(Companies for persons who are listed on this database were informed in writing of this restriction by the National Treasury after the *audi alteram partem* rule was applied)**	**YES**	**NO**
	If so, furnish particulars:		
4.2	Is the tenderer or any of it's directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (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**
	If so, furnish particulars:		
4.3	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**
	If so, furnish particulars:		

Item	Question	Response	
4.4	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**
	If so, furnish particulars:		
4.5	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**
	If so, furnish particulars:		

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

I accept that, in addition to cancellation of a contract, action may be taken against me should this declaration prove to be false.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.A.4 MBD 9: CERTIFICATION OF INDEPENDENT TENDER DETERMINATION

1. This Municipal Bidding Document (MBD) must form part of all bids [3]invited.

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

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

   a. Take all reasonable steps to prevent such abuse;
   b. Reject the tender of any tenderer if that tenderer or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
   c. Cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the tendering process or the execution of the contract.

4. This will serve as a certificate of declaration that would be used by institutions to ensure that, when tenders are considered, reasonable steps are taken to prevent any form of tender-rigging.

5. In order to give effect to the above, the attached Certificate of Tender Determination must be completed and submitted with the tender.

[3] Includes price quotations, advertised competitive bids, limited bids and proposals.

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

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying tender:

RTD26 – 2024/25: Tender For The Appointment Of a Contractor For The Upgrading Of Stormwater Systems in Ramotse Network 1A, 1C & 1F – Phase 2 For A Duration Of 18 Months

in response to the invitation for the tender made by

City of Tshwane Metropolitan Municipality

do hereby make the following statement 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 understand the contents of this certificate;

2. I understand that the accompanying tender will be disqualified if this certificate is found not to be true and complete in every aspect;

3. I am authorised by the tenderer to sign this certificate, and to submit the accompanying tender, on behalf of the tenderer;

4. Each person whose signature appears on the accompanying tender has been authorised 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 the accompanying tender, I understand that the word "competitor"" shall include any individual or organization, other that the tenderer, whether or not affiliated with the tenderer who:

    a. Has been requested to submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and
    b. Could potentially submit a tender in response to this tender invitation, based on their qualifications, abilities or experience; and 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 the accompanying tender independently form, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium[35] will not be construed as collusive tendering.

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

    a. Prices;
    b. Geographical area where product of services will be rendered (market allocation);
    c. Methods, factors of 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.

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

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

9. The terms of the accompanying 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 to the awarding of the contract.

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practises 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 form conduction 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.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date:

FORM RD.A.5 CERTIFICATE OF AUTHORITY OF SIGNATORY

RESOLUTION of the a meeting of the *Board of Directors/Members/Partners of

_____

_____

(Legally correct full name and registration number, if applicable, of the enterprise)

Held at: _____ (place)

On: _____ (date)

RESOLVED that:

1. The enterprise submits a tender to the Tshwane Metro Municipality in respect of the following project:

Tender Number:	**RTD26 – 2024/25**
Tender Description:	**Tender For The Appointment Of a Contractor For The Upgrading Of Stormwater Systems in Ramotse Network 1A, 1C & 1F – Phase 2 For a Duration Of 18 Months**

2. *Mr/Ms: _____

in *his/her capacity as _____

and who will sign as follow:

Proof signature	Proof signature

be, and is hereby authorised to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender for the enterprise mentioned above

NAME	CAPACITY	SIGNATURE

Note:	Enterprise stamp
1. *Delete which is not applicable. 2. IMPORTANT: This resolution must be signed by all the directors/members/ partners of the tendering enterprise. 3. Should the number of directors/members/partners exceed the space available above, additional names and signatures must be supplied on a separate page.	

FORM RD.A.6 CERTIFICATE OF AUTHORITY OF SIGNATORY FOR JOINT VENTURES AND CONSORTIA

*Joint venture/consortium name: _____

We, the undersigned, are submitting this tender in a *joint venture/consortium and hereby authorise *Mr/Ms _____ authorised signatory of the enterprise _____ acting in the capacity of lead partner to sign the tender, and any and all other documents and/or correspondence in connection with and relating to the tender for the *joint venture/consortium mentioned above.

Registered name of enterprise	Registration number	% of contract value	Address	Duly authorised signatory	Mark with (x) for lead partner

Note:

1. *Delete which is not applicable.
2. IMPORTANT: This resolution must be signed by all the parties of the joint venture/consortium and every duly authorised signatory for each party to the joint venture/consortium must complete a Form RD.C.15.
3. Should the number of directors/members/partners exceed the space available above, additional names and signatures must be supplied on a separate page.

FORM RD.A.7 BANK RATING

The service provider must provide proof of financial support from an institution accredited by FSCA and/or NCR as proof of financial capacity. Proof of financial support shall be on the financial institution letterhead and shall be stamped/signed by the Financial Institution. In order to clarify the requirement above, the following will be accepted as proof of financial support:

- A bank rating letter not older than 3 months from an approved financial institution must be provided.
- minimum rating to be considered is C.

FORM RD.B.1 VALID B-BBEE STATUS LEVEL OF CONTRIBUTOR CERTIFICATE

Submit B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA).

NOTE:

1. Attach original copy of B-BBEE Verification Certificate to this page.

2. In the case of a joint venture / consortium parties must each attach original copy of their B-BBEE Verification Certificates.

FORM RD.B.2 MBD 6.1: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

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

NB BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all tenders:
- The 80/20 system for requirements with a Rand value of up to R50 million (**all applicable taxes included**); and
- The 90/10 system for requirements with a Rand value above R50 million (**all applicable taxes included**).

1.2 The value of this tender is estimated *not to exceed* R50 million and therefore the ***80/20*** system shall be applicable.

1.3 Preference points for this tender shall be awarded for:
(a) Price; and
(b) B-BBEE Status Level of Contribution

1.3.1 The points for this tender are allocated as follows:

	POINTS	POINTS
PRICE	**80**	**90**
SPECIFIC GOALS	**20**	**10**
Total points for Price and SPECIFIC GOALS	**100**	**100**

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

1.5 Blank or incomplete particulars or insufficient documentary proof thereof, or failure to sign the declaration, will be construed to mean that the tenderer is not claiming preference points, in which case no points will be awarded for HDI.

2. DEFINITIONS

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

2.2 **B-BBEE** means broad-based black economic empowerment as defined in Section 1 of the Broad-Based Black Economic Empowerment Act.

2.3 **B-BBEE Status Level of Contributor** means the B-BBEE status received by a measured entity based on its overall performance using the relevant scorecard contained in the Codes of Good Practice on Black

Economic Empowerment, issued in terms of Section 9(1) of the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003).

2.4 **Broad-Based Black Economic Empowerment Act** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003).

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

2.6 **consortium or joint venture** means an association of persons for the purpose of combining their expertise, property, capital, efforts, skills and knowledge in an activity for the execution of a contract.

2.7 **contract** means the agreement that results from the acceptance of a tender by an organ of state.

2.8 **EME** means any enterprise with an annual total revenue of R5 million or less.

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

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

2.11 **non-firm prices** means all prices other than **firm** prices.

2.12 **person** includes a juristic person.

2.13 **rand value** means that total estimated value of a contract in South African currency, calculated at the time of tender invitations and includes all applicable taxes and excise duties.

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

2.15 **tender** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods, works or services works or goods, through price quotations, advertised competitive bidding processes or proposals.

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

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

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

3. ADJUDICATION USING A POINT SYSTEM

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

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

3.3 Points scored will be rounded off to 2 (two) decimal places.

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

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

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

4. POINTS AWARDED FOR PRICE

THE 80/20 AND 90/10 PREFERENCE POINT SYSTEM

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

80/20

$$P_S = 80\left(1 - \frac{P_T - P_{MIN}}{P_{MIN}}\right)$$

90/10

$$P_S = 90\left(1 - \frac{P_T - P_{MIN}}{P_{MIN}}\right)$$

Where

P_S = Points scored for price of tender under consideration

P_T = Rand value of tender under consideration

P_{MIN} = Rand value of lowest acceptable tender

5. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTION

5.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender.

5.2 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

(a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or

(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

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

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

80/20:

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
BB-BEE score of companies Level 1 Level 2 Level 3 Level 4 Level 5 Level 6 Level 7 Level 8 Non-compliant	 8 Points 7 Points 6 Points 5 Points 4 Points 3 Points 2 Points 1 Point 0 Points	
EME and/or QSE	2	
At least 51% Women owned companies	2	
At least 51% owned companies by People with disability	2	
At least 51% owned companies by Youth	2	
Local Economic Participation		
City of Tshwane Participants	4	
Gauteng Participants	2	
National participants	1	

90/10:

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 claimed (90/10 system) (To be completed by the tenderer)**
BB-BEE score of companies Level 1 Level 2 Level 3 Level 4 Level 5 Level 6 Level 7 Level 8 Non-compliant	 4 Points 3.5 Points 3 Points 2.5 Points 2 Points 1.5 Points 1 Points 0.5 Point 0 Points	
EME and/or QSE	1	
At least 51% Women owned companies	1	
At least 51% owned companies by People with disability	1	
At least 51% owned companies by Youth	1	
Local Economic Participation		
City of Tshwane Participants	2	
Gauteng Participants	1	
National participants	1	

DECLARATION WITH REGARD TO COMPANY/FIRM

5.3 Name of company/firm: ……

5.4 Company registration number: ……

5.5 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]

5.6 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.

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

FORM RD.B.3 VALID B-BBEE STATUS LEVEL OF CONTRIBUTOR CERTIFICATE

Submit B-BBEE Verification Certificate from a Verification Agency accredited by the South African Accreditation System (SANAS) or a Registered Auditor approved by the Independent Regulatory Board of Auditors (IRBA) or an Accounting Officer as contemplated in the Close Corporation Act (CCA).

NOTE:

1. Attach original copy of B-BBEE Verification Certificate to this page.
2. In the case of a joint venture / consortium parties must each attach original copy of their B-BBEE Verification Certificates.

FORM RD.B.3 B-BBEE EXEMPTED MICRO ENTERPRISE – SWORN AFFIDAVIT

I, the undersigned

Full Name & Surname																
Identity Number							-					-			-	

Hereby declare under oath as follow:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a member / director / owner of the following enterprise and am duly authorised to act on its behalf.

Enterprise Name	
Trading Name	
Registration Number	
Enterprise Address	

3. I hereby declare under oath that:

- The enterprise is _____ % black owned;
- The enterprise is _____ % black woman owned;
- Based on the audited management accounts and other information available on the _____ financial year, the income did not exceed R 10,000,000 (ten million rands);
- Please confirm on the below the B-BBEE level contributor, by ticking the applicable box.

100% Black owned	**Level One** (135% B-BBEE procurement recognition)	
More than 51% Black owned	**Level Two** (125% B-BBEE procurement recognition)	
Less than 51% Black owned	**Level Four** (100% B-BBEE procurement recognition)	

4. The entity is an empowering supplier in terms of the dti Codes of Good Practice
5. I know and understand the contents of the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
6. The sworn affidavit will be valid for a period of 12 (twelve) month from the date signed by the commissioner.

Deponent Signature:	Date:
Commissioner of oaths (Signature and stamp)	

FORM RD.B.4 PROMOTION OF LOCAL ENTERPRISES

The City of Tshwane has mandated the promotion of local enterprises. To comply with this the tenderer must provide proof of the type of business unit and whether the unit resides within the Tshwane and will be scored as follow:

80/20 or 90/10 preference point system applies:

	Promotion of local enterprises
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Satisfactory (score 1)	The tenderer operates a head office or fully staffed office or his sole office outside the boundaries of Gauteng Province. (I.e. no business unit or office resides within the boundaries of Tshwane Metropolitan Municipality)
Good (score 1)	The tenderer's office resides within the boundaries of Gauteng Province. (I.e. no business unit or office resides within the boundaries of Tshwane Metropolitan Municipality)
Very good (score 2)	The tenderer's office resides within the boundaries of the Tshwane Metropolitan Municipality.

Municipal Rates & Taxes not older than three months from tender advertisement date or Valid Lease Agreement should be attached as evidence.

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

<u>Person authorized to sign the tender:</u>

Full name (in BLOCK letters): _____

Signature: _____

Date:

FORM RD.B.5 At least 51% Women owned companies and At least 51% owned companies by Youth

The City of Tshwane has mandate for the promotion At least 51% Women owned companies and At least 51% owned companies by youth. To comply with this the tenderer must provide Certified copy of Identity Document/s that proof that company is 51% owned by Women or youth

	Promotion At least 51% Women owned companies and At least 51% owned companies by youth
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Good (score 1	Certified copy of Identity Document/s that proof that company is 51% owned by Women
Good (score 1)	Certified copy of Identity Document/s that proof that company is 51% owned by youth

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date:

FORM RD.B.6 At least 51% owned companies by People with disability

The City of Tshwane has mandate for the promotion of At least 51% owned companies by People with disability. To comply with this the tenderer must provide Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers that proof that company is 51% owned by People with disability

	Promotion of At least 51% owned companies by People with disability
No Response (score 0)	The tenderer did not respond or comply with this evaluation schedule. A score of 0 will also be awarded for any misrepresentation made in this regard,
Good (score 1)	Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers

(If necessary the tenderer will be requested to present the office / business unit to officials of the City)

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date:

FORM RD.C.1 PROOF OF REGISTRATION ON CSD WITH NATIONAL TREASURY

1. Attach original or certified copy of CSD registration certificate to this page.

2. In the case of a joint venture / consortium (excluding consulting engineering partners) the joint venture / consortium must attach original or certified copy of their CSD registration certificate to this page.

FORM RD.C.2 MBD 5: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION

1. The tenderer is required by law to prepare annual financial statements for auditing their audited annual financial statements:

   i) for the past three years; or

   ii) Since the establishment if established during the past three years.

   Indicate whether these have been included in the tender:

YES	NO

2. Does the tenderer have any undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days?

YES	NO

   If so, state particulars _____

3. Has any contracts been awarded to the tenderer by an organ of state during the past five years?

YES	NO

   If so, state particulars _____

4. Has there been any material non-compliance or dispute concerning the execution of such contract?

YES	NO

   If so, state particulars _____

5. Is any portion of the goods or services expected to be sourced from outside the Republic?

YES	NO

   If, so state what portion and whether any portion of payment from the municipality is expected to be transferred outside of the Republic.

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

I accept that the state may act against me should this declaration prove to be false.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.C.3 PROOF OF REGISTRATION WITH THE CIDB

1. Attach original or certified copy of CIDB registration certificate to this page.

2. In the case of a joint venture / consortium (excluding consulting engineering partners) parties must each attach original or certified copy of their CIDB registration certificate.

Firm	**CRS Number**	**CIDB Grading**	**Lead Partner** (Indicate with X)
Combined CIDB Grading for Joint Venture / Consortium:			

(Calculator is available at https://registers.cidb.org.za/common/jvcalc.asp)

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date:

FORM RD.C.4 COMPLIANCE WITH OHSA (ACT 85 OF 1993)

Tenderers are required to satisfy the employer and the engineer as to their ability and available resources to comply with the above by answering the following questions and providing the relevant information required below.

(Tick applicable box)

1. Are your company familiar with the OHSA (ACT 85 of 1993) and its Regulations?	**YES**	**NO**
2. Who will prepare your company's Health and Safety Plan? Provide a copy of the person/s curriculum vitae/s or company profile.		
3. Do your company have a health and safety policy? If **YES** provide a copy.	**YES**	**NO**
4. How is this policy communicated to your employees? Provide supporting documentation.	**YES**	**NO**
5. Do your company keep record of safety aspects of each site where work is performed? If **YES** what records are kept?	**YES**	**NO**
6. Do your company conduct monthly safety meetings? If **YES**, who is the chairperson of the meeting, and attend these meetings?	**YES**	**NO**
7. Do your company have a safety officer in its employment, responsible for overall safety of your company? If **YES**, explain his duties and provide a copy of his CV	**YES**	**NO**
8. Do your company have trained first aid employees? If **YES**, indicate who.	**YES**	**NO**
9. Do your company have a safety induction training programme in place? If **YES**, provide a copy.	**YES**	**NO**
10. Does your company conduct medical surveillance for its employees?	**YES**	**NO**

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.C.5 RECORD OF SERVICES PROVIDED TO ORGANS OF STATE

Tenderers are required to complete this record in terms of the Supply Chain Management Regulations issued in terms of the Municipal Finance Management Act of 2003.

Include only those contracts where the tenderer identified in the signature block below was directly contracted by the employer. Tenderers must not include services provided in terms of a sub-contract agreement.

Where contracts were awarded in the name of a joint venture and the tenderer formed part of that joint venture, indicate in the column entitled "Title of the contract for the service" that was in joint venture and provide the name of the joint venture that contracted with the employer. In the column for the value of the contract for the service, record the value of the portion of the contract performed (or to be performed) by the tender.

Complete the record or attach the required information in the prescribed tabulation

	ALL SERVICES COMMENCED OR COMPLETED TO AN ORGAN OF STATE IN THE LAST FIVE YEARS			
	Organ of state, i.e. national or provincial department, public entity, municipality or municipal entity.	**Title of contract for the service**	**Value of contract for service incl. VAT (Rand)**	**Date completed (State current if not yet completed)**
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

(Attach additional pages if more space is required.)

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date:

FORM RD.C.6 SCHEDULE OF PLANT AND EQUIPMENT

The following are lists of the major items of relevant equipment that I/we presently own/lease and will have available for this contract or will hire/acquire for this contract as proof of the requirements for Clause F.3.13 b) of the Conditions of Tender

Major equipment owned/leased that is immediately available for the execution of the works	
Quantity	**Description, size, capacity etc.**

(Attach additional pages if more space is required)

Major equipment that will be hired or acquired for the execution of the works	
Quantity	**Description, size, capacity etc.**

(Attach additional pages if more space is required)

FORM RD.C.8 STATUS OF CONCERN SUBMITTING TENDER

1. General

State whether the tenderer is a company, a closed corporation, a partnership, a sole practitioner, a joint venture/consortium or a co-operative

Public Company	
Private Company	
Closed Corporation	
Partnership	
Sole Proprietary	
Joint Venture / Consortium	
Co-operative	

(Mark the appropriate option)

2. Information to be provided

If the Tendering Entity is a:		**Documentation to be submitted with the tender**
1	Closed Corporation, incorporated under the Close Corporation Act,1984, Act 69 of 1984	CIPRO CK1 or CK2 (Certified copies of the founding statement) and list of members
2	Private Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973 (Including Companies incorporated under Art 53 (b))	Certified copies of: a) CIPRO CM 1 - Certificate of Incorporation b) CIPRO CM 29 – Contents of Register of Directors, Auditors and Officers c) Shareholders Certificates of all Members of the Company, plus a signed statement of the Company's Auditor, certifying each Member's ownership/shareholding percentage relative to the total.
3	Private Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973 in which any, or all, shares are held by another Closed Corporation or company with, or without, share capital.	Certified copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies
4	Public Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973 (Including Companies incorporated under Art 21)	A signed statement of the Company's Secretary confirming that the Company is a public Company.
5	Sole Proprietary or a Partnership	Certified copy of the Identity Document of: a) such Sole Proprietary, or b) Each of the Partners in the Partnership Certified copy of the Partnership agreement.

If the Tendering Entity is a:		**Documentation to be submitted with the tender**
6	Co-operative	CIPRO CR2 - Certified copies of Company registration document.
7	Joint Venture / Consortium	All the documents (as described above) as applicable to each partner in the joint venture / consortium as well as a certified copy of the joint venture / consortium agreement.

Note:

1. If the shares are held in trust provide a copy of the Deed of Trust (only the front page and pages listing the trustees and beneficiaries are required) as well as the Letter of Authority as issued by the Master of the Supreme Court wherein trustees have been duly appointed and authorised
2. Include a certified copy of the Certificate of Change of Name (CM9) if applicable.

3. Registered for VAT proposes in terms of the Value-Added Tax Act (89 of 1991)

Yes	
No	

(Make an X in the appropriate space)

REGISTRATION NO: _____

FORM RD.C.9 CLASSIFICATION OF BUSINESS

1. The Small Businesses are defined in the National Small Business Act, 1996 (Act 102 of 1996).

2. Information furnished with regard to the classification of Small businesses

(b.) Indicate whether the company/entity is defined as a small, medium or micro enterprise by the National Small Business Act.

YES	NO

(Tick appropriate box)

(c.) If the response to 2.(a.) is **YES**, the following must be completed:

i. Sector/sub-sector in accordance with the Standard Industrial classification:

_____

ii. Size or class:

_____

iii. Total full-time equivalent of paid employees:

_____

iv. Total annual turnover:

_____

v. Total gross asset value (fixed property excluded):

_____

(A schedule indicating the different sectors is attached to this form.)

(d.) The tenderer should substantiate the information provided by submitting the following documentation:

i. A letter from the tenderer's auditor or an affidavit from the South African Police Services confirming the correctness of the abovementioned information,

ii. Company profile indicating the tenderer's staff compliment, and

iii. 3 year financial statement or since their establishment if established during the past 3 years.

SCHEDULE OF SECTORS

SIZE OF CLASS	THE TOTAL FULL-TIME EQUIVALENT OF PAID EMPLOYEES	TOTAL TURNOVER	TOTAL GROSS ASSET VALUE (FIXED PROPERTY EXCLUDED)
AGRICULTURE			
Medium	100	R 5 mil	R 5 mil
Small	50	R 3 mil	R 3 mil
Very Small	10	R 500 000	R 500 000
Micro	5	R 200 000	R 100 000
MINING AND QUARRYING			
Medium	200	R 39 mil	R 23 mil
Small	50	R 10 mil	R 6 mil
Very Small	20	R 4 mil	R 2 mil
Micro	5	R 200 000	R 100 000
MANUFACTURING			
Medium	200	R 51 mil	R 19 mil
Small	50	R 13 mil	R 5 mil
Very Small	20	R 5 mil	R 2 mil
Micro	5	R 200 000	R 100 000
ELECTRICITY, GAS & WATER			
Medium	200	R 51 mil	R 19 mil
Small	50	R 13 mil	R 5 mil
Very Small	20	R 5.1 mil	R 1.9 mil
Micro	5	R 200 000	R 100 000
CONSTRUCTION			
Medium	200	R 26 mil	R 5 mil
Small	50	R 6 mil	R 1 mil
Very Small	20	R 3	R 500 000
Micro	5	R 200 000	R 100 000
RETAIL AND MOTOR TRADE & REPAIR SERVICES			
Medium	200	R 39 mil	R 6 mil
Small	50	R 19 mil	R 3 mil
Very Small	20	R 4 mil	R 600 000
Micro	5	R 200 000	R 100 000
WHOLESALE TRADE, COMMERCIAL AGENTS AND ALLIED SERVICES			
Medium	200	R 64 mil	R 10 mil
Small	50	R 32 mil	R 5 mil
Very Small	20	R 6 mil	R 600 000
Micro	5	R 200 000	R 100 000
CATERING, ACCOMMODATION AND OTHER TRADE			
Medium	200	R 13 mil	R 3 mil
Small	50	R 6 mil	R 1 mil
Very Small	20	R 5.1 mil	R 1.9 mil
Micro	5	R 200 000	R 100 000
TRANSPORT, STORAGE & COMMUNICATIONS			
Medium	200	R 26 mil	R 6 mil
Small	50	R 13 mil	R 3 mil
Very Small	20	R 3 mil	R 600 000
Micro	5	R 200 000	R 100 000
FINANCE & BUSINESS SERVICES			
Medium	200	R 26 mil	R 5 mil
Small	50	R 13 mil	R 3 mil
Very Small	20	R 3 mil	R 500 000
Micro	5	R 200 000	R 100 000
COMMUNITY, SOCIAL AND PERSONAL SERVICES			
Medium	200	R 13 mil	R 6 mil
Small	50	R 6 mil	R 3 mil
Very Small	20	R 1mil	R 600 000
Micro	5	R 200 000	R 100 000

FORM RD.C.10 LETTER OF INTENT TO PROVIDE A PERFORMANCE BOND

It is hereby agreed that a Performance Bond drafted **exactly** as set out in the attached examples (See Section C1.3: Form of Guarantee) will be provided by the Surety named below:

Name of Surety (Bank or Insurer) _____

Address: _____

_____

_____

Signed:

_____

Name: _____

Capacity: _____

On behalf of Tenderer (name of tenderer) _____

Date: _____

CONFIRMED BY Surety's Authorised representative

Signature(s):

_____

Name (print): _____

Capacity _____

On behalf of Surety (Bank or Insurer)

_____

Date: _____

Note: Refer to the Annexure to **C1.3 Form of Guarantee** for the List of Institutions from who Contract/Deposit Guarantees will be accepted.

FORM RD.D.1 RECORD OF ADDENDA TO TENDER DOCUMENTS

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

	DATE	REFERENCE	TITLE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date:

FORM RD.D.2 KEY PERSONNEL

The tenderer shall list in the table below the key personnel to be engaged for this project.

Refer to clause C.2.1 of Part T1: Eligibility (mandatory requirements)
Note: Form RD.D.3 must be complete for each person listed below.

	NAME	PROFESSIONAL REGISTRATION CATEGORY	Number of years post registration experience
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

(Attach additional pages if more space is required)

FORM RD.D.3 CURRICULUM VITAE OF KEY PERSONNEL

Note: This form should be completed for each key person listed in Form RD.D.2(attach a comprehensive C.V, and proof of Registration).

Name:	**Date of birth:**
Profession:	**Nationality:**
Qualifications:	
Professional membership:	
Number of years post registration experience:	
Name of employer (firm):	
Current position:	**Years with firm:**
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to project scope:	
Certification: **I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications, and my experience.** _____ _____ *(Signature of person named in schedule)* Date:	

FORM RD.D.4 SCHEDULE OF TENDERERS EXPERIENCE

The experience of the tenderer or joint venture partners in the case of an unincorporated joint venture consortium, in similar projects shall be evaluated. Proof of experience (Appointment letters and Completion certificates) will influence the scoring on listed projects.

NOTE: The General Conditions of Contract prohibit the sub-contracting of the whole of the Contract.

The evaluation of the Tenderer's experience shall be for a similar project (Stormwater Infrastructure) as follows:

- **A similar project is a Stormwater Infrastructure Project**
- **Tenderer to have successfully completed at least one Storm Water Infrastructure Project.**

The following is a statement of similar work successfully executed by myself / ourselves:

	Employer, contact person and telephone number (Project will be rejected without current accurate contact data)	**Description of contract – of similar nature for each project**	**Date completed**	**To be completed by Evaluator**
1	Employer: _____ Contact Person: _____ Tel: _____			
2	Employer: _____ Contact Person: _____ Tel: _____			
3	Employer: _____ Contact Person: _____ Tel: _____			
4	Employer: _____ Contact Person: _____ Tel: _____			
5	Employer: _____ Contact Person: _____ Tel: _____			

PORTION 2: CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

TABLE OF CONTENTS

C1.1 FORM OF OFFER AND ACCEPTANCE 2
OFFER 2
ACCEPTANCE 3
SCHEDULE OF DEVIATIONS 4
CONFIRMATION OF RECEIPT 6
C1.2 CONTRACT DATA 7
C1.3 PERFORMANCE GUARANTEE 27
C1.4 CASH DEPOSIT GUARANTEE 29
C1.5 HEALTH AND SAFETY AGREEMENT 31
C1.6 APPLICATION FOR A PERMIT TO DEPARTMENT OF LABOUR TO DO CONSTRUCTION WORK 33
C1.7 ADJUDICATOR'S AGREEMENT 36

C1.1 FORM OF OFFER AND ACCEPTANCE

STAMP

OFFER

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

RTD26 – 2024/25: Tender For The Appointment Of a Contractor For The Upgrading Of Stormwater Systems in Ramotse Network 1A, 1C & 1F – Phase 2 For a Duration Of 18 Months

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

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

THE OFFERED TOTAL OF PRICES INCLUSIVE OF VALUE ADDED TAX IS

R _____ *(in figures)*

_____ *(in words)*

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 including the Schedule of Deviations (if any) 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.

FOR AND ON BEHALF OF THE TENDERER:

NAME:
(In BLOCK letters) _____

CAPACITY:
(Of authorized agent) _____

SIGNATURE:
(Of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

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
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 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 of 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 documentation to be provided in terms of the conditions of contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

FOR AND ON BEHALF OF THE EMPLOYER:

NAME:
(In BLOCK letters) _____

CAPACITY:
(Of authorized agent) _____

SIGNATURE:
(Of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the employer prior to the tender closing date is limited to those permitted in terms of the conditions of tender;

2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such, letter, which constitutes a deviation as aforesaid 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.

4.1 Subject: _____

_____

Details: _____

_____

4.2 Subject: _____

_____

Details: _____

_____

4.3 Subject: _____

_____

Details: _____

_____

4.4 Subject: _____

_____

Details: _____

_____

4.5 Subject: _____

_____

Details: _____

_____

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 the amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the Tenderer and the Employer during this process of offer and acceptance.

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

FOR AND ON BEHALF OF THE TENDERER:

NAME:
(In BLOCK letters) _____

CAPACITY:
(Of authorized agent) _____

SIGNATURE:
(Of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

FOR AND ON BEHALF OF THE EMPLOYER:

NAME:
(In BLOCK letters) _____

CAPACITY:
(Of authorized agent) _____

SIGNATURE:
(Of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

CONFIRMATION OF RECEIPT

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today the _____ (day) of _____ (month) _____ (year) at _____ (place).

FOR AND ON BEHALF OF THE CONTRACTOR:

NAME:
(In BLOCK letters) _____

CAPACITY:
(Of authorized agent) _____

SIGNATURE:
(Of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

C1.2 CONTRACT DATA

TABLE OF CONTENTS

C.1.2.1 GENERAL CONDITIONS OF CONTRACT 8
C1.2.2 VARIATIONS AND ADDITIONS TO THE CONDITIONS OF CONTRACT 9
C1.2.3 DATA PROVIDED BY THE EMPLOYER 22
C1.2.4 DATA PROVIDED BY THE CONTRACTOR 26

C.1.2.1 GENERAL CONDITIONS OF CONTRACT

The general conditions of contract applicable to this contract shall be **General Conditions of Contract for Construction Works, Third Edition (2015)** of the South African Institution of Civil Engineering (SAICE), read together with the Variations and Additions to the Conditions of Contract as well as the Data provided by Employer.

Tenderers, contractors and subcontractors shall obtain their own copies of the document **General Conditions of Contract for Construction Works, Third Edition (2015)** for tendering purposes and for use for the duration of the contract from the Secretary of the South African Institution of Civil Engineering, Private Bag X200, Halfway House, Midrand, 1685 and shall bear all expenses in this regard:

South African Institution of Civil Engineering (SAICE)
Telephone: 011 80505947 / 48 / 53
E-Mail: civilinfo@saice.org.za
Web: www.saice.org.za

C1.2.2 VARIATIONS AND ADDITIONS TO THE CONDITIONS OF CONTRACT

The following variations and additions to the **General Conditions of Contract for Construction Works, Third Edition (2015)**, shall apply to this contract:

CLAUSE / SUB-CLAUSE	DESCRIPTION	VARIATION / ADDITION
1.1.1	Definitions	**1.1.1.3 Certificate of Completion** **Add** the following to the clause: *Unless specified otherwise in the Contract Data, separate Certificates of Completion will not be issued for portions or phases of the Works.*
		1.1.1.24 Practical Completion **Add** the following to the clause: *This clause shall apply mutatis mutandis to any portion or phase of the Works that may be described in the Scope of Works or in the Contract Data, or agreed subsequently between the Contractor and the Employer, and committed to in writing.*
		Add the following new clause: *1.1.1.35 Construction Work Permit* *Construction Work Permit" means a statutory permit as defined in the Construction Regulations 2014.*
1.2.1	Delivery of notices	**Add** the following to the clause: *1.2.1.3 Sent by facsimile, electronic or any like communication irrespective of time of transmission;* *1.2.1.4 posted to the Contractor's address, and delivered by the postal authorities; or* *1.2.1.5 delivered by a courier service or messenger, and signed for by the recipient or his representative.*
1.2.3	Authority of representatives	**Add** the following to the clause: *1.2.3.1 The Employer has authorised the **Divisional Head: Transport Infrastructure Design & Construction** to act on his behalf in respect of this Contract, save for such duties or functions:* *1.2.3.1.1 which other holders of office ex officio execute on behalf of the Employer; or* *1.2.3.1.2 for which the **Divisional Head: Transport Infrastructure Design & Construction** has no authority and the Employer's approval is required before execution thereof.*
2.4.1	Ambiguity or Discrepancy	**Delete** the contents of the clause and insert the following:

		The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence, listed from highest to lowest priority: *a) Form of Offer and Acceptance* *b) Contract Data* *c) General Conditions of Contract* *d) Drawings* *e) Scope of Work* *f) Standard Specifications* *g) Bill of Quantities* *h) any other documents forming part of the Contract* *Upon finding any ambiguity in, or discrepancy between, or otherwise any error in the documents, the Contractor shall forthwith advise the Employer's Agent thereof before applying an interpretation in accordance with the above priority. If, after applying the above priority, an ambiguity in, or discrepancy between, or otherwise any remaining error in the documents remains, the Employer's Agent shall provide the necessary clarification or instruction.*
3.2.3	Specific approval of the Employer required	**Replace** clause 3.2.3 with the following: *In addition to the functions or duties set out in the Contract Data under Data Provided By The Employer, the Employer's Agent is required to obtain the specific prior approval of the Employer for:* *3.2.3.1 certification of expenditure that exceeds the Contract Price in terms of Clause 1.1.1.10;* *3.2.3.2 issuing of an order to suspend the progress of the Works in terms of Clause 5.11.2, the extra cost resulting from which order is to be borne by the Employer or the effect of which is liable to give rise to a claim by the Contractor for an extension of time under Clause 5.12 of these conditions;* *3.2.3.3 issuing of an instruction or order to vary the nature or quantity of the Works in terms of Clause 6.3, the estimated effect of which will be to increase the Contract Price by an amount exceeding R100 000, the evaluation of all variation orders in terms of Clause 6.4 and the adjustment of the sum(s) tendered for General Items in terms of Clause 6.11; or* *3.2.3.4 approval of any claim submitted by the Contractor in terms of Clause 10.1.*
4.1.2	Contractor's liability for own design errors	**Add** the following to the clause: *The Contractor shall provide the following to the Employer's Agent for retention by the Employer or his assignee in respect of all works designed by the Contractor:*

		4.1.2.1 A Certificate of Stability of the Works signed by a registered Professional Engineer confirming that all such works have been designed in accordance with the appropriate codes of practice. *4.1.2.2 Proof of registration and of adequate and current professional indemnity insurance cover held by the designer(s).* *4.1.2.3 Design calculations should the Employer's Agent request a copy thereof.* *4.1.2.4 Engineering drawings and workshop details (both signed by the relevant professional engineer), in order to allow the Employer's Agent to compare the design with the specified requirements and to record any comments he may have with respect thereto.* *4.1.2.5 "As-Built" drawings in DXF electronic format after completion of the Works.* *The Contractor shall be responsible for the design of the Temporary Works.*
4.3	Legal Provisions	**Add** the following new sub-clause: *4.3.3 Wages and conditions of work:* *i. For conventional construction works the Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) shall apply and the minimum employment conditions which will apply shall be guided by the Bargaining Council for the Civil Engineering Industry Collective Agreement as published from time to time.* *ii. Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) as per Government Notice R63 of 25 January 2002, shall apply to works described in the Scope of Work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.*
		Add the following new sub-clause: *4.3.4 Notwithstanding any actions which the Employer may take, the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2014, for which he is liable as mandatory. By entering into this Contract it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37(2) of the Act. The Contractor shall sign the Occupational Health and Safety Agreement for Contract Work in the City of Tshwane Metropolitan Municipality included in section C1.5.*
		Add the following new sub-clause: *4.3.5 The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health*

		and Safety Act, 1993 (Act 85 of 1993) and its Regulations following any incident involving the Contractor and/or Sub-Contractor and/or their employees. The Contractor shall notify the Employer in writing of all investigations, complaints or criminal charges which may arise pursuant to work performed under this Contract in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and Regulations.
		Add the following new sub-clause: *4.3.6 Contractor's Designer* *The Contractor and his designer shall accept full responsibility and liability to comply with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2014 for the design of the Temporary Works and those part of the Permanent Works which the Contractor is responsible to design in terms of the Contract*
		Add the following new sub-clause: *4.3.7 Construction Work Permit* *Unless duly exempted or otherwise duly agreed with the Contractor, the Employer shall forthwith, where a Construction Work Permit in terms of Regulation 3(1) of the Construction Regulations 2014 is required to be obtained by the Employer without derogation from the Employer's duties, the Employer or his duly appointed Construction Health and Safety Agent in terms of Regulation 5(6) or otherwise, upon the Construction Work Permit becoming available, issue it to the Employer's Agent, who, in turn, shall forthwith issue it to the Contractor.* *Notwithstanding anything stipulated to the contrary in these Conditions, the Contractor shall not be entitled to any claim or extension of time arising from any delay in obtaining a Construction Work Permit which has been duly applied for, unless such delay exceeds 84 consecutive days.*
5.3.3	Time to instruct the commencement of the works	**Replace** both periods of "*7 days*" in Clause 5.3.3 with "*14 days*".
5.6.1	Programme of works	**Add** the following to the clause: *The Contractor shall have regard for the phases and sub-phases (if applicable) for the Works, which shall also be the order in which the Permanent Works shall be constructed, unless otherwise agreed between the parties and committed to writing. If phased construction is applicable, the phases and sub-phases will be described in the Scope of Works and/or will be indicated on the Phasing Plan which forms part of the Drawings.*
5.7.1	Rate of progress	**Delete** the last paragraph of the clause and replace with the following: *No instruction by the Employer's Agent to the Contractor to improve his rate of progress in this regard will qualify for additional compensation, unless the instruction explicitly states that the Contractor is entitled to additional*

		compensation and cites the amount of such compensation or the basis upon which it is to be determined.
5.9.2	Further drawings and instructions	**<u>Add</u>** the following to the clause: *All instructions shall be in writing*
5.12	Extension of time for Practical Completion	**<u>Add</u>** the following new sub-clause *5.12.5 Critical path provision* *A delay in so far as extension of time is concerned, will be regarded as a delay only if, on a claim by the Contractor in accordance with the General Conditions of Contract, the Employer's Agent rules that all progress on an item or items of work on the critical path of the approved programme for the execution of the Works by the Contractor, has been brought to a halt. Delays on normal working days only, based on a working week, of five normal working days, will be taken in account for the extension of time.*
		<u>Add</u> the following new sub-clause *5.12.6 Extension of time due to abnormal rainfall* *Extension of time due to abnormal rainfall shall be determined by means of Method 1, if rainfall records and/or values derived from rainfall records are supplied in the Scope of Work, otherwise Method 2 shall apply.* *<u>Method 1: Rainfall formula method</u>* *The rainfall records and/or values derived from rainfall records from a suitable rainfall station near the Site, which are supplied in the Project Specifications, shall be considered suitable for the determination of extension of time due to abnormal rainfall in accordance with this method.* *Extension of time arising from abnormal rainfall, shall be calculated separately for each calendar month or part thereof for the full period of completion of the Contract, including any extension thereof, in accordance with the rainfall formula given below:* $V = (N_w - N_n) + \frac{(R_w - R_n)}{X}$ *If V is negative and its absolute value exceeds N_n, then V shall be equal to minus N_n.* *If V is positive and greater than the number of calendar days in the calendar month under consideration, V shall be taken as equal to the number of calendar days in the relevant calendar month.*

The symbols shall have the following meaning:

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

N_w = *Actual number of days during the calendar month on which a rainfall of Y mm or more has been recorded.*

R_w = *Actual rainfall in mm for the calendar month under consideration.*

N_n = *Average number of days as derived from existing rainfall records, on which a rainfall or Y mm or more has been recorded for the calendar month. Rainfall records and/or the derived values of N_n will be provided in the Specifications.*

R_n = *Average rainfall in mm for the calendar month, as derived from existing rainfall records. Rainfall records and/or the derived values of R_n will be provided in the Project Specifications.*

X = *20 unless otherwise provided in the Project Specifications*

Y = *10 unless otherwise provided in the Project Specifications*

The total extension of time shall be the algebraic sum of the monthly totals for the period under consideration. However, if the grand total is negative the time for completion shall not be reduced on account of abnormal rainfall. Extension of time for parts of a month shall be calculated by pro rata values of N_n and R_n being used.

The factor $(N_w - N_n)$ shall be considered to represent a fair allowance for variations from the average number of days during which rainfall exceeds Y mm and wet conditions prevented or disrupted work.

The factor $\frac{(R_w - R_n)}{X}$ *shall be considered to represent a fair allowance for variations from the allowance for variations from the average number of days when wet conditions further to that allowed for the factor $(N_w - N_n)$, prevented or disrupted work during the calendar month.*

Accurate rain gauging shall be taken at a suitable point on Site and the Contractor shall, at his own expense, take all necessary precautions to ensure that the rain gauges cannot be interfered with.

This formula does not take into account further on concurrent delays which could be caused by other abnormal climatic conditions such as floods, which have to be determined separately in accordance with Sub-Clause (5.12.5 Critical Plath Provision) hereof.

<u>Method 2: Expected delay method</u>

The Contractor shall make provision in his programme for the execution of the Works, for an expected delay of "n" normal working

		days (based on a working week of five normal working days) due to normal rainfall, for which he will not receive any extension of time. *Unless otherwise provided in the Project Specifications, the value of "n" shall be taken as equal to the tendered time for completion of the Works in months, rounded off to an integer.* *Extension of time during normal working days will be granted to the degree to which actual delays as determined in accordance with Sub-Clause (5.12.5 Critical Path Provision) hereof, exceed the number of "n" normal working days.* *The value of "n" does not take into account further or concurrent delays which are caused by other abnormal climatic conditions such as floods, which have to be determined separately in accordance with Sub-Clause (5.12.5 Critical Path Provision) hereof.*
6.1	Payment to Contractor	**Add** the following new sub-clause: *6.1.2 Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any non-payment for such works shall not relieve the Contractor in any way of his obligations either in contract or in delict.*
		Add the following new sub-clause: *6.1.3 The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the Contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the employer. The Contractors invoices shall not be paid until all pending labour information has been submitted.*
		Add the following new sub-clause *6.1.4 The Contractor shall be paid at Pretoria in the currency of the Republic of South Africa only at the Office of the Chief Financial Officer of the CITY OF TSHWANE, unless otherwise stated in the Data provided by Employer.*
6.2	Security	**Add** the following new sub-clause: *6.2.4 As an alternative to a performance guarantee, the Contractor may deposit with the Employer a cash amount in a sum equal to the amount stated in the Data provided by Employer. All the provisions in respect of the guarantee apply mutatis mutandis to the cash deposit accept that the amount deposited will be repaid to the Contractor within 30 (thirty) days after the issue of the Certificate or Certificates of Completion in respect of the whole of the permanent works.*

8.6	Insurances	**<u>Replace</u>** clause 8.6 with the following: ***8.6 Insurances*** *8.6.1 Without limiting the Contractor's/Sub-contractor's obligation in terms of the Contract, the Employer will effect and maintain for the duration of the Contract until the issuing of the Final Approval Certificate, the following insurances in the name of the Contractor (including all Subcontractors whether nominated or otherwise):* *8.6.1.1 The Employer's insurer will indemnify the Contractor/Sub-contractor against physical loss of or damage to any part of the Property Insured not exceeding the maximum contract value or the final contract value estimated at inception including free issue materials were applicable as stated in the Contract Data:* *a. Whilst in transit including loading and unloading whilst temporarily stored at any premises and route to or from the Contract Site within the Territorial Limits;* *b. From the time of unloading, dismantling or preparation at the Contract Site and thereafter until the Property Insured has been officially accepted by the Employer and becomes his responsibility by means of a notice of completion certificate or similar evidence of legal transfer of risk;* *c. During the contractual defects liability or Maintenance Period which shall not exceed the period reflected in the Schedule but only so far as the Contractors and/or Sub-Contractors may be liable for such loss or damage under the defects liability or maintenance condition/s of the Insured Contract;* *d. Removal of debris;* *e. Surrounding property* *f. Work away;* *g. Off-site storage* *h. Temporary repairs;* *i. Contribution clause – marine;* *j. Escalation during Contract Period;* *k. Post loss escalation;* *l. Automatic reinstatement;* *m. Principals maintenance;* *n. Property taken over;* *o. Beneficial occupation;* *p. Escalation due to currency fluctuation;* *q. Manufacturers guarantees* *8.6.1.2 The Employer's insurer will indemnify the Contractor/Sub-contractor against all sums for which the Contractor/Sub-contractor shall become legally liable towards third party claimants to pay for and in consequence of:* *a. Accidental death of or bodily injury to or illness or disease contracted by any person (excluding employees of the Contractor/Subcontractor);* *b. Accidental physical loss or damage to tangible property occurring during the Period of Insurance and arising out of or in connection with the performance of the Insured*

		Contract at the Contract Site as defined in the Schedule. The minimum limit of indemnity for any one event is R10-million in respect of contracts with a contract value of up to R50-million (excluding VAT). *8.6.2 Insurance premium payable* *The Employer will pay the insurance premium for the works damage and public liability insurance cover. The insurance premium will be calculated based on the approved Capital Budget per financial year and the insurance premium will be charged out to the relevant departments by the Section: Insurance and Risk Management.* *8.6.3 Additional insurance by the Employer* *The Employer shall be free to effect at his own cost any additional insurance, which he deems necessary in own interest to cover loss or damage not insured in terms of the insurance policies of Sub-Clause 8.6.1.1 of this Clause.* *8.6.4 Additional insurance by the Contractor / Subcontractor* *The Contractor and Sub-contractor shall be free to effect and maintain at their own cost any additional insurance which the Contractor/Subcontractor deem necessary to cover damage, loss or injury not insured in terms of the insurance effected by the Employer's insurer. The cost of the additional insurance will be for the account of the Contractor/Subcontractor.* *8.6.5 Contractor satisfied with insurance* *The submission of a tender shall be construed as acknowledgement by the Contractor that he is satisfied with the insurance cover affected by the Employer.* *8.6.6 Contractor to observe conditions* *The Contractor shall give all notices and observe all conditions and requirements imposed by the relevant insurance policies, which shall be binding on the Contractor.* *8.6.7 Contractor to insure* *The Contractor/Sub-contractor must obtain for the duration of the contract until the issuing of the Final Approval Certificate, the following insurance policies at an insurance company within 14 (fourteen) days of the notification of acceptance of the tender and must pay all premiums and supply proof thereof to the relevant Employer's Agent, 30 (thirty) days before the inception of the contract, that the policies have been taken out and that all premiums have been paid:* *a. All Risk Insurance cover with regard to all Plant and Materials and Equipment, owned, leased or hired by the*

		Contractor that are used in the execution of the contract for the full replacement value thereof. *b. Motor Vehicle and Liability Insurance cover indicating the registration numbers of the vehicles owned, leased or hired by the Contractor that are used in the execution of the contract to the amount of at least R10-million per claim with the number of claims unlimited.* *c. SASRIA cover for motor vehicles and Plant and Materials and Equipment owned, leased or hired by the Contractor that are used in the execution of the contract for the full replacement value thereof.* *d. In respect of Plant and Materials and Equipment and Motor Vehicles brought onto the Site by or on behalf of Subcontractors, the Contractor shall be deemed to have compiled with the provisions of this Sub-Clause by ensuring that such Subcontractors have similarly insured such Plant and Materials and Equipment and Motor Vehicles.* *e. Proof must also be submitted that the Contractor complies with the conditions of the following legislation:* - *Compensation for Occupational Injuries and disease, 1993* - *Unemployment Insurance Act, 1996* - *The Contractor shall in respect of the Site of the contract works appoint in writing a Section 16 appointee to meet the requirements of the Health and Safety Act, No 85 of 1993 as amended.* *8.6.8 The Employer's Agent involved must furnish the required insurance documentation 30 (thirty) days before the inception of the contract to the Section: Insurance and Risk Management.* *8.6.9 Reporting of incidents* *In the event of an occurrence, which is likely to give rise to a claim under the insurance policy affected by the Employer, the Contractor / Subcontractors and Employer's Agent will adhere to the following procedures:* *a. In addition to any statutory obligations and/or requirements contained in the General Conditions of Contract, the Contractor shall notify the Employer and the Employer's Agent of every occurrence within 48 (forty-eight) hours giving the circumstances, nature and an estimate of the loss or damage.* *b. The Employer's Agent will be responsible to complete and submit the relevant claim documentation for each incident within 30 (thirty) days after the incident occurred to the Section: Insurance and Risk Management. Should the incident be reported by the Employer's Agent more than 30 (thirty) days after the incident occurred to the Section: Insurance and Risk Management, the claim will only be considered if the claim documentation is accompanied by a letter from the relevant Strategic Executive Director motivating the reason(s) for the late reporting of the incident, but the Employer's Agent must take note the*

		Insurer might repudiate the loss if it is found that the insurers rights have been compromised as a result of the late reporting. *c. The following documentation must be included with the claim documentation:* *- Photos of damages caused or suffered as proof or substantiation of the claims.* *d. In the event of Insured Property being damaged during the Contract Works beyond economical repair, the property must be safeguarded and be handed over to the Employer's insurer for salvage.* *e. The Section: Insurance and Risk Management will inform the Employer's insurer of the incident. The Contractor/Subcontractor shall afford all reasonable access to the Site to the Employer, the Employer's Agent, the Employer's insurers and/or representatives for the purpose of assessment of any loss or damage.* *8.6.10 Reporting of catastrophic incidents* *In the event of an occurrence, which is likely to give rise to a claim, under the insurance policy effected by the Employer, with an estimated loss or damage of more than R250 000,00, the Contractor and the Employer's Agent will adhere to the following procedures:* *a. In addition to any statutory obligations and/or requirements contained in the General Conditions of Contract, the Contractor shall notify the Employer and the Employer's Agent of every occurrence within 24 (twenty-four) hours giving the circumstances, nature and an estimate of the loss or damage.* *b. The Employer's Agent must notify the Section: Insurance and Risk Management on the same day that the Contractor/Sub-contractor has notified the Employer's Agent of the incident.* *c. The Section: Insurance and Risk Management will notify the Employer's insurer of the incident. The Contractor/Sub-contractor shall afford all reasonable access to the Site to the Employer, the Employer's Agent, the Employer's insurers and/or representatives for the purpose of assessment of any loss or damage.* *d. The Employer's Agent will be responsible to complete and submit the relevant claim documentation for each incident within 30 (thirty) days after the incident occurred to the Section: Insurance and Risk Management. Should the incident be reported by the Employer's Agent more than 30 (thirty) days after the incident occurred to the Section: Insurance and Risk Management, the claim will only be considered if the claim documentation is accompanied by a letter from the relevant Strategic Executive Officer motivating the reason(s) for the late reporting of the incident. Should the relevant claim documentation not be submitted within 30 (thirty) days, the claim will be repudiated.*

		8.6.11 Reporting of crime related incidents *All crime related incidents, losses or shortages irrespective of the value, must be reported within 24 (twenty-four) hours by the person who was involved or who has discovered the incident to the nearest South African Police Services (SAPS) station. The name of the Police Station, Investigation Officer and the Case number must be obtained and stated on the Contractor Claim Form. Should the incident not be reported to the SAPS, the claim will be repudiated.* *8.6.12 Claim documentation* *The Employer's Agent must obtain all relevant information from the Contractor/Sub-contractor and complete the Contractor Claim Form, included in this report as Annexure B that is available on the Intranet. The project number must be stated on the Contractor Claim Form.* *The Employer's Agent must submit with the Contractor Claim Form a detailed cost sheet indicating the estimate of the loss or damage.* *Any misrepresentation, misdescription or non-disclosure of material facts, at the option of the insurers, can result in claims submitted being declared null and void.* *8.6.13 Authorization of claim forms* *It is imperative that a formally delegated official or his nominee of the Employer should authorize the Contractor Claim forms as proof of the appropriate authorization, verification and approval of claims submitted. The Divisional Head must provide an authorization letter to the Section: Insurance and Risk Management stating the names and the specimen signatures of the delegated official or his nominee within 30 (thirty) days from approval of this report by Council. Should the delegated official or his nominee not sign the relevant claim form, the claim will be repudiated as this may lead to inappropriate independent verification of the validity of claims, thereby increasing the risk of insurance fraud and consequent reputation damage to the Employer.* *8.6.14 Contractor to pay deductibles* *Any claim in terms of the insurance affected by the Employer shall be subject to the Contractor being responsible for the payment of the amount stated in the Annexure to the Policies as being the deductible (first amount payable or Excess) as defined in the Certificate of Insurance issued by the Employer's insurer in terms of the Policy.* *8.6.15 Settlement of claims* *All incidents reported to the Section: Insurance and Risk Management in respect of an occurrence, which is likely to give rise to a claim will be forwarded to the Employer's insurer who will take the necessary actions for the settlement of any such claims.*

		The Contractor shall negotiate for the settlement of claims with the Employer or the Employer's insurer through the Section: Insurance and Risk Management. The Employer's Chief Financial Officer will authorize all settlements of claims. *Should action for the settlement of any such claim to the satisfaction of the Employer's Agent not be taken by the Contractor/sub-contractor within 30 (thirty) days after receipt of such claim by the Contractor/sub-contractor, the Employer or the Employer's insurer may settle any such claim, after giving the Contractor notice of its intention to do so; provided that no such claim shall be settled by the Employer or the Employer's insurer without first consulting the Contractor/sub-contractor.* *The foregoing provisions of this Sub-Clause shall apply mutatis mutandis to any such claim received by the Contractor directly.*

C1.2.3 DATA PROVIDED BY THE EMPLOYER

CLAUSE/OPTION		DATA	
1.1.1.13	The Defects Liability period is:	**18 (eighteen) months** from the date of the Certificate of Completion.	
1.1.1.14	The time for achieving Practical Completion is:	Due Completion Date is **18 months** from Commencement Date	
1.1.1.15	The name of the Employer is:	**City of Tshwane Metropolitan Municipality**.	
1.1.1.26	The Pricing Strategy is:	**Re-measurement Contract**	
1.2.1.2	The address of the Employer is:	Physical Address:	**Capitol Towers North, 225 Madiba (former Vermeulen) Street, Pretoria**
		Postal Address:	**P.O. Box 1409 PRETORIA 0001**
1.1.1.16	The name of the Employer's Agent is:	**Nevhutalu Consulting Engineers**	
1.2.1.2	The address of the Employer's Agent is:	Physical Address:	**521 Zuzette Street Moreleta Park Pretoria, 0181**
		Postal Address:	**521 Zuzette Street, Moreleta Park, Pretoria, 0181**
		E-Mail Address:	**admin@nevhutalu.co.za**
3.1.3		• The Employer's Agent is required to obtain approval of the Employer: ▪ for expenditure on the Contract to exceed the Contract Price; ▪ prior to the execution of any of the following duties of functions:	

CLAUSE	DUTY/FUNCTION
3.2.1	Nomination of person as Employer's Agent's Representative
3.3.4	Authorization to Employer's Agent's Representative or any other person
4.10.1	Approval to use the Site for any other purpose such as housing
5.3.1	Delivery of the written notice to commence the execution of the works
5.6.3	Approval of programme of construction
5.7.2	Permission to carry out work by day and by night
5.8.1.1	Approval to work on special non-working days and between sunset and sunrise
5.9.7	Approval of Contractor's designs
5.11	Suspension of progress of the Works
5.13.2	Reduction of penalty for delay
5.14.2	The issue of a Certificate of Practical Completion

CLAUSE/OPTION		DATA
		5.14.4 The issue of a Certificate of Completion 5.16.1 The issue of a Final Approval Certificate 6.3.1 Variation Orders in respect of variations which are not small 6.6 Instruction to expend on Provisional and Prime Cost Sums 6.11 Adjustment of Preliminary and General allowances 7.8.1 Order to execute work of repair, etc. during the Defects Liability Period 7.8.2 Determination of value of repair work 8.2.2.2 Order to repair and make good damage arising from any excepted risk
5.3.1	The documentation required before commencement with Works execution are:	• Health and Safety Plan (Refer to Clause 4.3) • Initial programme (Refer to Clause 5.6) • Security (Refer to Clause 6.2) • Proof that all contributions required in terms of the provisions of the Workman's Compensation Act (Act no 30 of 1941) as amended in 1993, 2002 have been paid (Refer to Cause 4.3.2) • A certified copy of Unemployment Insurance Certificate, Act of 1996 (Refer to Clause 4.3.2)
5.3.2	The time to submit the documentation required from the Commencement Date is:	**14 days**
5.8.1	The non-working days are:	Sundays
	The special non-working days are:	• Annual builders holiday • Statutory public holidays
5.13.1	The penalty for failing to complete the works is:	**The penalty will be *R5000/day*.**
5.14.1	Requirements for achieving Practical Completion	• Layer works, Surfacing, Pre-marking, Road signs • All storm water systems, inlets, outlets, junction boxes and manholes must be completed.
5.16.3	The latent defect period is:	**10 (ten) Years**
6.1.3	Labour returns:	Labour returns will be submitted **monthly**.
6.2.1	Type of security for due performance:	• Fixed Performance Guarantee from approved financial institution or Cash Deposit. • The forms for the Guarantees is to contain the wording of the pro forma document included as **C1.3** or **C1.4** contained herein.
	Liability of performance guarantee/cash deposit	The liability of the guarantee shall be for **10 (ten) %** of the Contract Sum, excluding contingencies and VAT.
6.2.2	Retention money guarantee	**Not** permitted

<table>
<tr><th colspan="2">CLAUSE/OPTION</th><th>DATA</th></tr>
<tr><td>6.8.2</td><td>Adjustment in rates and/or prices</td><td>

- The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values:

<table>
<tr><th>Coefficient</th><th>Description</th><th>Value</th></tr>
<tr><td>x</td><td>Portion not subject to adjustment</td><td>0.10</td></tr>
<tr><td>a</td><td>Labour</td><td>0.21</td></tr>
<tr><td>b</td><td>Civil Engineering Plant</td><td>0.27</td></tr>
<tr><td>c</td><td>Civil Engineering Materials</td><td>0.42</td></tr>
<tr><td>d</td><td>Fuel</td><td>0.10</td></tr>
</table>

(Coefficients a, b, c and d must sum to one)

- The area nearest the Site is **Gauteng**.
- The base month is **the month and year prior to the closing of the tender**.

</td></tr>
<tr><td>6.8.3</td><td>Price adjustment for variations in the cost of special materials</td><td>Allowed</td></tr>
<tr><td>6.10.1.5</td><td>The percentage advance on materials not yet built into the Permanent Works is:</td><td>80% (Eighty percent)</td></tr>
<tr><td rowspan="2">6.10.3</td><td>Percentage retention is:</td><td>10% (ten percent) of the value of works, excluding contingencies and VAT</td></tr>
<tr><td>The limit of retention money is:</td><td>5% (five percent) of Contract Sum, excluding contingencies and VAT.</td></tr>
<tr><td rowspan="4">8.6</td><td>Insurance of the Works and Public Liability Insurance</td><td>The Employer shall arrange this insurance.

A copy of the policy and the list of excesses may be obtained from

Contractors All Risk and Liability Insurance
Ms. Morongwa Mokoena (Tel: 012 358 1126) (morongwam@tshwane.gov.za)
Mrs Ronett Marlow-Reid (Tel: 012 358 1131) (ronettm@tshwane.gov.za)
Mr Lawrence Matjila (Tel: 012 358 1374) (lawrencem@tshwane.gov.za)</td></tr>
<tr><td>The value of plant and materials supplied by the Employer to be included in the insurance sum is:</td><td>R 0 (zero)</td></tr>
<tr><td>Responsibility for payment of deductibles in respect of Insurance of Works as well as Public Liability Insurance:</td><td>Deductibles are the responsibility of the Contractor</td></tr>
<tr><td>Construction Plant:</td><td>Contractor to insure. Policy to be approved by Employer</td></tr>
<tr><td>10.5</td><td>Determination of disputes</td><td>Ad-hoc Adjudication Board</td></tr>
<tr><td>10.5.3</td><td>Number of Adjudication Board members to be appointed:</td><td>One</td></tr>
</table>

CLAUSE/OPTION		DATA
10.6	Disagreement with Adjudication Board's decision, refer matters to:	Court proceedings

C1.2.4 DATA PROVIDED BY THE CONTRACTOR

CLAUSE/OPTION		DATA		
1.1.1.9	The name of the Contractor is:			
1.2.1.2	The address of the Contract is:	• Physical Address:		
		• Postal Address:		
		• Fax to E-Mail:		
		• E-Mail Address:		
6.2.1	The security to be provided by the Contractor shall be one of the following:	Type of Security		Contractor's choice (Indicate "Yes" or "No"
		Performance guarantee (**10% (ten percent)** of the Contract Sum, excluding contingencies ad VAT)		
		Cash deposit (**10% (ten percent)** of the Contract Sum, excluding contingencies and VAT)		
6.5.1.2.3	The percentage allowance to cover profits and overhead charges for dayworks is:	_____ %. (Maximum of **15%** will be allowed) *(In the case of the Contractor not providing a percentage the percentage as per the General Conditions of Contract will prevail)*		
6.8.3	Price adjustments for variations in the cost of special materials	The variation in cost of special materials is:		
		Type of material	**Unit**	**Base Rate or Price**
		Bitumen		
		Steel		

C1.3 PERFORMANCE GUARANTEE

C1.3 PERFORMANCE GUARANTEE

WHEREAS

The City of Tshwane Metropolitan Municipality
(hereinafter referred to as the "Council"),

enters into a Contract (No _____) with

_____

(hereinafter referred to as the "Contractor")
for _____

_____

AND WHEREAS in terms of the General Conditions of the Contract the Contractor is required to furnish an acceptable independent guarantee for the due and proper fulfilment by him of all his duties and obligations in terms of the said contract.

NOW THEREFORE we the undersigned _____
_____ (full names of authorized agent(s))
and acting in my/our capacity as_____
and _____
and as such duly authorized thereto, do hereby bind the said _____
(hereinafter referred to as the "Guarantor") as surety and co-principal Debtor in solidum for the sum of
R _____ (_____)
for the due and proper fulfilment by the Contractor of all or any of his duties and obligations in terms of the said Contract. The guarantee shall not be interpreted as accessory to the contract between Council and the Contractor. The Guarantor further undertakes, in the event of the Contractor failing duly and properly to fulfil any of his duties and obligations in terms of the said Contract, or if the Contractor is placed under provisional liquidation or in the event of termination of the Contract by the Council in terms of the General Conditions of Contract, to pay to the Council the said sum of
R _____ (_____)
or such portion thereof as may be required by the Council, immediately upon receiving written demand from the Council which written demand shall be addressed to the Guarantor at (domicilium address)

The Guarantor further hereby renounces the benefits of the legal exceptions:
Exceptio non numerate pecuniae

Exception non causa debiti

Beneficium de duobus vel pluribus reis debendi

Beneficium ordinis deu excussionis

Beneficium divisionis

and all other defence which could be pleaded against the validity of this guarantee, with the meaning and effect of which it declares itself to be fully acquainted.

This undertaking shall remain in full force and effect up to and including the date of issue of the Certificate of Completion, as provided for in the General Conditions of Contract, unless the Guarantor is advised in writing by the Council of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated. Notwithstanding the aforesaid, the Council may at its' sole discretion elect to have the amount provided for under this guarantee, paid out directly to it in the case of breach of contract by the Contractor by giving the Guarantor written notice to that effect, notwithstanding the fact that the Council may decide not to institute any further legal action against the Contractor.

This document is not negotiable or transferable.

FOR AND ON BEHALF OF THE BANKER/INSURER:

BANKER/INSURER:

NAME: _____

(in BLOCK letters)

CAPACITY: _____

(of authorized agent)

SIGNATURE: _____

(of authorized agent)

SIGNED at _____on this _____day of_____

WITNESSES:

(Full name in BLOCK letters and signature)

1._____ _____

2._____ _____

C1.4 CASH DEPOSIT GUARANTEE

Contract:	RTD26-2024/25
Description of Contract:	Tender For The Appointment Of a Contractor For The Upgrading Of Stormwater Systems in Ramotse Network 1A, 1C & 1F – Phase 2 For a Duration Of 18 Months
Employer:	**CITY OF TSHWANE METROPOLITAN MUNICIPALITY**
Contractor:	

I/We, the undersigned, deposit herewith [1]cash / a bank certified cheque, in the amount of

_____

_____

as surety for the due performance of the Contract by the abovementioned Contractor, and for all losses, damages and expenses that may be suffered or incurred by the Employer as a result of non-performance of the Contract by the Contractor.

The amount thus deposited shall at the sole discretion of the above Employer be utilised and appropriated in the manner it deems fit which shall include but not be limited to the set off of claims upon occurrence of any one or more of the following events:

(a) the Contractor being placed under provisional liquidation or committing any one or more of the acts of insolvency as provided for in the Insolvency Act, 1936 (Act 24 of 1936);
(b) failure to comply with the conditions of the contract by the contractor; or
(c) if the contract is terminated.

A letter received from the Employer stating that any one or more of the aforementioned has occurred shall be sufficient notice to effect appropriation of such deposit. A certificate under the hand of the Employer's Agent as defined under the contract described above reflecting the amount of damages shall for all purposes be deemed to be sufficient to proof to do a set off of claims

The deposit shall, subject to the above, be returned to the Contractor on the issue of the Completion Certificate in terms of the Contract, unless the Employer has utilised and / or appropriated the monies as provided for above.

[1] Delete which is not applicable

FOR AND ON BEHALF OF THE CONTRACTOR:

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

C1.5 HEALTH AND SAFETY AGREEMENT

Article of Agreement in terms of Section 37(2) of the Occupational Safety Act, 1993 between

CITY OF TSHWANE
(Hereinafter referred to as the "EMPLOYER")

AND

_____

_____

_____

_____

Herein represented by _____ in his/her capacity as _____ duly authorised by

virtue of a resolution dated _____, attached hereto Annexure A, of the said

_____ (herein after referred to as the "CONTRACTOR")

WHEREAS the CONTRACTOR is the mandatory of the EMPLOYER as contemplated in an agreement in respect of

RTD26-2024/25: Tender For The Appointment Of a Contractor For The Upgrading Of Stormwater Systems in Ramotse Network 1A, 1C & 1F – Phase 2 For a Duration Of 18 Months

AND WHEREAS section 37 of the Occupational Health and Safety act, 1993 (Act 85 of 1993), hereinafter referred to as the "ACT"), imposes certain powers and duties upon the EMPLOYER.

AND WHEREAS the parties have agreed to enter into an agreement in terms of section 37(2) of the ACT.

NOW THEREFORE the parties agree as follows:

(a) The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.

(b) The CONTRACTOR undertakes that all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations will be fully complied with. Provided that should the EMPLOYER prescribe certain arrangements and procedures, that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.

(c) The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedure, if any, imposed by the ACT and Regulations and the EMPLOYER expressly absolves the EMPLOYER from itself being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedure as the case may be.

(d) The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with the undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to inspect

any appropriate records held by the CONTRACTOR or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.

(e) The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigations, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such an investigation, complaint or criminal charge as the case may be

FOR AND ON BEHALF OF THE CONTRACTOR:

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

FOR AND ON BEHALF OF THE EMPLOYER:

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

C1.6 APPLICATION FOR A PERMIT TO DEPARTMENT OF LABOUR TO DO CONSTRUCTION WORK

Annexure 1

Occupational Health and Safety Act, 1993
(Regulation 3(2) of the Construction Regulations, 2014)

APPLICATION FOR A PERMIT TO DO CONSTRUCTION WORK

This application must be submitted with the following documents:

a) Health and Safety specification
b) Health and Safety plan
c) Baseline risk assessment.

1. Name, postal address and telephone numbers of the client

_____

_____

2. Details of the agent

(a) Title, Surname and initials: _____

(b) Identity number / Passport number: _____

(c) Registration number with SACPCMP: _____

(d) Office Tel. Number and/or Mobile number: _____

(e) Postal address: _____

_____

3. Name, postal address and telephone numbers of the principal contractor

_____

_____

_____

4. Name, postal address and telephone numbers of the designer of the project

_____

_____

_____

5. Name, Postal address and telephone numbers of the following persons

(a) Construction Manager: _____

_____

(b) Construction Health and Safety Officer _____

_____

(c) Construction Health and Safety Officer _____

_____

6. Exact physical address of the construction and site office

_____

_____

7. Nature of construction work

_____

_____

8. Expected commencement date

_____

9. Expected completion date

_____

10. Estimated maximum number of persons on the construction site:

_____

11. Planned number of contractors on the construction site accountable to the principal contractor:

_____

12 Names(s) of contractors appointed

_____

_____

_____

18. Signature of Client / Client's Agent _____

19. Signature of the Principal Contractor

FOR OFFICE USE ONLY

Authorization / Unique No.	LABOUR CENTRE	OFFICE APPROVAL STAMP

13. Date of application: _____

14.
Submitted documents prescribed in Construction Regulation 5(4). (Please tick √)

CR 5(1)(a)		CR 5(1)(b)		CR 5(1); (C-S)	

15. Result of the application. (Please tick √)

Approved		**Declined**	

16. Reason for declining the application

_____

_____

_____

_____

_____

_____

_____

_____

17 Signature of the Supervisor: _____

18 Signature of revoking officer / inspector: _____

C1.7 ADJUDICATOR'S AGREEMENT

This agreement is made on the _____ day of _____ between:

_____ *(name of company / organisation)*

of _____

_____ *(address)* and

_____ *(name of company / organisation)*

of _____

_____ *(address)* (the Parties) and

_____ *(name of Adjudicator)*

of _____

_____ *(address)* (the Adjudicator).

Disputes or differences may arise/have arisen[1] between the Parties under a Contract dated _____ and known as _____

and these disputes or differences shall be/have been[2] referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "the Procedure") and the Adjudicator may be or has been requested to act.

IT IS NOW AGREED as follows:

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

[1] Delete as necessary
[2] Delete as necessary

SIGNED by: _____	SIGNED by: _____	SIGNED by: _____
Name: _____	Name: _____	Name: _____
who warrants that he / she is duly authorised to sign for and on behalf of the first Party in the presence of	who warrants that he / she is duly authorised to sign for and behalf of the second Party in the presence of	the Adjudicator in the presence of
Witness _____	Witness: _____	Witness: _____
Name: _____	Name _____	Name: _____
Address:	Address:	Address:
_____	_____	_____
Date: _____	Date: _____	Date: _____

Contract Data

1	The Adjudicator shall be paid at the hourly rate of R _____ in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to: (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs. (b) Telegrams, telex, faxes, and telephone calls. (c) Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. (e) Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R _____ This fee shall become payable in equal amounts by each Party within 14 days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not[1] currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

[1] Delete as necessary

PART C2: PRICING DATA

TABLE OF CONTENTS

C2.1 PRICING INSTRUCTIONS

1. General 2

2. Pay Items 2

3. Rates 3

4. Corrections of entries made by tenderer 4

C2.2 PRICING SCHEDULE 5

C2.1 PRICING INSTRUCTIONS

1. General

1.1 This section provides the tenderer with guidelines and requirements with regard to the completion of the Price Schedule. The Schedule **shall be completed by hand in black ink** and the tenderer is referred to the Tender Specifications in regard to the correction of errors.

1.2 The Price Schedule shall be read with all the documents which form part of this Contract.

1.3 The following words shall have the meanings hereby assigned to them:

Unit:	The unit of measurement for each item of work in terms of the Specifications and the Project Specifications.
Quantity:	The number of units of work for each item.
Rate:	The payment per unit of work at which the tenderer tenders to do the work.
Amount:	The product of the quantity and the rate tendered for an item.
Lump sum:	An amount tendered for an item, the extent of which is described in the Price Schedule, the Specifications and the Project Specifications, but the quantity of work of which is not measured in any units.

1.4 Reference shall be made to the General and Special Conditions of Contract regarding Provisional and Prime Costs Sums.

1.5 Work reserved for Labour Intensive construction methods will be numbered with a prefix "LI" in the Price Schedule to distinguish them from the conventional construction works. Such work shall be constructed using local labour who is temporarily employed in terms of the project specification.

2. Pay Items

2.1 Descriptions in the Price Schedule are abbreviated and comply generally with those in the Standard Specifications. The measurement and payment clause of each Standard 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 Standard Specification, or the Scope of Work, conflict with the terms of the Price Schedule, the requirements of the Standard Specification or Scope of Work, as applicable, shall prevail.

2.2 The item numbers appearing in the Price Schedule refer to the corresponding item number in the standard specifications or as amended in the Scope of Work. In the latter case, the item number is prefixed with the letter "B". The same applies to new clauses added to the standard specifications. The prefix "LI" is simply highlighting that the item is to be done using labour intensive methods.

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

2.4 The quantities set out in the Price Schedule are the estimated quantities of the Works, but the Contractor will be required to undertake whatever quantities may be directed by the Engineer 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.

2.5 The units of measurement described in the Price Schedule are metric units. Abbreviations used in the Price Schedule are as follows:

mm	=	Millimetre	h	=	per hour
m	=	Metre	kg	=	kilogram
km	=	Kilometre	t	=	ton (metric = 1000kg)
m^2	=	square metre	no	=	number
m^2.pass	=	square metre pass	sum	=	sum
ha	=	Hectare	MN	=	mega newton
m^3	=	cubic meter	MN.m	=	mega newton metre
m^3.km	=	cubic meter kilometre	PC sum	=	prime cost sum
ℓ	=	Litre	prov sum	=	provisional sum
kℓ	=	Kilolitre	%	=	percent
MPa	=	mega pascal	kW	=	kilowatt
V	=	Volt	KVA	=	kilo volt ampere
A	=	Ampere	R/only	=	rate only
month	=	per month	pe	=	per establishment
day	=	per day	pm	=	per person per month
pd	=	per person per day	p	=	per person
ph	=	per person per hour			

3. Rates

3.1 The prices and rates to be inserted in the Price Schedule are to be 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.

3.2 A price or rate is to be entered against each item in the Price Schedule, whether the quantities are stated or not.

An item against which no price is entered or where a word or phrase such as "included" or "provided elsewhere" will be accepted as a rate of nil (R0,00) having been entered against such items and covered by the other prices or rates in the Schedule.

Any work executed to which such a pay item applies, shall be measured under the appropriate items in the Price Schedule and valued at a rate of nil (R0,00). The rate of nil shall be valid irrespective of any change in the quantities during the execution of the Contract.

3.3 The Tenderer shall fill in a rate against all items where the words "rate only" appears in the amount column. The intention is that, although no work is foreseen under such item and no quantities are consequently given in the quantity column, the tendered rate shall apply should work under this item be actually required.

3.4 Except where rates only are required, the Tenderer shall insert all amounts to be included in his total tendered price in the "Amount" column and show the corresponding total tendered price.

3.5 The tenderer shall not group together a number of items and tender one rate for such group of items.

3.6 The tenderers shall be requested to supply three (3) quotations on each provisional sums' items provided as and when needed. The service provider will be required to provide a minimum of three (3) quotations every time he is allocated work depending on the available budget and scope thereof. The approved quotation will be taken as a lump sum for that specific period only and paid for according to the CTMM Standard Specifications for Civil Engineering works 2005.

3.7 All rates and sums of money quoted in the Price Schedule shall be in rands and whole cents. Fractions of a cent shall be discarded.

3.8 All prices and rates entered in the Price Schedule must be **excluding VAT**. VAT will be added last on the summary page of the Price Schedule.

3.9 Should excessively high unit prices be tendered, such prices may be of sufficient importance to warrant rejection of a tender by the Employer.

4. Corrections of entries made by tenderer

Any entry made by the Tenderer in the Price Schedule, forms, etc., which the tenderer desires to change, shall not be erased or painted out. **A line shall be drawn through the incorrect entry and the correct entry shall be handwritten above in black ink and the full signature of the Tenderer shall be placed next to the correction**.

C2.2 BILL OF QUANTITIES

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 0: GENERAL				
001		**SECTION 001 : GENERAL REQUIREMENTS AND CHARGES**				
001.01		**Preliminary and general charges:**				
001.01.01		Fixed charges	Lump Sum	1		
001.01.02		Time-related charges	Month	18		
001.02		Locating Existing Services	Lump Sum	1		
LI001.03		Excavate by hand to expose existing services and backfill	m³	100		
001.04		**Compliance with the Occupational Health and Safety Act and applicable regulations:**				
001.04.01		Provision of a Health and Safety Plan	Lump Sum	1		
001.04.02		Provision of a Health and Safety File	Lump Sum	1		
001.04.04		(a) Provision of safety officer - (full-time)	Month	18		
		(b) Provision of safety officer - (part -time)	Month	9		
001.04.05		Health and Safety Training	Lump Sum	1		
001.04.06		Provision of Personal Protective clothing and equipment	Lump Sum	1		
001.04.07		Provision of safety fences, signs and barricades	Lump Sum	1		
001.04.08		**Other Obligations**				
B001.04.08.01		Safeguarding against Theft and Vandalism	Lump Sum	1		
TOTAL SECTION 001 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
BROUGHT FORWARD						
B001.04.08.02		Compliance with Environmental Management Plan	Lump Sum	1		
B001.04.08.03		(a) Provision of Environmental Officer - (full-time)	Month	18		
B001.04.08.04		Compliance with OHS Act Regulations	Lump Sum	1		
001.05		Community Liaison Officer	Prov. Sum	18	R360 000.00	R 360 000.00
B001.05.01		Contractor's overhead charges and profit on item 001.05	%	R 360 000.00		
B001.08		Registration with Compensation Fund or approved/ licensed Compensation Insurer	Provisional Sum	1	R 30 000.00	R 30 000.00
B001.11		**Training:**				
B001.11.01		**Provision of Accredited Technical Skills Training**	Prov. Sum	1	R 300 000.00	R 300 000.00
B001.11.02		Handling cost and charges for the Contractor on item B003.11.02	%	R 300 000.00		
TOTAL SECTION 001 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 0 : GENERAL				
002		**SECTION 002: ENGINEERS'S ACCOMMODATION**				
002.01		**Services:**				
B002.01.01		Services for offices and laboratories	Month	18		
002.01.02		Services for Cooking and Ablution Facilities on Site for the Engineer's Site Staff	Lump Sum	1		
002.02	**LI**	**Treatment and maintenance of areas surrounding offices and laboratories**	Month	18		
002.03		**Offices and laboratory accommodation**	Month	18		
002.04		**Provision of survey equipment and assistants**	Month	18		
B002.05		Project Name Boards	No.	2		
TOTAL SECTION 002 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 1 : ANCILLARY WORK				
101		**SECTION 101 : SITE CLEARING AND GRUBBING**				
101.01		**Clearing and grubbing:**				
101.01.01	SC	Areas (M01 & U01)	m²	16 000		
101.01.02		**Strips**				
101.01.02.01		15m width (M02, 03, K01, 02)	m	800		
101.02	**LI**	**Cutting and removing large trees with girth:**				
101.02.01	LI	Exceeding 1m and up to and including 2m	No	100		
		Exceeding 2m and up to and including 3m	No	10		
101.03	**LI**	**Grubbing and the removal of the stumps and roots of large trees with a girth:**				
101.03.01	LI	Exceeding 1m and up to and including 2m	No	100		
101.03.01		Exceeding 2m and up to and including 3m	No	10		
101.05		**Removal and disposal of specific elements**				
101.05.01	LI	Concrete kerbing / kerbing combination	m	100		
101.05.02	**LI**	**Concrete or brick elements (reinforced or unreinforced)**				
101.05.02.01	LI	Small Concrete Structures, up to 4m^2 and 1.0m high	m³	500		
TOTAL SECTION 101 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
BROUGHT FORWARD						
101.05.02.02	LI	Erosion Control Beams	m³	20		
101.05.03	LI	Asphalt Surfacing	m²	500		
TOTAL SECTION 101 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 1 : ANCILLARY WORK **SECTION 102: ACCOMMODATION OF TRAFFIC**				
102.01		Accommodation of traffic and maintenance of bypasses	m	500		
102.02		**Earthworks for bypasses:**				
102.02.01		Shaping of bypasses	m	500		
102.03		Gravel wearing courses for bypasses	m³	300		
102.04		Watering of bypasses	kl	200		
102.05		Blading of bypass by motor grader	km	1		
102.14		**Temporary traffic-control facilities:**				
102.14.01	LI	Flagmen	Lump Sum	1		
102.14.02		Portable STOP and GO-RY signs	No	6		
102.14.03		Amber flicker lights	No	6		
102.14.04		Road signs, TR-series, 1 200 mm in diameter or 900 mm x 675 mm if rectangular	No	10		
102.14.05		Road signs, TW-series, 1 524 mm sides	No	10		
102.14.06		Road signs, TG-series, (excluding G49)	m²	10		
102.14.07		Danger plates and delineators	No	30		
102.14.08		Movable barricades (chevron and ROAD CLOSED types)	No	20		
102.14.09		Traffic cones	Lump Sum	1		
TOTAL SECTION 102 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
				BROUGHT FORWARD		
102.15		**Re-use or Removal of Traffic Control Facilities:**				
102.15.01		Amber flicker lights	No	6		
102.15.02		Road signs, TR and TW-series	No	5		
102.15.03		Road signs, TG-series	No	5		
102.15.04		Danger plates and delineators	No	30		
TOTAL SECTION 102 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 1 : ANCILLARY WORK				
103		**SECTION 103 : OVERHAUL**				
103.01		Overhaul on material hauled outside the defined free-haul boundaries	m³.km	10 000		
TOTAL SECTION 103 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 1 : ANCILLARY WORK **SECTION 104 : LANDSCAPING AND GRASSING**				
104.01		**Trimming:**				
104.01.01		Machine trimming	m²	2 500		
104.01.02	LI	Hand trimming	m²	1 000		
104.02		**Use of machines for trimming or shaping (alternative to subitem 104.01.01):**				
104.02.01		Bulldozer	h	1		
104.02.02		Motor grader	h	1		
104.03		**Preparing areas for grassing and ground covers:**				
104.03.01		Scarifying	ha	1		
104.03.02		**Topsoiling on the Site with -**				
104.03.02.01		Topsoil obtained from the Site or borrow areas provided by the Employer	m³	1 150		
104.03.02.02		Topsoil provided by the Contractor from other sources (including all haul)	m³	50		
104.03.03	LI	Topsoiling of borrow pits with topsoil obtained from borrow areas or from the Site	m³	50		
104.03.04	**LI**	**Supplying and applying chemical fertilizers -**				
104.03.04.01	LI	Lime	t	5		
104.03.04.02	LI	Superphosphate	t	1		
TOTAL SECTION 104 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
				BROUGHT FORWARD		
104.03.04.03	LI	Limestone ammonium nitrate	t	1		
104.03.04.04	LI	2:3:2 (22)	t	1		
104.03.05	LI	Stockpiling of topsoil	m³	1 100		
104.04	**LI**	**Grassing:**				
104.04.01	LI	Planting of grass cuttings	ha	1		
104.04.02	LI	Sodding	m²	250		
104.04.04	**LI**	**Hydroseeding -**				
104.04.04.01	LI	Providing approved seed mixture for hydroseeding	kg	250		
104.04.04.02	LI	Hydroseeding	ha	1		
104.06		Anti-erosion compounds such as organic adhesives or bio-degradable covering material (Verdyolor a similar approved compound)	kg	100		
104.07		**Trees, shrubs, grass and reeds -**				
104.07.01		Provision of trees and shrubs (Acacia Tortilis, 40l)	No	250		
104.07.02		Provision of trees and shrubs (Acacia Nilotica, 40l)	No	250		
104.07.03		Provision of grass Layer (Mixture of *Eragrastis tef (10 – 15%), Cenchrus ciliaris (30%), Digitaria eriantha (30%)* and *Cynodon dactylon (30%)*)	ha	2		
104.07.04		Provision of Reeds (Mixture of *Typha capensis, Schoenoplectus* and *Imperata*)	m²	2 500		
TOTAL SECTION 104 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
					BROUGHT FORWARD	
104.07.03	**LI**	**Planting and establishing of -**				
104.07.03.01	LI	Trees	No	500		
104.07.03.02	LI	Grass	ha	2		
104.07.03.04	LI	Reeds	m²	2 500		
104.08	LI	Extra Work For Landscaping	Prov. Sum	1	R100 000.00	R 100 000.00
TOTAL SECTION 104 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 1 : ANCILLARY WORK				
105		**SECTION 105 : FENCING**				
105.01		**Supply and erection of new fencing material:**				
105.01.01		Campeon Barbed Wire High-tensile grade, oval shaped, three strands wire, 2.60mm x 2.00mm	m	500		
105.01.02		Smooth Straining Wire, Mild Steel, 4mm in dia	m	500		
105.01.04		Diamond mesh, 1.8m high, 2,5mm dia wire, 64mm mesh size	m²	700		
105.01.05		Fencing (Concrete palisade)	m	2 300		
105.01.06		Corner, end, straining and gate posts, including anchors, hot dip galvinised, 75mm tubing and 3.15m length	No	80		
105.01.07		Standards, hot dip galvinised, 50mm dia tubing and 3.15m length	No	150		
105.01.08		Droppers, Standard black, 2.5kg/m, 2.4m length	No	6		
105.02		**New gates:**				
105.02.02		Double leaf, 5m width as shown on the drawings	No	4		
105.03	LI	**Moving of existing fences and gates:**				
105.03.01	LI	Fences :				
105.03.01.01	LI	Ordinary fences	m	100		
105.03.01.02	LI	Security fences	m	300		
105.03.02	LI	Gates	No	4		
105.04	**LI**	**Dismantling of existing fences**	m	400		
TOTAL SECTION 105 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
BROUGHT FORWARD						
105.05		**The drilling and blasting of holes for posts and anchors**	No	5		
105.06		**Provision of temporary fencing**				
105.06.01		Ordinary	m	100		
105.06.02		Security	m	300		
TOTAL SECTION 105 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 1 : ANCILLARY WORK				
106		**SECTION 106 : SERVICE DUCTS**				
106.01	**LI**	**Bedding and backfilling up to 300 mm above pipes:**				
106.01.01	LI	Using selected excavated material	m³	25		
106.01.02	LI	Using imported selected material	m³	25		
106.01.03	LI	Using imported non-cohesive material	m³	25		
106.01.04	LI	Using crushed stone	m³	25		
106.01.05	LI	Using stabilized material	m³	25		
106.02		The casting of in situ concrete in bedding and the encasing of pipes (Class 20/19 Concrete)	m³	30		
106.03		Soilcrete	m³	30		
106.04		**Service duct pipes:**				
106.04.01		**Ordinary pipes**				
106.04.01.01		160mm uPVC	m	1 500		
106.04.02		**Split pipes**				
106.04.02.01		160mm uPVC	m	200		
TOTAL SECTION 106 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 2 : EARTHWORKS				
202		**SECTION 202 : TRENCHING**				
202.01.01		**Trench excavations: Concrete pipes up to 900 mm dia.**				
202.01.01.01	LI	up to 1,5 m deep	m³	10		
202.01.01.02		Over 1,5 m and up to 2,0 m deep	m³	100		
202.01.01.03		Over 2,0 m and up to 2,5 m deep	m³	10		
202.01.01.04		Over 2,5 m and up to 3,0 m deep	m³	10		
202.01.02		**Trench excavations: Concrete pipes up to 1200 mm ø**				
202.01.02.01	LI	up to 1,5 m deep	m³	10		
202.01.02.02		Over 1,5 m and up to 2,0 m deep	m³	10		
202.01.02.03		Over 2,0 m and up to 2,5 m deep	m³	10		
202.01.02.04		Over 2,5 m and up to 3,0 m deep	m³	10		
202.02		**Extra over items 202.01, 202.03, 202.04 and 202.09 for excavating in:**				
202.02.01		Intermediate material	m³	10		
202.02.02		Hard material	m³	10		
202.03	LI	Excavations outside the normal trench profile	m³	10		
202.08		**Backfilling additional excavations in trench floor, using:**				
202.08.01	LI	Class 1:3:6/19 concrete	m³	10		
202.08.02	LI	Concrete aggregate, max size 38 mm	m³	20		
TOTAL SECTION 202 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
				BROUGHT FORWARD		
202.10		**Removal of spoil material:**				
202.10.01		To positions indicated on the Drawings or by the Engineer	m³	100		
202.10.02		To dumping areas to be provided by the Contractor	m³	300		
202.12		**Extra over item 202.06 for additional compaction of backfill to 93% of modified AASHTO density in road reserves**	m³	30		
202.13	**LI**	**Backfilling trenches with soilcrete**	m³	300		
202.15		**Reinstatement of bitumen surfaced roads**	m²	400		
TOTAL SECTION 202 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 2 : EARTHWORKS				
203		**SECTION 203 : MASS EARTHWORKS**				
203.01		**Excavation and borrow to fill:**				
203.01.01		Compaction to 90% of modified AASHTO density	m³	5 500		
203.01.02		Rock-fill processing and compaction	m³	1 000		
203.02		**Extra over item 203.01 for excavating in:**				
203.02.01		Intermediate material	m³	5 500		
203.02.02		Hard material	m³	1 000		
203.02.03		Boulder material class A	m³	40		
203.02.04		Boulder material class B	m³	40		
203.03		**Excavate and spoil of:**				
203.03.01		Soft material	m³	51 000		
203.03.02		Intermediate material	m³	7 200		
203.03.03		Hard material	m³	4 000		
203.03.04		Boulder material class A	m³	1 200		
203.03.05		Boulder material class B	m³	1 200		
203.04		**Removal of oversize material**	m³	1 200		
203.06		**Widening of cuttings (extra over items 203.01 and 203.03):**				
203.06.01		In hard material	m³	1 500		
203.06.02		In intermediate and soft material	m³	3 500		
203.06.03		In boulder material class A or class B	m³	500		
TOTAL SECTION 203 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
					BROUGHT FORWARD	
203.08		**Preparation and compaction of construction bed material to 90% of modified AASHTO density**	m³	6 000		
203.11		**Finishing off slopes:**				
203.11.01	LI	Excavation slopes	m²	6 000		
203.11.02	LI	Fill slopes	m²	600		
203.14		**Extra over item 203.01 for borrow material from sources to be supplied by the Contractor**	m³	1 000		
203.15		**Extra over items 203.03 and 203.04 for disposing of spoil material to sites to be provided by the Contractor**	m³	5 000		
TOTAL SECTION 203 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 5 : DRAINAGE AND EROSION PROTECTION				
501		**SECTION 501 : SUBSURFACE DRAINS AND DRAINAGE BLANKETS**				
501.01		**Crushed stone:**				
501.01.01	LI	Graded crushed stone	m³	500		
501.01.02	LI	Single-sized crushed stone (19mm nominal aggregate size)	m³	2 200		
501.01.03	LI	Single-sized crushed stone (50mm nominal aggregate size)	m³	250		
501.02		Procuring of filter sand	Prov. Sum	1	R 10 000.00	R 10 000.00
501.03	LI	Placing of filter sand	m³	250		
501.04		**Geotextiles, U24 Bidim**	m²	6 000		
501.05		**Pipes in subsurface drains:**				
501.05.01		**Supply, deliver, install perforated pipes complete with couplings for:**				
501.05.01.01		150mm dia	m	2 200		
501.05.01.02		250mm dia	m	200		
TOTAL SECTION 501 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 5 : DRAINAGE AND EROSION PROTECTION				
502		**SECTION 502: PREFABRICATED CULVERTS ANDSTORMWATER SEWERS**				
502.01		**Backfilling with selected excavated material compacted to:**				
502.01.01	LI	90% of modified AASHTO density	m³	1 000		
502.01.02		93% of modified AASHTO density	m³	100		
502.01.03		95% of modified AASHTO density	m³	100		
502.02		**Supplying and laying of concrete pipe culverts (type SC-pipes):**				
502.02.01		Supply, handle, lay and bed concrete pipes Class 50D on Class B bedding:				
502.02.01.01		600mm dia	m	5		
502.02.01.02		675mm dia	m	5		
502.02.01.03		750mm dia	m	5		
502.02.01.04		900mm dia	m	10		
502.02.01.05		1050mm dia	m	20		
502.02.01.06		1200mm dia	m	5		
502.02.01.07		1500mm dia	m	5		
TOTAL SECTION 502 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
BROUGHT FORWARD						
502.07		**Extra over item 502.02 for end units for concrete pipe culverts with a skew of more than 20º :**				
502.07.01		**Type SC pipes**				
502.07.01.01		900mm dia	No	2		
502.07.01.02		1050mm dia	No	2		
502.10		**Cast in situ concrete:**				
502.10.01		**In class A bedding, blinding layers and encasing of pipes, including any formwork required**				
502.10.01.01		Class 15/19mm Concrete	m³	500		
502.10.02		**In invert slabs for portal or rectangular culverts, including formwork to provide class F1 surface finish and class U2 surface finish for unformed surfaces**				
502.10.02.01		Class 25/19 Concrete	m³	30		
502.10.03		**In inlet and outlet structures, catchpits, manholes and junction boxes excluding formwork, but including class U2 surface finish:**				
502.10.03.01		Class 25/19 Concrete (K01 & K02)	m³	105		
502.16		**Manholes, catchpits, precast inlet and outlet structures and junction boxes complete:**				
502.16.01	LI	Manholes, Concrete complete as per drwg no. V03 for a standard depth of up to 3.5m	No	2		
TOTAL SECTION 502 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
BROUGHT FORWARD						
502.16.02	LI	Drop Inlet/Field Inlet, Concrete complete as per drwg no V03 for a standard depth of up to 3.5m	No	1		
502.21		**Soilcrete**	m³	100		
502.22		**Extra over items 502.01 and 502.21 for using backfill material obtained:**				
502.22.01		From borrow areas provided by Employer	m³	100		
502.22.02		From sources provided by Contractor	m³	500		
TOTAL SECTION 502 CARRIED TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 5: DRAINAGE AND EROSION PROTECTION				
504		**SECTION 504: OPEN DRAINS**				
504.04	LI	**CHANNELS (LABOUR)**				
		Trimming the excavation, furnishing and installing the channel according to the detail on drawing no's M01 – M03 but excluding mass excavation (measured under section 203), grass blocks (measured under section 505), formwork (measured under section 702) reinforcement (measured under section 703), Concrete (measured under section 704) and Joints (measured under section 706)				
504.04.01	LI	Class 25/19 Trapezoidal Canal M01,M02,M03	m	960		
504.04.05	LI	Class 25/19 Transition T02 – T04, Drwg No. T02 – T04	m	80		
TOTAL SECTION 504 CARRIED FORWARD						

SERIES 5: DRAINAGE AND EROSION PROTECTION
SECTION 505: EROSION PROTECTION

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 5: DRAINAGE AND EROSION PROTECTION				
505		**SECTION 505: EROSION PROTECTION**				
505.01		**Foundation trench excavation and backfilling:**				
505.01.02		In all other classes of material	m³	1 500		
505.02	**SC**	**Surface preparation for the bedding of gabions**	m²	2 000		
505.03	**SC**	**Gabions**				
505.03.01		Gabion baskets (2m x 1m x1m) 80 - 100mm mesh	m³	120		
505.03.02		Gabion baskets (2m x 1m x0.5m) 80 - 100mm mesh	m³	120		
505.03.03		Gabion mattresses (4m x 2m x 0.3m) 80 - 100mm mesh	m³	300		
505.03.04		**Geotextiles**				
505.03.04		(a) Class A6	m²	1 500		
505.09		**Concrete pitching**				
505.09.03		Precast concrete grass blocks	m²	4 500		
B505.09.05		Armorflex Blocks	m²	3 000		
TOTAL SECTION 505 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 6: ROADS AND PARKING AREAS				
601		**SECTION 601: GRAVEL PAVEMENT LAYERS**				
601.01		**Preparation and compaction of in situ subgrade material to:**				
601.01.01		90% of modified AASHTO density	m³	4 000		
601.02		**Gravel layers constructed from material obtained from borrow pits:**				
601.02.01		**Selected layer**				
601.02.01.02		Compacted to 93% of modified AASHTO density	m³	250		
601.02.02		**Subbase**				
601.02.02.02		Compacted to 95% of modified AASHTO density	m³	250		
TOTAL SECTION 601 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 6: ROADS AND PARKING AREAS				
602		**SECTION 602: CRUSHED STONE PAVEMENT LAYERS**				
602.01		**Crushed-stone base constructed with material obtained from:**				
602.01.01		**Commercial sources**				
602.01.01.01		G1 material compacted to 86% of apparent density	m³	200		
TOTAL SECTION 602 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 6: ROADS AND PARKING AREAS				
605		**SECTION 605: PRIME COAT**				
605.01		**Prime Coat:**				
605.01.01		RTH 3/12P or RTL 3/12P tar prime	lt	600		
605.01.03		MC-70 cut-back bitumen	lt	600		
TOTAL SECTION 605 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 6: ROADS AND PARKING AREAS				
606		**SECTION 606: ASPHALT BASE AND SURFACING**				
606.01		**Asphalt Surfacing:**				
606.01.01		Continuous Medium Graded (30mm thick)	m^2	1 500		
TOTAL SECTION 606 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 6: ROADS AND PARKING AREAS				
612		**SECTION 612: TRAFFIC SIGNS**				
B612.07		**Small road signs with class 1 retro-reflective chromodek sheeting, complete with "D" section galvanized pole, excavation and backfilling included:**				
B612.07.01		W-series (900 mm sides)	No	1		
B612.07.02		W401 (600mm x 150mm)	No	1		
B612.07.03		W402 (600mm x 150mm)	No	1		
TOTAL SECTION 612 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 6: ROADS AND PARKING AREAS				
613		**SECTION 613: TRAFFIC MARKINGS**				
613.01		**Road-marking paint:**				
613.01.01		White lines (broken or unbroken) 150mm	km	0.5		
613.01.02		Yellow lines (broken or unbroken) 150mm	km	1		
613.06		Setting out and the pre-marking of lines (excluding traffic-island markings, lettering and symbols)	km	0.5		
TOTAL SECTION 613 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 7 : STRUCTURES				
701		**SECTION 701 : FOUNDATIONS FOR STRUCTURES**				
701.02		**Excavations for structures:**				
701.02.01		**Excavation of soft material situated in the following depth ranges :**				
701.02.01.01	LI	0m up to 2m	m³	5 000		
701.02.01.02		Exceeding 2m and up to 4m	m³	8 000		
701.02.02		Extra over subitem 701.02.01 for excavation in hard material irrespective of depth	m³	2 000		
701.02.03	LI	Extra over subitem 701.02.01 for additional excavation required by the Engineer after the Excavation has been completed	m³	200		
701.04	LI	Dewatering of foundation excavations	Lump Sum	1		
701.05	LI	**Backfill to excavations utilizing -**				
701.05.02	LI	**Material from the excavation compacted to**				
701.05.02.01	LI	90% of modified AASHTO density	m³	500		
701.06	LI	Fill with restricted areas (extra over Item 203.01)	m³	200		
701.07	LI	**Foundation fill consisting of**				
701.07.01	LI	Rock	m³	100		
701.07.02	LI	Crushed stone:	m³	200		
701.07.03	LI	Compacted Granular Material	m³	500		
701.07.04	LI	Mass Concrete (Class 20/19)	m³	300		
701.07.05	LI	75mm thick blinding layer, class 15/19 concrete	m³	200		
TOTAL SECTION 701 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
702		**SECTION 702 : FALSEWORK, FORMWORK AND CONCRETE FINISHING**				
702.02	LI	**Formwork class F2 surface finish:**				
702.02.01	LI	**Single-surface formwork:**				
702.02.01.01	LI	Plane, horizontal	m²	1 200		
702.02.01.02	LI	Plane, horizontal/sloping combination, 100mm high (between Channel sections M02-M04)	m	1 100		
702.02.01.03	LI	Plane, vertical	m²	1 800		
702.02.01.05	LI	Curved, conical (Radius >5m, <100m))	m²	800		
702.02.02	LI	**Double-surface formwork:**				
702.02.02.01	LI	Plane, horizontal	m²	300		
702.02.02.02	LI	Plane, sloping	m²	200		
702.02.02.03	LI	Plane, vertical	m²	700		
702.02.02.05	LI	Curved, conical (Radius >5m, <100m)	m²	350		
702.02.03	LI	**Beams**				
702.02.03.01	LI	Beams, Soffit	m²	5		
702.02.03.01	LI	Beams, Sides	m²	10		
702.02.04	LI	**Columns**				
702.02.04.01	LI	Square and Rectangular	m²	100		
702.06	LI	Formwork to Openings	m²	50		
TOTAL SECTION 702 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 7 : STRUCTURES				
703		**SECTION 703 : STEEL REINFORCEMENT FOR STRUCTURES**				
703.03		**Welded Steel fabric for**				
703.03.01		**Culvert K01-K02 Floor Slab**				
703.03.01.01		Reference No 772	kg	200		
703.03.02		**Transition T02 -T04**				
703.03.02.01		Reference No 193	kg	450		
703.03.03		**Main Channel (M01-M03)**				
703.03.03.01		Reference No 193	kg	15 000		
703.03.03.02		Bars with 12mm dia	t	3		
703.03.04		**Reinforcement for Stilling basin and sediment trap floor**				
703.03.04.01		Reference No 193	kg	2 300		
703.04.01		**Reinforcement for Stilling basin and sediment trap floor**				
703.04.01.01		**Mild Steel**				
703.04.01.01		Bars with 6mm dia	t	1		
703.04.01.02		**High yield stress steel**				
703.04.01.02.01		Bars with 10mm dia	t	20		
703.04.01.02.02		Bars with 12mm dia	t	50		
703.04.02		**Reinforcement Culvert K01-K02**				
703.04.02.01		**Mild Steel**				
703.04.02.01.01		Bars with 6mm dia	t	1.5		
703.04.02.01.02		Bars with 8mm dia	t	1.5		
TOTAL SECTION 703 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
				BROUGHT FORWARD		
703.04.02.02		**High yield stress steel**				
703.04.02.02.01		Bars with 10mm dia	t	1		
703.04.02.02.02		Bars with 12mm dia	t	12		
703.04.02.02.03		Bars with 16mm dia	t	1		
703.04.02.02.04		Bars with 20mm dia	t	1		
703.04.04		**Transition T02-T06**				
703.04.04.01		**Mild Steel**				
703.04.04.01.01		Bars with 6mm dia	t	1		
703.04.04.01.02		Bars with 8mm dia	t	0.6		
703.04.04.01.03		Bars with 10mm dia	t	0.4		
703.04.04.02		**High yield stress steel**				
703.04.04.02.01		Bars with 10mm dia	t	1		
703.04.04.02.02		Bars with 12mm dia	t	12		
703.04.04.02.03		Bars with 16mm dia	t	2		
703.04.04.02.04		Bars with 20mm dia	t	1		
703.04.05.02.05		Bars with 25mm dia	t	0.1		
TOTAL SECTION 703 CARRIED TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
704		**SECTION 704 : CONCRETE**				
704.01		**Cast in situ concrete:**				
704.01.01		Stilling basin and sediment trap floor	m³	1 500		
704.01.02		Class 25/19 Trapezoidal Canal M02-M03	m³	900		
704.01.03		Class 25/19 Culvert K01-K02	m³	300		
704.01.04		Class 25/19 Transition T02-T04, Drwg no. T02-T04	m³	300		
704.02		**Manufacture of precast concrete members**				
704.02.01		Class 25/19 Concrete filter section, drwg no. U02	No	850		
704.02.02		Class 25/19 Culvert K01, 3 x 2.4m, drwg no. K01	m	15		
704.02.03		Class 25/19 Culvert K02, 3 x 2.4m, drwg no. K02	m	30		
704.03		**Transportation and erection of precast concrete members**				
704.03.01		Class 25/19 Concrete filter section, drwg no. U02	m	850		
704.03.02		Class 25/19 Culvert K01, 3 x 2.4m x 2.4m, drwg no. K01	m	15		
704.03.03		Class 25/19 Culvert K02, 3 x 2.4m x 2.4m, drwg no. K02	m	30		
TOTAL SECTION 704 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
706		**SECTION 706 : JOINTS IN STRUCTURES**				
706.03		Expansion joints complete, including 12mm bars, bitumen emulsion and joint sealer as detailed on Drawing for Concrete Canals	m	1 600		
706.04		**Filled joints**				
706.04.01		10mm filler between joints as indicated on Drawing	m	1 600		
TOTAL SECTION 706 CARRIED FORWARD						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 8 : SPECIFIC WORKS				
809		**SECTION 809 : STRUCTURAL STEELWORK**				
809.01		**Structural Steel Items**				
809.01.04		Steel section to be supplied and construct into concrete floor, columns and beams as detailed on drawing no U02 and U03	No	15		
TOTAL SECTION 809 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SECTION B810 : DAYWORKS				
B810.01		**Personnel during normal working hours:**				
B810.01.01		Unskilled labour	h	12		
B810.01.02		Semi-skilled labour	h	12		
B810.01.03		Skilled labour	h	12		
B810.02		**Plant:**				
B810.02.01		Tipper trucks (6m³ capacity)	h	12		
B810.02.02		Tipper trucks (10m³ capacity)	h	12		
B810.02.03		TLB	h	12		
B810.02.04		Truck mounted Hydraulic crane (20 ton)	h	12		
B810.02.05		Grader 140G	h	12		
B810.02.06		Compressors and equipment	h	12		
B810.02.07		Excavator (30 ton)	h	12		
B810.02.08		Bomac 60	h	12		
B810.02.09		Water tanker - 10,000 litre	h	12		
B810.03		**Materials:**				
B810.03.01		Procurement of materials	Prov. Sum	1	R100 000.00	R 100 000.00
B810.03.02		Contractor's handling costs, profit and all other charges in respect of subitem B810.03.01	%	R100 000.00		
B810.04		**Transport:**				
B810.04.01		Lowbed	km	2 500		
TOTAL SECTION 810 CARRIED FORWARD TO SUMMARY						

ITEM	LI/SC	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		SERIES 9: QUALITY CONTROL				
903		**SECTION 903: TESTING**				
903.06		**Other special tests requested by the Engineer**				
903.06.01		Cost of testing	Prov. Sum	1	R100 000.00	R 100 000.00
903.06.02		Charge on prime cost sum	%	R 100 000.00		
TOTAL SECTION 903 CARRIED FORWARD TO SUMMARY						

CONTRACT: RTD26 – 2024/25

SUMMARY OF BILL OF QUANTITIES

SECTION	DESCRIPTION	AMOUNT
001	GENERAL REQUIREMENTS AND CHARGES	
002	ENGINEERS'S ACCOMODATION	
101	SITE CLEARANCE AND GRUBBING	
102	ACCOMODATION OF TRAFFIC	
103	OVERHAUL	
104	LANDSCAPING AND GRASSING	
105	FENCING	
106	SERVICE DUCTS	
202	TRENCHING	
203	MASS EARTHWORKS	
501	SUB-SURFACE DRAINS AND DRAINAGE BLANKETS	
502	PRE-FABICATED CULVERTS AND STORMWATER SEWERS	
504	OPEN DRAINS	
505	EROSION PROTECTION	
601	GRAVEL PAVEMENT LAYERS	
602	CRUSHED-STONE PAVEMENT LAYERS	
605	PRIME COAT	
606	ASPHALT BASE AND SURFACING	
612	TRAFFIC SIGNS	
613	TRAFFIC MARKINGS	
701	FOUNDATIONS FOR STRUCTURES	
702	FALSEWORK, FORMWORK AND CONCRETE FINISHING	
703	STEEL REINFORCEMENT FOR STRUCTURES	
704	CONCRETE	
706	JOINTS IN STRUCTURES	
809	STRUCTURAL STEELWORK	
B810	DAYWORKS	
903	QUALITY CONTROL	
SUB – TOTAL A		
Add 10% For Contingencies on SUB – TOTAL A		
SUB – TOTAL B		
Add 7.5% For CPA on SUB – TOTAL B		
SUB – TOTAL C		
Add 15% VAT on SUB – TOTAL C		
TOTAL CONTRACT PRICE CARRIED TO FORM OF OFFER		

PART C3: SCOPE OF WORK

TABLE OF CONTENTS

C3.1 DESCRIPTION OF THE WORKS 2
C3.2 ENGINEERING 10
C3.3 PROCUREMENT 14
C3.4 CONSTRUCTION 25
C3.5 MANAGEMENT 35

C3.1 DESCRIPTION OF THE WORKS

TABLE OF CONTENTS

C3.1.1 Employers objectives 3
C3.1.2 Overview of the works 3
C3.1.3 Extent of the works 4
C3.1.3 Extent of the works 5
C3.1.4 Location of the works 6

C3.1.1 Employers objectives

The objective of the project is to provide stormwater system upgrading services at Ramotse. The aim is to ensure that the standard of living is improved through the provision of basic stormwater system services to the broader community. The project is also aimed at delivering public infrastructure to the community through construction by using conventional methods, and most importantly using Labour Intensive methods to empower the community according to the Expanded Public Works Programme (EPWP).

The project entails the upgrading of the stormwater system to serve the residential stands. This will include Trapezoidal Concrete Canals, Reticulation Concrete Canals, Prefabricated Box Culverts, Transition Channels and Rectangular Concrete Canals.

The employer's objectives are to have the works constructed cost-effectively without compromising quality or construction standards, in such a manner that:

a) employment and entrepreneurial opportunities are created for members of the local community in the execution of the works and in aspects of the third-party management support that is to be provided by the Contractor;
b) the amount of the construction cost retained by the local community is significant;
c) entrepreneurs from the local community are developed through the performance of construction contracts with assistance from, and under guidance of, third-party management support provided by the Contractor and,
d) entrepreneurs are given sufficient support in construction management and materials management to ensure their success.

Works earmarked for Labour Intensive construction methods will be numbered with a prefix "LI" in the bill of quantities to distinguish them from the conventional construction works. Such work shall be constructed using local workers who are temporarily employed in terms of the project specification.

The Contractor will be appointed with a minimum Construction Industry Development Board (CIDB) 7CE.

City of Tshwane is not bound to accept the lowest or any tender and reserves the right to accept the whole or any part of a tender.

C3.1.2 Overview of the works

The project requires the construction of stormwater systems upgrading to service residential stands at Ramotse.

The description of the works contained is merely an outline of the Contract works to be undertaken and shall not limit the work to be carried out by the Contractor under this Contract. The Schedule of Quantities provide only for the type of work that may be undertaken and the quantities are provided purely for tendering purposes and is indicative of the expected or estimated quantities.

The Scope of Works entails the following:

(i) 308m of Trapezoidal Canal (M01 – M03).
(ii) 660m of Trapezoidal Concrete Canal (M02 – M03)
(iii) 45m of Stormwater (precast and insitu) culverts (K01 – K02).
(iv) 40m of Transition channels (T02 – T04).
(v) Stilling Basin and Sedimentation Trap Structure

C3.1.3 Extent of the works

a) The extent of the Works consists of:

General

(i) General Requirements And Charges which covers the principles, responsibilities and requirements applicable to the contract as a whole as well as to all work and costs involved in the establishment of the Contractor's organization, camps and construction equipment on the site and their removal after completion.
(ii) Provision of Office accommodation for the Engineer's resident staff.
(iii) The Clearing of the Site and the Grubbing necessary for the Construction of the works covered by the contract.
(iv) Accommodation of Traffic.
(v) Overhaul.
(vi) Landscaping and Grassing or establishment of vegetation at the pump station and along the pipeline.
(vii) Erection of New fences, moving of existing fences, erection and later removal of temporary fences.
(viii) Service Ducts.
(ix) Trenching for stormwater systems.
(x) Construction of large excavations and embankments for the stormwater systems.
(xi) Sub-surface Drains and Drainage Blankets.
(xii) Stormwater Sewers.
(xiii) Open Drains.
(xiv) Erosion Protection Gravel Pavement Layers.
(xv) Crushed Stone Pavement Layers.
(xvi) Prime Coat.
(xvii) Asphalt Base And Surfacing.
(xviii) Traffic Signs.
(xix) Traffic Markings.
(xx) Foundation work for the structures.
(xxi) Design, supply and erection of all falsework and formwork in the construction of Pump Station.
(xxii) Supplying and placing of steel reinforcement.
(xxiii) Manufacture, transportation, placing and testing of concrete.
(xxiv) Supply and installation of all permanent joints that will permit movement.
(xxv) Structural Steelwork
(xxvi) Requirements for testing laboratories and equipments to test properties of materials.
(xxvii) Dayworks.
(xxviii) Maintenance of the work during Construction and during the 12 months Defects Liability Period.

b) Particular Works

In particular the following needs to be observed and considered where estimating the cost of the works:

- Bidders shall prepare and submit the programme of works taking into consideration that the Employer may require that the services be completed is a specific order.
- The contractor shall, upon commencement, inspect the stormwater systems routes and inform the engineer of all obstructions to be relocated.
- A high level of superintendence is required.

3.2 Phasing Of The Works

The works will not be phased but constructed over 2 financial years.

The Contractor will commence with the Works in the 2025/2026 Financial Year.

Financial Year	Portion
2025/2026	All the works
2026/2027	All the works

3.3 NATURE OF THE WORKS

The employer wishes to deliver public infrastructure using labour-intensive methods and sub-contractors where possible. The works in this contract are to be executed by using both conventional construction and labour-intensive construction methods according to the Special Public Works Programme (SPWP) as prescribed in the guidelines of the Expanded Public Works Programme (EPWP).

a) <u>Conventional construction methods</u>

- Site Establishment
- Setting Out of the Works
- Traffic Accommodation
- Excavation of trenches
- Construction of bedding
- Installation of Stormwater Sewers
- Backfilling
- Asphalt Surfacing

C3.1.3.1 Conventional construction methods

- Grubbing
- Mass Earthworks for Roads'
- Excavation (Soft, Intermediate and Hard Rock) for Stormwater Pipes
- Watering of bypasses
- Roadbed Preparation

- Layer works
- Stormwater Pipe Laying and Backfilling
- Asphalt Surfacing
- Cleaning of existing stormwater systems

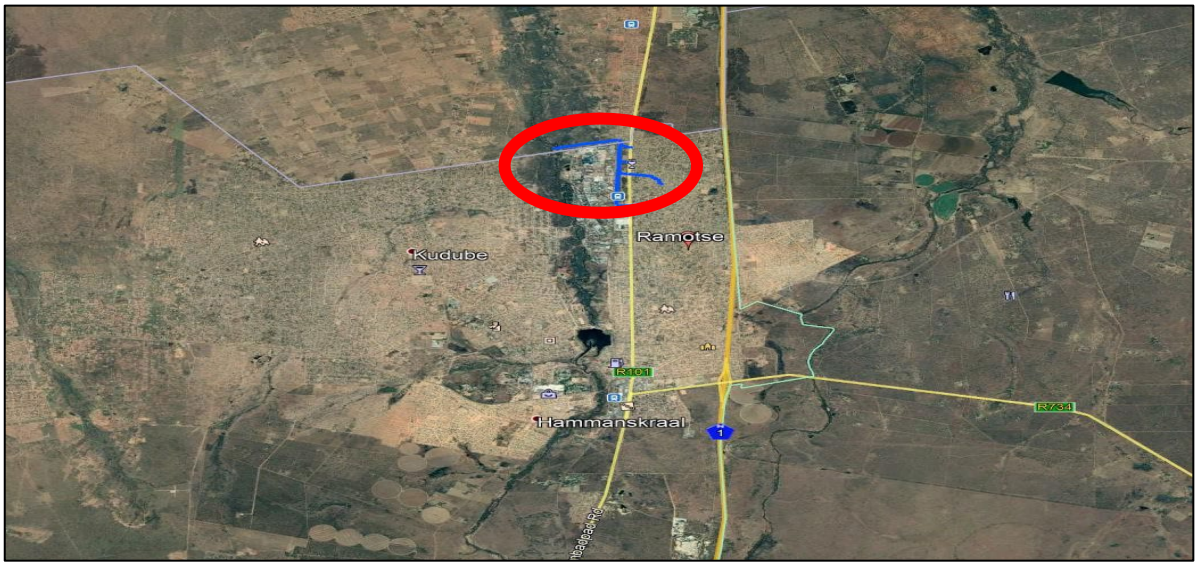
C3.2.3.2 Labour intensive construction (LIC)

- Establishment of the Contractor's base camp or depot
- Site Clearance
- Selected trench excavations
- Pipe laying smaller than 200 diameter(service ducts)
- Erection of traffic signs and Markings
- Traffic calming measures
- Bedding
- Manholes and junction boxes
- Construction of inlet, and outlet structures
- Paving for walkways
- Edge beams and kerbing

C3.1.4 Location of the works

The Ramotse site is situated in at Ramotse Ward 73 and 75 in the City Of Tshwane, Gauteng Province. The area is situated within Region 1 of the City of Tshwane's Municipal Area.

Project GPS Coordinates GPS Coordinates:
S (Latitude) 25°21'02.73"S
E (Longitude)28°16'56.27"E



C3.1.5 GEOTECHNICAL INFORMATION

The completed geotechnical investigation concludes that the site is suitable for the proposed development provided that the following precautionary measures are taken into consideration.

C3.1.5.1 Excavability

The soil is classified as soft to intermediate excavation. Excavability will not pose problems depending on the in-situ moisture content.

C3.1.5.2 Stability Of Trenches

The report indicates that there is no evidence of side wall collapse during test pits excavation. It however recommends the battering of deep excavated trenches to stable angles or shored to avoid side wall collapse.

C3.1.5.3 Construction Material

The report recommends that suitable construction materials are not present on site and should be acquired from commercial sources.

C3.1.5.4 Earthworks

The report advises that all unsuitable fill material should be removed from the site and that the upper loose topsoil should be removed and stockpiled for use during rehabilitation.

The report recommends that during construction, an experienced geotechnical engineer be engaged to assess the foundation conditions to ensure the ground conditions are as anticipated and to make recommendations if conditions have changed.

C3.1.6 FEATURES REQUIRING SPECIAL ATTENTION

C3.1.6.1 Existing Services

All existing services shall be indicated to the contractor where after he will assume full responsibility for maintaining these in good running order. It shall be understood that the protection of the existing services shall in no way be impaired during the contract.

The wayleaves are also to be utilized to identify clashes of services with the Sewer Rising Main and Gravity Main design.

Wayleaves to be attained are shown on the table below.

Name of Institution	Type of Service
Eskom / Internal Distribution	Electricity
Telkom	Telecommunication
City Of Tshwane Municipality	Electricity
City Of Tshwane Municipality	Water and Sanitation
DFA	Fibre
Randwater	Water Pipes
Liquid Communication / Neotel	Fibre
Cell C	Fibre
City Of Tshwane Municipality	Environmental Services
City Of Tshwane Municipality	Roads and Stormwater
Frog Foot	Fibre
Extribx Pty Ltd T/A SAS Networks	Fibre
Link Africa	Fibre
Metro Fibre	Fibre
MTN	Fibre
Sasol	Gas Pipes
Transnet	Pipe Lines
Tshwane Broad Band	Fibre
Vodacom	Fibre
VumaTel	Fibre

C3.1.6.2 Surveying and Cadastral Beacons (including Stand pegs)

The Contractor shall be held responsible for the cost incurred in replacing or repositioning of any cadastral beacons which may have been disturbed by his actions.

Under no circumstances shall cadastral beacons be replaced by unauthorized persons and the Engineer shall be informed immediately of such disturbed beacons. The Engineer shall arrange for the replacement of any beacons by a competent Land Surveyor.

C3.1.7 SUPPLYING OF MATERIALS

All materials required for this contract shall be supplied by the Contractor. The Contractor shall take care that no delay is caused due to a shortage of material. Therefore, material required shall be ordered well in advance.

While care had been taken in calculating the quantities, the Contractor shall check the quantities before ordering.

No claims for payment of excess or incorrect materials due to such shall be entertained.

C3.1.8 QUALITY CONTROL

It is the responsibility of the Contractor to deliver work of quality and accuracy that is in accordance with the specifications and drawings, and the Contractor shall at his own cost provide a quality control system and provide experienced Engineers, Foreman, Surveyors, Technicians and other Technical Personnel together with the necessary transport, instruments and plant to ensure that proper supervision and positive control be

applied on the job at all times. This also includes work done by sub-contractors, including nominated sub-contractors for specialised work or otherwise.

The cost of all supervision and control, test included, performed by the Contractor, shall be included in the relevant rates for the different items when tendering, except where separate provision has been made in the sections of the specifications.

The Contractor's attention is drawn to the stipulations of the different sections of the specifications regarding the minimum frequency of test to ensure proper quality control. The Contractor shall increase this frequency if he deems fit to ensure appropriate control.

The Contractor shall, at the completion of each part of the work and requesting approval thereof by the Engineer, submit all applicable test results, measurements and levels to indicate that it conforms with the relevant specifications.

C3.2 ENGINEERING

TABLE OF CONTENTS

C3.2.1 Employer's design 11

C3.2.2 Drawings 11

C3.2.1 Employer's design

The employer is responsible for the design of the permanent works as reflected in the Contract Documents unless otherwise stated. It is the responsibility of the Contractor to design the temporary works and ensure their compatibility with the permanent works. The Contractor shall supply all the details necessary to assist the Engineer in compilation of the as- built drawings.

C3.2.2 Drawings

The drawings issued to tenderers as part of the tender documents must be regarded as provisional and preliminary for the tenderer's benefit to generally assess the scope of work. The work shall be carried out in accordance with the latest available revision of the drawings approved for construction.

At commencement of the contract, the Engineer shall deliver to the Contractor copies of the construction drawings and any instructions required for the commencement of the works. From time to time thereafter during the progress of the works, the Engineer may issue further drawings or revisions for construction purposes as may be necessary for adequate construction, completion and defects correction of the works.

Drawings issued separately in Volume 2 will be listed hereafter. The drawings represent the total works required under this contract. The employer has developed comprehensive standardized typical details which can be obtained by the contractor from the employer.

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

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

The Drawings prepared by the Employer for the permanent Works are bound at the back of this volume. The Employer reserves the right to issue amended and/or additional drawings during the Contract
Note: All applicable Drawings are Included Under Volume 2.

The tender drawings for the Upgrading of Stormwater Systems are as listed below:

DRAWING NO.	DESCRIPTION OF DRAWING
159-COT-001	LIST OF DRAWINGS
159-COT-002	LOCALITY PLAN
159-COT-003	LAYOUT PLAN SHOWING FLOODLINES
159-COT-004	HYDROLOGICAL LAYOUT
159-COT-005	LAYOUT PLAN
159-COT-006	LONGSECTION FOR HYDRAULIC INFORMATION # 1
159-COT-007	MAIN CHANNEL M01: PLAN, LONGSECTION AND CROSS SECTION (Ch. 0.00 TO Ch. 340.00m)
159-COT-008	MAIN CHANNEL M02: PLAN, LONGSECTION AND CROSS SECTION (Ch. 340.00 TO Ch. 694.896m)
159-COT-009	MAIN CHANNEL M03: PLAN, LONGSECTION AND CROSS SECTION (Ch. 732.398 TO Ch. 984.807m)
159-COT-010	CULVERT K01: PLAN AND LONGSECTION (Ch. 706.896 TO Ch. 720.398m)
159-COT-011	CULVERT K01: CONCRETE DETAILS
159-COT-012	CULVERT K01: BASESLABS – REINFORCING DETAILS
159-COT-013	CULVERT K02: PLAN AND LONGSECTION (Ch. 996.807 TO Ch. 1025.394m)
159-COT-014	CULVERT K02: CONCRETE DETAILS
159-COT-015	CULVERT K02: BASESLABS – REINFORCING DETAILS
159-COT-016	TRANSITION T02: PLAN, LONGSECTION AND SECTIONS (Ch's. 694.896 TO Ch. 706.896m)
159-COT-017	TRANSITION T02: REINFORCING DETAILS
159-COT-018	TRANSITION T03: PLAN, LONGSECTION AND SECTIONS (Ch's. 720.398 TO Ch. 723.398m)
159-COT-019	TRANSITION T03: REINFORCING DETAILS
159-COT-020	TRANSITION T04: PLAN, LONGSECTION AND SECTIONS (Ch's. 984.807 TO Ch. 996.807m)
159-COT-021	TRANSITION T04: PLAN, LONGSECTION AND SECTIONS (Ch's. 984.807 TO Ch. 996.807m)
159-COT-022	LAYOUT PLAN FOR FENCING AROUND OPEN CANALS
159-COT-023	DETAILS FOR FENCING
159-COT-024	STILLING BASIN AND SEDIMENTATION TRAP U01: LAYOUT PLAN
159-COT-025	STILLING BASIN AND SEDIMENTATION TRAP U01: SECTIONS
159-COT-026	STILLING BASIN AND SEDIMENTATION TRAP U01: CONCRETE DETAILS – PLAN AND SECTIONS
159-COT-027	STILLING BASIN AND SEDIMENTATION TRAP U01: REINFORCING DETAILS – PLAN AND SECTIONS
159-COT-028	STILLING BASIN AND SEDIMENTATION TRAP U01: REINFORCING DETAILS – PLAN AND SECTIONS

DRAWING NO.	DESCRIPTION OF DRAWING
159-COT-029	STILLING BASIN AND SEDIMENTATION TRAP U01: REINFORCING DETAILS – PLAN AND SECTIONS
159-COT-030	STILLING BASIN AND SEDIMENTATION TRAP U01: REINFORCING DETAILS – PLAN AND SECTIONS
159-COT-031	STILLING BASIN AND SEDIMENTATION TRAP U01: LAYOUT AND MESH REINFORCING REF 617 TO SURFACE BEDS
159-COT-032	BENDING SCHEDULE 5
159-COT-033	BENDING SCHEDULE 12
159-COT-034	BENDING SCHEDULE 13
159-COT-035	BENDING SCHEDULE 14

The Principal Contractor will receive three sets of construction drawings, of which one set shall be designated for as-built records and updated by the Principal Contractor on a daily basis. The latter shall be:

- Made available to the Engineer or his/her duly authorised representative within 24 hours on request.
- Submitted to the Engineer with the completion of each project.

Take note: The information contained in the drawings, relating to the position, material, and size of the existing services, may not be 100% accurate,

C3.3 PROCUREMENT

TABLE OF CONTENTS

C3.3.1 Preferential procurement procedures 15
C3.3.2 Subcontracting 23
C3.3.2.1 Scope of mandatory subcontract works 23
C3.3.2.2 Preferred subcontractors/suppliers 23
C3.3.2.3 Subcontracting procedures 24

C3.3.1 Preferential procurement procedures

C3.3.1.1 Requirements

The City of Tshwane (CoT) has a mandate and responsibility to fight poverty, build clean, healthy, safe, and sustainable communities. To achieve this, the City adopted an Integrated Poverty Reduction and Community Development Strategy which requires all departments to cooperate and contribute towards poverty reduction through employing EPWP participants on projects. Therefore, the Roads and Stormwater Division is committed to utilize participants that are registered on the CoT Central Database on all projects. The aim is to ensure commitment by each contractor on a project to utilize 100% of its personnel of the EPWP Central Database in order to enhance poverty alleviation and the uplifting of participants.

The successful contractor appointed will have to request labour from the EPWP Office that will do a random selection from the Central Database. Hundred percent of all personnel on a project must be appointed from the Central Database provided by the EPWP Office. The idea is to place beneficiaries in the correct or appropriate project roles/occupations to help them achieve income capacity and/or to equip them through skills development. The contractor must provide data about the number of beneficiaries required, qualifications, type of placement/occupation and gender before the project starts. The successful contractor appointed must accommodate students that are in need of practical training or in-service training. One student per annum must be trained on this contract. The minimum wage as per Sectoral Determination: Civil Engineering Sector published in the Government Gazette will be payable for students.

C3.3.1.1.1 Employment of unskilled and semi-skilled labour in Labour Intensive Construction works

1. Requirements for the sourcing and engagement of labour

1.1 Unskilled and semi-skilled labour required for the execution of all labour-intensive works shall be sourced from the EPWP Office.
1.2 The guideline pay rate will be as set by the CIDB/ SAFCEC Gazetted rates
1.3 Tasks by the Contractor must be such that:
(a) the average worker completes 5 tasks per week in 40 hours or less; and
(b) the weakest worker completes 5 tasks per week in 55 hours or less.
1.4 The Contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.3.

C3.3.1.1.2 Appointment Process

C3.3.1.1.2.1 Project Steering Committee (PSC)

Section 6.1.3.1 of the Expanded Public Works Programme (EPWP) Recruitment Framework requires the Office of the Speaker, in consultation with the Ward Councillor, to hold a public meeting, and elect a Project Steering Committee (PSC).

Project Steering Committee will be limited to a minimum of four (4) members and a maximum of six (6) members, to avoid a situation of too many potential interest groups preventing the PSC from functioning.

C3.3.1.1.2.2 Community Liaison Officer

After selection of the PSC, at the same meeting indicated under item C3.3.1.1.2.1, residents and stakeholders in attendance are to vote for poll of three (3) potential CLO's coming from the community concerned.

In the event that a PSC is not constituted by public meeting, or cannot proceed with its work, as contemplated by section 6.1.3.5 of the Framework, the appointed PSC will nominate potential CLOs.

It is from this pool that the contractor, after interviewing the three (3) nominees and consultation with the PSC appoints the CLO.

Administrative processes for appointment of Community Liaison Officers.

- Minutes and an attendance register must be kept as evidence of the proceedings of the election meeting.
- The office of the speaker must submit the results (minutes) and attendance registrar of the community liaison officer election meeting to the chairperson of the PSC, the contractor and the Expanded Public Works Programme (EPWP) Division.
- The elected CLO will be appointed by the contractor for the duration of the project and also be remunerated by the contractor. Where the CLO is no longer available and another is appointed, the existing CLO shall cease to receive remuneration.
- An employment agreement containing the general terms and conditions of the contract, will be issued to the CLO and must be signed by the CLO before commencement of duties.
- A CLO will be appointed from the ward in which the project is executed.
- The CLO's will be remunerated according to the entry level basic salary of an Administrator Officer position of the City of Tshwane (Task Level 5 notch 1 (B1-1). No benefits will be applicable.

The CLO must have the following attributes: -

- have credibility and standing in the community.
- have a strong personality.
- be able to be firm and decisive.
- be able to facilitate in disputes.
- be able to handle conflict.
- be able to keep minutes and records in a proper and orderly way.
- have a knowledge of labour laws and industrial relations (training will be provided where necessary).
- be objective and impartial.
- be fair.

C3.3.1.2 Resource standard pertaining to targeted procurement

The Contractor shall deliver the following deliverables in terms of the relevant SANS 1914 and the associated specification data:

C3.3.1.2.1 Provide business opportunities for targeted enterprises in terms of **SANS 1914-4**

1. General

Targeted enterprises shall be engaged in the performance of the contract in accordance with the requirements of SANS 1914-4 as amended in 2

2. Amendments to SANS 1914-4

2.1 Replace the existing definitions with the following:

contract participation goal (CPG)
value of supplies, services and works for which the contractor contracts targeted enterprises exclusive of any value added tax or sales tax which the law requires the employer to pay to the contractor, expressed as a percentage of the contract amount associated with the targeting strategy that is identified in the specification data

2.2 Add the following definitions:

contract amount

1) targeting strategy A
financial value of the contract at the time of the award of the contract, exclusive of all allowances and any value added tax or sales tax which the law requires the employer to pay to the contractor

2) targeting strategy B
financial value of the contract upon completion of all contractual obligations, exclusive of any value added tax or sales tax which the law requires the employer to pay to the contractor

targeting strategy A
a strategy which:

a) links the granting of a preference by the employer in the evaluation of tender offers in return for the tendering of a contract participation goal or an undertaking to attain a specified contract participation goal at the time that tenders are evaluated; or
b) requires a contractor to achieve a minimum specified goal in the performance of a contract; or
c) involves both a) and b)

targeting strategy B
a strategy which:

a) links the payment of an incentive bonus to a contractor for the attainment of a specified contract participation goal; or
b) requires the contractor to record and report on the quantum of work generated for targeted labour

2.3 Replace clauses 3.11 and 3.12 with the following:

3.1.1 The contractor shall engage targeted enterprises directly or indirectly in the performance of the contract to the extent that the total monetary value of such engagements exclusive of any value added tax or sales tax required by law, is sufficient to achieve the contract participation goal provided for in the specification data.
3.1.2 The contractor shall, in the case of targeting strategy A, submit details of his plan to achieve the contract participation goal to the employer's representative on the contract participation goal implementation plan form contained in annex C, within five working days of being instructed to do so. If no such instructions are given, these plans shall be submitted before the submission of the first claim for payment.

2.4 Replace 3.2.2 with the following:

3.2.2 Contractors shall submit completed targeted enterprise declaration affidavits and, where targeting strategy A applies, letters of undertaking to act as sub-consultants, subcontractors suppliers, manufacturers or service providers (see annex D), in respect of each and every targeted enterprise and targeted partner whose contribution shall be counted towards the contract participation goal. These documents shall, unless otherwise stated in the specification data, be submitted to the employer's representative before the submission of the first claim for payment.

2.5 Replace 4.1 with the following:

4.1 The contractor shall enter into written contractual agreements with all the targeted enterprises and targeted partners cited in the contract participation goal implementation plan and shall, as soon as is practicable, furnish the employer's representative with copies of such agreements and the written acceptances thereof. The contract to be performed by the targeted enterprises and targeted partners shall, in the case of targeting strategy A, thereafter neither be reduced in scope, nor terminated without the prior written approval of the employer's representative, which shall not be unreasonably withheld or delayed.

2.6 Replace 4.2.1 with the following:

4.2.1 Where targeting strategy A applies and in the event that, through no fault of the contractor, a contracted targeted enterprise is found to be:
a) unable to perform, or to perform on time;
b) unable to produce acceptable work;
c) unwilling to perform work required; or
d) not fit to perform the service;
the contractor shall notify the employer's representative of the apparent necessity to reduce or terminate such a targeted enterprise's contract, citing the reasons therefor.

2.7 Replace 4.3 with the following:

Where, in the case of targeting strategy A, an enterprise under contract was initially considered to be a targeted enterprise but is later discovered not to be so, or is found not to be creditable towards contract participation goals, the employer may consider a partial waiver of the contractor's obligations towards the achievement of the contract participation goal in respect of such a targeted enterprise, should the contractor satisfactorily demonstrate that he was justified in believing the enterprise to be a targeted enterprise and that eligibility standards were not violated.

2.8 Replace 6 with the following:

In the event that, and where targeting strategy A applies, the contractor fails to substantiate that any failure to achieve the contract participation goal was due to
a) quantitative underruns,
b) the elimination of items contracted to targeted enterprises, or
c) any other reason beyond the contractor's control which may be acceptable to the employer,
the sanctions provided for in the contract shall apply.

2.9 Delete “net amount” in definitions and replace “net amount” with “contract amount” wherever it appears in the text.

Clause	**Specification Data**	
The specification data associated with SANS 1914-5 is as follows		
2.7	The employer’s representative is:	Ms. Pauline Letsoalo
	Target area:	
	Target Area 1	The ward/wards in which the work package is to be performed
	Target Area 2	The ward/wards directly adjoining the ward/wards in which the work package is to be performed.

	Target Area 3	The region within which the ward/wards in which the work package is to be performed resides
	Target Area 4	The Tshwane Municipal area
2.17	Targeted enterprise is	Will be specified for each work package.
	The targeting strategy is	Strategy A b)
	The contract participation goal is	*The min. goal is 10% and the maximum goal is 20% (The combined goal for the contract will not exceed 30%)*
	The contract participation goal may only be achieved by subcontracting work to one or more targeted enterprises to perform commercially useful functions in the performance of the contract.	
2.9	The following weightings shall apply:	
	Target Area 1	1.2
	Target Area 2	1.0
	Target Area 3	0.8
	Target Area 4	0.6
6	**Sanctions**	In the event that the Contractor fails to substantiate that any failure to achieve the Contract Participation Goal relating to the granting of preference was due to quantitive under runs, the elimination of items, or any other reason beyond the Contractor's control which may be acceptable to the Employer, it shall be liable to pay the Employer a financial penalty in the following manner: $$P = 0.15 \times \frac{(D - D_o)}{100} \times N_A$$ Where D = required Contract Participation Goal percentage D_o = the Contract Participation Goal which the Employer's representative based on the credits passed, certifies as being achieved upon completion of the work package N_A = Net Amount P = Rand value of penalty payable

C3.3.1.2.2 Employment of unskilled and semi-skilled labour in Labour Intensive Construction works in terms of SANS 1914-5

1. General

Targeted labour shall be engaged in the performance of the contract in accordance with the requirements of SANS 1914-5 as mended in 2

2. Amendments pertaining to SANS 1914-5

2.1 Replace the existing definitions with the following:

contract participation goal (CPG)

amount equal to the sum of the wages and allowances for which the contractor contracts to engage targeted labour exclusive of any value added tax or sales tax required by law, expressed as a percentage of the contract amount associated with the targeting strategy that is defined in the specification data

targeted labour: Unemployed persons who are employed as local labour on a work package.

2.2 Add the following definitions:

contract amount

1) targeting strategy A
financial value of the contract at the time of the award of the contract, exclusive of all allowances and any value added tax or sales tax which the law requires the employer to pay to the contractor

2) targeting strategy B
financial value of the contract upon completion of all contractual obligations, exclusive of any value added tax or sales tax which the law requires the employer to pay to the contractor

targeting strategy A
a strategy which:

a) links the granting of a preference by the employer in the evaluation of tender offers in return for the tendering of a contract participation goal or an undertaking to attain a specified contract participation goal at the time that tenders are evaluated; or
b) requires a contractor to achieve a minimum specified goal in the performance of a contract; or
c) involves both a) and b)

targeting strategy B
a strategy which:

a) links the payment of an incentive bonus to a contractor for the attainment of a specified contract participation goal; or
b) requires the contractor to record and report on the quantum of work generated for targeted labour

2.3 Terms and conditions for the engagement of targeted labour

Further to the provisions of Clause 3.3.2 of SANS 1914-5, written contracts shall be entered into with targeted labour.

2.4 The schedule referred to in Clause 5.2 of SANS 1914-5 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of formal trainings provided to targeted labour.

2.5 Replace 6 with the following:

In the event that, and where targeting strategy A applies, the contractor fails to substantiate that any failure to achieve the contract participation goal was due to
a) quantitative underruns,
b) the elimination of items contracted to targeted enterprises, or
c) any other reason beyond the contractor's control which may be acceptable to the employer,
the sanctions provided for in the contract shall apply.

3. Training of targeted labour

3.1 The Contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.
3.2 The cost of the formal training of targeted labour must be included on the total of the Prices.
3.3 The Contractor shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.
3.4 An allowance equal to 100 % of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 3.3 above.
3.5 Proof of compliance with the requirements of 3.2 to 3.4 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

Clause	**Specification Data**	
The specification data associated with SANS 1914-1 is as follows		
2.5	The employer's representative is:	*Mr. Thabo Lebepe*
	Target area:	
	Target Area 1	The ward/wards in which the work package is to be performed
	Target Area 2	The ward/wards directly adjoining the ward/wards in which the work package is to be performed.
	Target Area 3	The region within which the ward/wards in which the work package is to be performed resides
	Target Area 4	The Tshwane Municipal area
2.2	The contract participation goal is	*The min. goal is 10% and the maximum goal is 20% (The combined goal for the contract will not exceed 30%)*

2.8	Targeted labour means	Unemployed persons who are employed as local labour on the work package
	The targeting strategy is	Strategy A b)
2.9	The following weightings shall apply:	
	Target Area 1	1.2
	Target Area 2	1.0
	Target Area 3	0.8
	Target Area 4	0.6
6	**Sanctions**	In the event that the Contractor fails to substantiate that any failure to achieve the Contract Participation Goal relating to the granting of preference was due to quantitive under runs, the elimination of items, or any other reason beyond the Contractor's control which may be acceptable to the Employer, it shall be liable to pay the Employer a financial penalty in the following manner: $$P = 0.15 \times \frac{(D - D_o)}{100} \times N_A$$ Where D = required Contract Participation Goal percentage D_o = the Contract Participation Goal which the Employer's representative based on the credits passed, certifies as being achieved upon completion of the work package N_A = Net Amount P = Rand value of penalty payable

C3.3.2 SUBCONTRACTING

C3.3.2.1 Scope of mandatory subcontract works

The contractor is to identify and present to the Engineer the works to be subcontracted. The following shall be subcontracted to the local subcontractors:

- Removal and reinstatement of Paving
- Establishment of the Contractor's base camp or depot
- Site Clearance
- Selected trench excavations
- Pipe laying smaller than 200 diameters (service ducts)
- Erection of traffic signs and Markings
- Traffic calming measures
- Bedding
- Construction of Manholes and junction boxes
- Construction of kerb inlet, and outlet structures
- Paving for walkways
- Laying of Edge beams and kerbing

C3.3.2.2 Preferred Subcontractors / Suppliers

Section 47 of the SCM Policy SUB-CONTRACTING

When subcontracting:

The City shall obligate main contractors or service providers to engage targeted enterprises in the performance of their contracts incorporating resource specifications.

(1) The appointed service provider must source competent and capable service providers and where applicable be registered with the relevant body and submit a list of sub-contractors for approval to the City of Tshwane.

(2) Sub-contracting entity should have at least equal B-BBEE level status and /or specific goals or higher than the main contractor.

(3) Minimum of 30% will be sub-contracted for this tender.

(4) Local economic participation should be given priority when making a list of potential subcontractors available

- City of Tshwane Participants with specific attention for the region in which the contract is to be executed should be given priority and the below competent and capable designated groups should be prioritized.
  a) An EME or QSE
  b) An EME or QSE which is at least 51% Black Owned

c) An EME or QSE which is at least 51% Owned by Black youth
d) An EME or QSE which is at least 51% Black Women Owned
e) An EME or QSE which is at least 51% owned by black people with disabilities
f) An EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships
g) A cooperative which is at least 51% owned by black people
h) An EME or QSE which is at least 51% owned by black people who are military veterans; or
i) More than one of the categories referred to in paragraphs (a) to (h).

Should subcontractors within Tshwane not be identified, the appointed service provider can extend the list of subcontractors to:

- Gauteng Participants
- National participants

(5) In relation to a designated sector a contractor must not be allowed to sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold if the appointed Service Provider scored points for Local Content and Production.

C3.3.2.3 Subcontracting Procedures

C3.3.2.3.1 The contractor shall advertise and call for competitive tenders in accordance with the requirements stated in the specification data in respect of each portion of the works that are required to be subcontracted in terms of C3.3.2.1 in accordance with the relevant provisions of the latest edition of the CIDB Standard for Uniformity in Construction Procurement. The Contract Data in the associated procurement documents shall be based on the standard form of contract identified in the specification data, with minimal project specific variations and amendments that do not change their intended usage.

C3.3.2.3.2 The contractor shall evaluate the tenders received in accordance with the provisions of the Standard Conditions of Tender contained in Annex F of Standard for Uniformity in Construction Procurement. The evaluation panel shall comprise equal representatives from the contractor and the steering committee for the wards/s on which the work package will impact.

C3.3.2.3.3 The contractor shall without delay enter into a written contract with the successful tendering subcontractor based on their accepted tender submission.

C3.3.2.3.4 The contractor shall remain responsible for providing the subcontracted portion of the works as if the work had not been subcontracted.

C3.4 CONSTRUCTION

TABLE OF CONTENTS

C3.4.1 Works specifications 26

C3.4.1.1 Applicable standards 26
C3.4.1.2 Applicable national and international standards 26
C3.4.2 Plant and materials 31

C3.4.2.1 Plant and materials supplied by the employer 31
C3.4.2.2 Materials, samples and shop drawings 31
C3.4.3 Construction equipment 32

C3.4.3.1 Requirements for equipment 32
C3.4.3.2 Equipment provided by the employer 32
C3.4.4 Existing services 32

C3.4.4.1 Location of services 32
C3.4.4.2 Treatment of existing services 32
C3.4.4.3 Use of detection equipment for the location of underground services 32
C3.4.4.4 Damage to services 32
C3.4.4.5 Reinstatement of services and structures damaged during construction 32
C3.4.5 Site establishment 32

C3.4.5.1 Services and facilities provided by the employer 32
C3.4.5.3 Storage and laboratory facilities 33
C3.4.5.4 Other facilities and services 33
C3.4.5.5 Vehicles and equipment 33
C3.4.5.6 Advertising rights 34
C3.4.5.7 Notice boards 34
C3.4.6 Site usage 34

C3.4.7 Permits and way leaves 34

C3.4.8 Alterations, additions, extensions and modifications to existing works 34

C3.4.9 Inspection of adjoining properties 34

C3.4.10 Water for construction purposes 34

C3.4.11 Survey control and setting out of the works 34

C3.4.1 Works specifications

C3.4.1.1 Applicable standards

The applicable Standard Specifications shall be the document **Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005**, issued by the Employer.

Tenderers, Contractors and Subcontractors shall obtain their own copies of the document **Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005**, for tendering purposes and for use for the duration of the Contract from the Procurement Advice Centre, Tshwane House, 320 Madiba Street, Pretoria and shall bear all expenses in this regard. Also, freely available in electronic (pdf) format at:

http://www.tshwane.gov.za/documents/tenders/CTMM_Civil_Specification_2005.zip

The **Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005** have been written to cover all types of municipal civil engineering works and it may therefore cover work not applicable to this contract.

C3.4.1.2 Applicable national and international standards

Will be specified per work package

C3.4.1.3 Particular/generic specifications

C3.4.1.3.1 Generic Labour Specification

01 Scope

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

a) trenches having a depth of less than 1.5 metres
b) stormwater drainage
c) low-volume roads
d) sidewalks and non-motorised transport infrastructure
e) water and sanitation

02 Precedence

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

03 Hand excavate-able material

Hand excavate-able material is material:

a) granular materials:

i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dens, or dense; or
ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than fifteen blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm;

b) cohesive materials:

i) whose consistency when profiled may in terms of Table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than eight blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm;

NOTE:
1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.
2) A Dynamic Cone Penetrometer (DCP) is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60˚ with respect to the horizontal) into the material being used.

Table 1: Consistency of materials when profiled

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

04 Trench excavation

All hand excavate-able material in trenches having a depth of less than 1.5 metres shall be excavated by hand.

05 Compaction of backfilling to trenches (areas not subject to traffic)

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

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

06 Excavation

All hand excavate-able material including topsoil classified as hand excavate-able shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand. Any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

07 Clearing and grubbing

Grass and bushes shall be cleared by hand.

08 Shaping

All shaping shall be undertaken by hand.

09 Loading

All loading shall be done by hand. Haulage equipment should be selected in a manner that allows loading by hand to the greatest extent possible.

10 Haul

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

11 Offloading

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

12 Spreading

All material shall be spread by hand.

13 Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved. Appropriate rollers should be used where higher (than can be achieved by hand) levels of compaction are required or for large areas.

14 Grassing

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

15 Stone pitching and rubble concrete masonry

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

16 Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, pre-cast concrete planks and pipes, masonry unit and edge beams shall not individually, have a mass of more than 320kg. Where the mass of an element exceeds 55kg, consideration should be given to the size of the element relative to its total mass related to the number of workers who would be needed to lift such mass.

C3.4.1.3.3 Required performance characteristics on Traffic Markings

The following characteristics will be considered as indicative of the satisfactory performance of the traffic marking and should be read in conjunction with Section 613: Traffic Markings

01 Durability

Durability shall be indicated by the Traffic Wear Index determined in accordance with SABS 1248: 1995, Determination of traffic wear index.

02 Night-time visibility

Night-time retro-reflection shall be measured during day time with a portable retro-reflectometer in accordance with SANS 6261:2008. No separate payment shall be made for the retro-reflectometer as well as the tests.

Permanent road markings shall comply with the relevant levels of performance during the functional performance as indicated in table 1(a) which is adjusted from the SADC RTSM Vol 1 Chapter 7.

Table 1(a) – Road Marking Performance Specifications

FACTOR	NEW MATERIALS			USED MATERIALS		
	WHITE	YELLOW	RED	WHITE	YELLOW	RED
Colour X(1)	0,305 0,335 0,325 0,295	0,494 0,470 0,493 0,522	0,660 0,610 0,638 0,690	0,305 0,350 0,340 0,295	0,481 0,444 0,494 0,054	0,655 0,579 0,606 0,690
Colour Y(1)	0,315 0,345 0,355 0,325	0,505 0,480 0,457 0,477	0,340 0,340 0,312 0,310	0,315 0,360 0,370 0,325	0,518 0,476 0,426 0,454	0,345 0,341 0,314 0,310
Luminance Factor	0,6	0,4	+0,08	0,45	0,3	+0,06
Coefficient of Retro-reflective (minicandelas/m^2/lx)	250	135	30	100	70	20
Skid Resistance BPN(2)	50	50		50		

Note: All new surfaces shall be painted with 1.2mm thermoplastic paint
The co-ordinates given refer to the Chromaticity Chart in Figure 1.11 Volume 1 of the SADC RTSM. The co-ordinates measured for the colour should fall within the area defined by the co-ordinates given.
"BPN" stands for a value determined by the British Portable Pendulum Number measurement method applicable to all colours of markings.
Initial retro-reflectivity tests shall be performed within 14 days of road marking application to qualify for acceptance. (The Contractor shall notify the Employer in writing of any abnormal building or construction activities or circumstances on the roads prior to testing which may have a negative result in the night-time retro-reflectivity test). The contractor shall provide an approved retro-reflectometer for the measuring of retro-reflectivity free of charge to the employer for the duration of the contract period. Should there be any dispute regarding the type of retro-reflectometer used, a Delta LTL-X retro-reflectometer shall be used to provide the final measurements.
Retro-reflectivity tests shall also be performed six months after road marking application on the "cleaner type road surface" as agreed with the Engineer and shall meet the minimum requirements as follows:

White road markings ≥ 150 mcd/m^2/lx
Yellow road markings ≥ 90 mcd/m^2/lx

Should the road markings not meet this requirement after six months then the road must be repainted at the expense of the contractor. Proper surface preparation must be done to the satisfaction of the Engineer e.g. if the road markings are too thick or if the road markings are breaking off then sand blasting or water blasting may be required before the road marking application. The cost of this preparation work shall be for the account of the contractor and will not be paid for by the Employer.
No new work orders will be issued to the contractor before the road markings are repainted and approved according to the requirements in Table 1(a) above.
N.B. A "cleaner type of road surface" is a road where sand does not get onto the road which adversely affects the road markings.

03 Protection

After the paint has been applied, the traffic markings shall be protected against damage by traffic or other causes. The Contractor shall be responsible for the erection, placing and removal of warning boards, flags, cones and barricades as recommended in Vol2, Chapter 13 of the SADC RTSM. The Contractor shall be responsible for the placing of extra cones to prevent vehicles from crossing over wet paint. Should the wet paint be carried over the road surface or paint spillage takes place during the traffic marking operation such redundant paint shall be sandblasted. Black paint shall never be applied as a corrective measure to redundant traffic markings unless approved by the Engineer as a temporary measure. These traffic markings shall then be sandblasted as a final corrective measure.

04 Quality Control

The Contractor shall execute quality control of the traffic markings in accordance with a quality control plan approved by the employer. The quality control plan shall be based on a minimum level of assessment on at least 10 sets of 5 readings per 1km section of a road as indicated by the Engineer to determine the night-time visibility of each type of marking. The contractor shall provide the Engineer with the results of the Contractor's process quality control during the traffic marking process. The cost of such process quality control shall be borne by the Contractor.
Should it be clear that the traffic markings would not meet the required level of performance at any of the inspection dates; the Contractor may use his discretion to apply appropriate remedial actions to rectify the shortcomings after getting approval from the Engineer.

C3.4.2 Plant and materials

C3.4.2.1 Plant and materials supplied by the employer

The Employer will **not** supply any plant and / or materials.

C3.4.2.2 Materials, samples and shop drawings

C3.4.2.2.1 Road Construction Materials

No borrow pits are provided. Where material cannot be obtained from cut on the works, the Contractor will be responsible to obtain the material required for the fill, sub-grade and pavement layers from commercial sources.

C3.4.2.2.2 Aggregate for Concrete

The crushed stone and aggregate to be used in the base, surfacing and concrete must be approved by the Engineer before it may be used.

C3.4.2.2.3 Water for Concrete and Construction Purposes

No natural water from rivers, streams, boreholes, pans, dams or irrigation canals shall be used for concrete, stabilised layers or compaction purposes. Only suitably purified (drinking quality) water shall be used.

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.

C3.4.2.2.4 Spoil Material

The contractor shall make his own arrangements for the provision of a suitable place off the site for the disposal of material obtained from excavations, demolition, clearing and grubbing the demolition of boundary walls, brick work, foundation excavations, etc. The rates in the schedule of quantities shall include all costs or fees payable to cover the disposal at the dumping site. The rates must allow for haul as no haul will be payable.

C3.4.2.2.5 Cement for concrete

The cement used for the construction of culverts, foundations and bridge structures as well as for stabilisation must be approved by the engineer prior to construction.

C3.4.3 Construction equipment

C3.4.3.1 Requirements for equipment

The construction methods adopted, and plant and equipment used shall be at the discretion of the Contractor, provided always that the construction methods adopted and Plant used by the Contractor are appropriate in respect to the nature of the Works to be executed and the standards to be achieved in the Contract.

C3.4.3.2 Equipment provided by the Employer

The Employer will **not** provide any equipment.

C3.4.4 Existing services

C3.4.4.1 Location of services

The Employer's Agent will be responsible to obtain the necessary permissions and way leave approvals from the relevant Service Owners The Contractor shall locate and establish the actual position of any services on Site as indicated on the wayleaves before starting the construction.

Payment will not be made for any inconvenience caused to the Contractor in regard to any services crossing the Site or any authority working on any such service, nor will any delays caused by such works be accepted as a basis for claiming an extension of time for completing the works. All communications with owners of services and their work teams must take place in conjunction with the engineer or his representative.

C3.4.4.2 Treatment of existing services

As per the Engineer's Instructions.

C3.4.4.3 Use of detection equipment for the location of underground services

Equipment to be used at the direction of the Engineer

C3.4.4.4 Damage to services

All services damaged by the Contractor shall be reported directly to relevant institution and will be rectified with immediate effect. No separate payment will be made to the Contractor for services damaged and repaired by him/her.

C3.4.4.5 Reinstatement of services and structures damaged during construction

The Engineer will determine the requirements and reinstatement procedures for the notification and repair of damage to services, penalties applicable to the damage of services.

C3.4.5 Site establishment

C3.4.5.1 Services and facilities provided by the employer.

The employer will not provide any services and / or facilities

C3.4.5.2 Facilities provided by the contractor

C3.4.5.2.1 Contractor's Camp site

The contractor shall be provided with a suitable site for his camp and for accommodating the work force. The choice of the site for the establishment of the camp, offices and the layout thereof, shall be approved.

The camp site shall be cleared and grubbed and properly fenced with a security fence around the perimeter. The Contractor is to provide his own security at the camp or on the site if required, at his own expense.

After completion of the contract, the Contractor shall remove all his temporary buildings, plant and equipment. The site shall be made good and be left in a neat and tidy condition before a certificate of completion shall be issued.

C3.4.5.2.2 Water Supply

The Contractor shall make his own arrangement for potable and construction water. No natural water from rivers, streams, boreholes, pans, dams or irrigation canals shall be used for concrete or stabilised layers. Only drinking quality purified water shall be used. 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.

C3.4.5.2.3 Power Supply

The Contractor shall make his own arrangements.

C3.4.5.2.4 Ablution Facilities

The Contractor shall, at each construction area, provide sufficient portable chemical latrine units. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the approval of the engineer. No separate payment shall be made for this requirement, and the costs thereof shall be deemed to be included in the rates billed for the contractor's time-related obligations.

C3.4.5.2.5 Cellular Telephone

It is a requirement of the contract that the contractor shall equip his site agent(s) with a cellular telephone to allow for effective communication between the contractor's supervisory personnel and the engineer's supervisory staff. All costs associated with the provision of cellular telephones for the contractor's personnel shall be deemed to be included in rates billed for time-related charges.

C3.4.5.2.6 Site Facilities required by the Engineer

One site office of approximately 20m² complete with sufficient lighting and power points. Two desks, ten chairs, one conference table and two steel filing cabinets. Three carports for his exclusive use, a net shade cover will suffice. An ablution unit for his exclusive use.

The engineer does not require housing and office for personnel or laboratory facilities.

C3.4.5.3 Storage and laboratory facilities

The Engineer will order the Contractor to provide as needed.

C3.4.5.4 Other facilities and services

None.

C3.4.5.5 Vehicles and equipment

The Engineer will order the Contractor to provide as needed.

C3.4.5.6 Advertising rights

Not applicable.

C3.4.5.7 Notice boards

Two notice boards will be supplied by the Contractor which will be erected at the construction site as per instruction of the Engineer.

C3.4.6 Site usage

Not applicable.

C3.4.7 Permits and way leaves

The Engineer will be responsible for the initial application of permits and wayleaves after which the contractor will be responsible for maintaining and renewing of permits and wayleaves.

C3.4.8 Alterations, additions, extensions and modifications to existing works

To be carried out with the instruction from the Engineer.

C3.4.9 Inspection of adjoining properties

Adjacent buildings and properties will be inspected before commencing with the works that have the potential to damage surrounding buildings and property on the instruction of the Engineer and according to his requirements.

C3.4.10 Water for construction purposes

No natural water from rivers, streams, boreholes, pans, dams or irrigation canals shall be used for concrete or stabilised layers. Only drinking quality purified water shall be used. 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.

C3.4.11 Survey control and setting out of the works

Survey controls requirements and the setting out of the works will be determent by the Engineer and will be site specific.

C3.5 MANAGEMENT

TABLE OF CONTENTS

C3.5.1 Management of the works 36

C3.5.1.1 Applicable SANS 1921 standards 36
C3.5.1.2 Particular / generic specifications 36
C3.5.1.3 Planning and Programming 39
C3.5.1.4 Sequence of the works 40
C3.5.1.5 Software application for programming 40
C3.5.1.6 Methods and procedures 40
C3.5.1.7 Quality plans and control 40
C3.5.1.12 Recording of weather 41
C3.5.1.13 Format of communications 41
C3.5.1.14 Key personnel 42
C3.5.1.15 Management meetings 42
C3.5.1.16 Forms of contract administration 42
C3.5.1.17 Electronic payments 42
C3.5.1.18 Daily records 42
C3.5.1.19 Bonds and guarantees 42
C3.5.1.20 Payment certificates 42
C3.5.1.21 Permits 43
C3.5.1.22 Proof of compliance with law 43
C3.5.1.23 Insurance provided by the employer 43

C3.5.2 Environment 43

C3.5.3 Health and safety 43

C3.5.4 ANNEXURES 44

C3.5.1 Management of the works

C3.5.1.1 Applicable SANS 1921 standards

Will be specified per work package

C3.5.1.2 Particular / generic specifications

C3.5.1.2.1 Corrections and amendments to the Standard Specifications

CLAUSE / ITEM		**CORRECTION**
Series 6: Roads and Parking Areas		
Section 602: Crushed-stone Pavement Layers		
08 MEASUREMENT AND PAYMENT		
Item		
601.06	**Extra over Item 601.02 for borrow material from sources to be supplied by the Contractor**	Replace item numbers with:
~~614.02.01~~	(Layer and type material indicated)	*601.06.01*
~~614.02.02~~	Etc. for other layers and type of material	*601.06.02*
602.02	**Crushed-stone subbase constructed with material from**	
602.02.01	Commercial sources	Replace item description with:
602.02.01.02	~~G2 material compacted to 100% of apparent density~~	*G2 material compacted to 100% of modified AASHTO density*

C3.5.1.2.2 Variations and Additions to the Standard Specifications

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

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

SERIES 1: ANCILLARY WORK

SECTION 001: GENERAL REQUIREMENTS AND CHARGES

31 MEASUREMENT AND PAYMENT

Item 001.05: Community liaison officer

Replace pay item *001.05 Community liaison officer* with the following:

Item		Unit
B001.05	**Community Liaison Officer**	
B001.05.01	Monthly wage	month (month)
B001.05.02	Percentage on item B001.05.01 for charges and profit	percentage (%)

Item		Unit
B001.06	**Contract Name Board**	**No**

The sums tendered shall include full compensation for the procurement and erection of the Contract name board as specified on drawings and at locations specified by the Engineer.

Item		Unit
B001.07	**Accredited training**	
B001.07.01	Accredited training for Labourers	Prov. Sum
B001.07.02	Percentage on item B001.07.01 for charges and profit	percentage (%)

The contractor must obtain and submit three (3) quotations from accredited service providers. In collaboration with the CLO, they will select one service provider. The chosen service provider will be required to deliver accredited training to at least 30 local labourers. The training type will be selected from the options listed in section C.3.3.2.1, although other options may also be considered.

Payment will be made upon completion of the training and once the certificates have been distributed to the recipients.

Item		Unit
B102.16	**Obliteration of Bypasses**	m^2

The unit of measurement shall be the square metre of bypass obliterated.
The tendered rate shall include full compensation for the obliteration of bypasses as specified in the drawings.

Add the following section

SECTION B107: DAYWORKS

01 SCOPE

02 GENERAL

03 MEASUREMENT AND PAYMENT

01 SCOPE

This section covers the listing of Dayworks items in accordance with Conditions of Contract Clause 40, for the use in determining payment for work which cannot be quantified in specific units in the schedule of quantities, or work ordered by the Engineer during construction period which was not foreseen at bid stage and for which applicable rate exist in the schedule of quantities.

02 GENERAL

No Dayworks shall be undertaken unless written authorization has been obtained from the Engineer.

03 MEASUREMENT AND PAYMENT

Item		Unit
B107.01	**Labour during normal working hours**	
B107.01.01	Unskilled labour	hour (h)
B107.01.02	Semi-skilled labour	hour (h)
B107.01.03	Skilled labour	hour (h)
B107.02	**Extra-over item B107.01 for charges and overheads**	
B107.02.01	Unskilled labour	percentage (%)
B107.02.02	Semi-skilled labour	percentage (%)
B107.02.03	Skilled labour	percentage (%)
B107.03	**Construction Plant**	
B107.03.01	(Plant type size / capacity indicated)	hour (h)
B107.04	**Transport of Construction Plant**	
B107.04.01	(Transport type size / capacity indicated)	kilometre (km)

The Contractor is also referred to Clause 40(4) of the Conditions of Contract regarding Dayworks.

Personnel during normal working hours

The unit rate for item B107.01 shall be the hour for the labourer. The labour charges to be reimbursed under the Dayworks item B107.01 in the Schedule of Quantities shall be the actual amount of wages paid to labourers, (but no foreman), employed on Dayworks with the authorisation of the Engineer. The labour charges will be paid only for the time that the workmen are actually so employed on Dayworks.

Leave pay, bonuses, subsistence, allowances, employer's contribution to medical schemes and provident funds and the like shall not be included in the above-mentioned labour charges but will be deemed to be covered by the percentage rate tendered by the Contractor against item B107.02 scheduled for this purpose under Dayworks in the Schedule of Quantities.

The unit rate for item B107.02 shall be the percentage extra over for the labourer. This percentage rate shall also be deemed to allow for the use of small tools, supervision, insurances, overhead expenses, transport of workmen, housing and feeding (if the liability of the contractor), profit and any other expenses in connection with workmen employed on Dayworks and shall also include for everything else covered under the allowance as stated in Clause 40(4) of the Conditions of Contract.

Construction Plant

The unit rate for item B107.03 shall be the hour for the item of plant. The rates tendered for the hire of plant shall be applicable only to plant that the Contractor has on the site and shall be total all-inclusive unit prices which shall include, inter alia for all fuel and lubricants; for the wages of operators, equipment and everything else necessary; for all depreciation, maintenance and repair costs; for overhead expenses, profit and for everything in accordance with Clause 40(4) of the General Conditions of Contract.

The rates shall be paid only for the time that the plant is actually working on the Dayworks as authorised by the Engineer.

Transport of Construction Plant

The unit rate for item B107.04 shall be for the kilometre distance that the vehicle travelled for transporting plant. The billed rate for item B107.04 shall include full compensation for the cost of the vehicle including fuel, maintenance, depreciation and running costs and all costs related to the loading and unloading of the plant onto and off the vehicle.

C3.5.1.3 Planning and Programming

The Contractor shall submit within the period stated in the Contract Data a suitable and realistic construction programme for the consideration of the Engineer. This shall be done individually for each of the work packages identified within the limits of this tender.

The programme shall be in the form of a Gantt chart and shall include the following details:

- A work breakdown structure, identifying the major activity groups.
- For each activity group further details shall be provided with regard to the scheduled start and end dates of individual activities.
- The linkages between activities shall be clearly indicated and the logical network upon which the programme is based shall be separately submitted to the engineer if requested. Any constraints shall be classified as being time-related or resource-related.

- The critical path(s) shall be clearly indicated and floats on non-critical activities shall be shown.
- The Contractor shall indicate the working hours per day, night, week and month allowed for in the programme.
- Where relevant the Contractor shall state the production rates for key activities, e.g. earthworks, etc.
- The dates when, in order to construct the Works in accordance with his programme, the Contractor will need materials and other things to be provided by the Employer.
- For each activity, a statement of how the Contractor plans to do the work identifying the principal equipment and other resources which he plans to use.
- The execution of the work must be programmed in such a manner as to limit disruption to passing traffic and residents to a minimum.

Together with the programme as detailed above the Contractor shall submit to the Engineer a cash flow projection, indicating projected monthly invoice amounts. This have to be done for each of the work packages identified within the limits of the tender. The cash flow projection shall be updated at monthly intervals to reflect actual payments to date and anticipated further payments.

The programme will be reviewed at the monthly site meetings at which the Contractor shall provide sufficient detail that will allow the comparison of completed work per activity that has fallen behind. The updated programme shall be submitted to the Engineer at least two days prior to the monthly meetings.

If the programme has to be revised by reason of the Contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time in order to ensure completion of the Works within the time for completion as defined in Clause 42 of the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by providing more labour and plant on site, or by using the available labour and plant on site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the Contractor to submit the programme or to work according to the programme or revised programmes shall be sufficient reason for the Engineer to take steps as provided in Clause 55 of the General Conditions of Contract.

The approval by the Engineer of any programme shall have no contractual significance other than that the Engineer will be satisfied that the work is carried out according to such programme and that the Contractor undertakes to carry out the work in accordance with the programme. It shall not limit the right of the Engineer to instruct the Contractor to vary the programme if required by circumstances. The Contractor is also referred to Clause 12 of the General Conditions of Contract when drawing up his programme.

C3.5.1.4 Sequence of the works

The sequence of the works will be work package specific and will be evaluated by the Engineer as such.

C3.5.1.5 Software application for programming

Any software used for planning and programming must be fully compatible with Windows XP (Service Pack 3) operating system and Microsoft Project 2003.

C3.5.1.6 Methods and procedures

The methods and procedures of the works will be work package specific and will be provide by the Engineer as such.

C3.5.1.7 Quality plans and control

The quality plan and control of the works will be work package specific and will be provide by the Engineer as such.

C3.5.1.12 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site of the works and record the daily rainfall figures in the site diary. The site diary shall be handed to the Employer's representative for his signature no later than 10 days after rain that is considered to justify an extension of time occurs.

Extension of time due to abnormal rainfall shall be determined by means of Method 1, where rainfall records and/or values derived from rainfall records are supplied in the Scope of Work, otherwise Method 2 shall apply. Method 1 and 2 are defined and described in the Contract Data.

In the case where Method 2 applies the following is applicable:

- Extension of time resulting from abnormal rainfall or other forms of inclement weather for items on the critical path of the programme shall be calculated according to the requirements of Method 2 (Critical-path method). The value of "n" working days per calendar month as specified in this clause shall be two (2) working days. If no abnormal rainfall or other inclement weather periods occur during a specific calendar month (or months), the n-values as specified shall not be taken as accumulating over the contract period. If the n-days allowed for in the programme of work are not taken up by standing time due to abnormal rainfall or inclement weather conditions, they will fall away and will not be considered in extension of time claims which may arise later during the contract period.

- A working day, or portion thereof, shall be considered as lost when the engineer agrees that no work could have been undertaken on any item falling within the critical path. The contract extension of time arising from inclement weather shall be agreed upon between the engineer's and the contractor's representatives. The days upon shall be recorded in the minutes of the monthly site meetings.

Extension of time due to abnormal rainfall for the purposes of this contract shall be determined by means of Method 1. The rainfall records at Rainfall Station, Pretoria University Proefplaas 05134651 for the period 1960 to 2004 reproduced in the accompanying table and the monthly averages, Rn and Nn, for this period, shall for the purpose of this Contract be taken as normal rainfall.

MONTH	Rn	Nn	MONTH	Rn	Nn
January	118.6	3.7	July	2.2	0.0
February	89.6	2.7	August	5.0	0.1
March	86.0	2.6	September	18.2	0.6
April	50.4	1.5	October	71.3	2.2
May	14.0	0.4	November	103.4	3.9
June	7.3	0.2	December	115.5	4.0
			TOTAL	**696.7**	**22.3**

Records of rain days will be recorded in the minutes of the monthly site meeting.

C3.5.1.13 Format of communications

The Engineer will set standards specific to the work package for communications.

C3.5.1.14 Key personnel

A schedule of key personnel / schedule of contact particulars of key personnel will be requested by the Engineer with the commencement of a specific work package.

C3.5.1.15 Management meetings

C3.5.1.15.1 Community participation

Community participation consists of engagement of Project Steering Committees (PSC). A PSC will be established for the town by the Ward Councillor. The functions of the PSC will be to:

- Assist in monitoring the work package.
- Ensure that the community provide assistance to the contractor to ensure that he can execute the contract in accordance with the specifications and within time.
- Encourage the community to participate in the Labour-Intensive construction.
- Identify skills, skilled personnel and suppliers in the towns.

The PSC will not have the power to:

- Give any instructions to the contractor, except through the engineer.
- Become involved in the daily operations of the contractor or interfere with the contract works.

A monthly meeting will be held with the PSC to discuss relevant matters. The site agent and resident engineer will attend the meetings. The contractor will have to report on progress, deviations from the programme, financial matters community related aspects, general problems and co-operation at the meeting. The PSC members will not receive any remuneration for attending, and they must provide their own transport.

C3.5.1.16 Forms of contract administration

Contract administration pro-formas will be as provided by the Engineer

C3.5.1.17 Electronic payments

Will be as per City of Tshwane's standards.

C3.5.1.18 Daily records

The requirements for daily records of resources (people and equipment employed) / site diaries in respect of work performed on the site and where such documents are to be held will be provided by the Engineer.

C3.5.1.19 Bonds and guarantees

Will be as specified in the Contract Data

C3.5.1.20 Payment certificates

Will be carried out as per General Conditions of Contract for Construction Works, Third Edition (2015).

C3.5.1.21 Permits

Not applicable.

C3.5.1.22 Proof of compliance with law

Not applicable.

C3.5.1.23 Insurance provided by the employer

A copy of the policy and the list of excesses may be obtained from

Contractors All Risk and Liability Insurance:
Mrs Morongwa Mokoena

Tel: 012 358 1126
E-Mail: morongwam@tshwane.gov.za

Room 123
HB Phillips Building
C/O Schoeman and Bosman Streets
Pretoria

C3.5.2 Environment

See Annexure 3.5.A: Environmental Specification

C3.5.3 Health and safety

See Annexure 3.5.B: Health and Safety Specification

C3.5.4 ANNEXURES:

ANNEXURE C.3.5.A Environmental Specification 45

ANNEXURE C.3.5.B Health and Safety Specification 53

ANNEXURE C.3.5.A Environmental Specification

1. INTRODUCTION 46

2. POLICY STATEMENT 46

3. OBJECTIVES OF EMP 46

4. DESIGNATED ENVIRONMENTAL OFFICER 46

5. LEGAL REQUIREMENTS 46

6. MITIGATION MEASURES 47

6.1 Establishment of site offices 47
6.2 Sewage treatment 47
6.3 Waste management 48
6.4 Soil management 48
6.5 Discovery of archaeology sites, artefacts or graves 48
6.6 Stockpiled material 49
6.7 Fuel, diesel and other hazardous materials 49
6.8 General conditions 50

7. MEASUREMENT AND PAYMENT 50

1. INTRODUCTION

The EMP will address the environmental impacts during the design, construction and operational phases of a work package. Due regard must be given to environmental protection during the entire work package. In order to achieve this, a number of environmental specifications/recommendations are made. These are aimed at ensuring that the Contractor maintains adequate control over the work package in order to:

Minimise the extent of impact during construction,
Ensure appropriate restoration of areas affected by construction.
Prevent long term environmental degradation.

The contractor must be made aware of the environmental obligations that are stipulated in this document and declares himself/herself to be conversant of all relevant environmental legislation. The Contractor should also be aware that the Employer's Agent will monitor the implementation of the procedures.

2. POLICY STATEMENT

The construction will be to the best management practices as identified to minimize the environmental impact of activities associated with the development.

3. OBJECTIVES OF EMP

The EMP has the following goals:

- Identifying those construction activities that may have a detrimental impact on the environment;
- Detailing the mitigation measures that will need to be taken, and the procedures for their implementation;
- Establishing the reporting system to be undertaken during the construction.

The EMP also serves to highlight specific requirements that will be monitored during the development and should the environmental impacts not have been satisfactory prevented or mitigated; corrective action will have to be taken. The document should, therefore, be seen as a guideline that will assist in minimising the potential environmental impact of activities.

4. DESIGNATED ENVIRONMENTAL OFFICER

For the purpose of the EMP, a nominated representative of the Contractor should be the designated environmental officer for the work package. The nominated representative of the Contractor will therefore be responsible for ensuring that the provisions of the EMP are complied with. The Employer's Agent will be responsible for issuing instructions to the Contractor where environmental considerations call for action to be taken. The environmental officer will submit monthly reports to the Employer's Agent on site who will verify the information.

5. LEGAL REQUIREMENTS

Under normal circumstances and EMP would be the end result or the final stage in the EIA procedure. However, a working agreement was negotiated between the National Department of Environmental Affairs and Tourism (DEAT) and the City of Tshwane Metropolitan Municipality. The agreement stipulates the work package types of the City of Tshwane Metropolitan Municipality need to submit to DEAT for approval and those work package types the City of Tshwane Metropolitan Municipality do not need to submit for approval. For those actions that do not need approval, the City of Tshwane Metropolitan Municipality undertook to compile generic EMP's to assist to minimising degradation to the area. The following work package types fall in this non-approval category: periodic maintenance, special maintenance, rehabilitation and specific upgrades.

6. MITIGATION MEASURES

In setting mitigation measures, the practical implications of executing these measures must be borne in mind. With early planning, both the cost and the impacts can be minimised.

6.1 Establishment of site offices

6.1.1 Site Plan

The Contractor shall provide the Employer's Agent on site with a plan detailing the layout of site offices facilities, such as chemical toilets, areas for stockpiling of material, storage of hazardous materials and provision of containers. The site offices should not be sited in close proximity to steep areas as this will increase soil erosion. Preferred locations would be flat areas along the route. If the route traverses water courses, streams and rivers, it is recommended that the site, and in particular the ablution facilities, aggregate stockpiles and hazardous material stockpiles are located as far away as possible from any water course as possible.

The site plan shall be submitted before the site hand over meeting. Read with Standard Specifications for Municipal Civil Engineering Works: Section 001 and 002.

6.1.2 Vegetation

The vegetation surrounding the site offices is to be left as intact as possible and vegetation planted at the site should be indigenous. Only trees directly affected by the works and such others as may be indicated by the Employer's Agent in writing may be sawn off/removed.

The work package specification for the rehabilitation of the grass cover shall be strictly adhered to. Any proclaimed weed or alien invader plant shall be cleared by hand before seeding. Read with Specifications: 104 – Landscaping and grassing.

6.1.3 Rehabilitation

The site offices will require rehabilitation at the end of the contract. All construction material, including concrete slabs and braai areas are to be removed from the site on completion of the contract. Read with Sections 001, 002 and 104 of the Specifications.

6.1.4 Water for human consumption

Water for human consumption must be tested and treated in accordance with recommendations.

6.2 Sewage treatment

Adequate toilet facilities are to be provided. Use of the veld for this purpose shall not, under any circumstances, be allowed. The Contractor shall be entirely responsible for enforcing their use and for maintaining such latrines in a clean, orderly and sanitary condition to the satisfaction of the Engineer. Latrines shall be positioned within walking distance from wherever employees are employed on the works.

Save and effective sewage treatment will require one of the following sewage handling methods: septic tanks and soak always, dry composting toilets such as "enviro loos", or the use of chemical toilets which are supplied and maintained by a subcontractor. The type of sewage treatment will depend on the geology of the area selected, the duration of the contract and proximity (availability) of providers of chemical toilets is to be done in consultation with the Site Engineer.

Read with Sections 104 of the Specifications.

6.3 Waste management

Waste management and waste minimisation must be implemented at the outset of the contract.

6.3.1 Litter

No littering by construction workers is allowed. During the construction period, the facilities shall be maintained in a neat and tidy condition and the site is to be kept free of litter. Read with Sections 001 and 002 of the Specifications.

6.3.2 Removal of solid waste

Solid waste is to be stored in an appointed area for collection and disposal. A refuse control system must be established for the collection and removal of refuse to the satisfaction of the Engineer. Disposal of solid waste will be in a Department of Water Affairs and Forestry (DWAF) licensed landfill site.

6.3.3 Hazardous waste

Hazardous waste such as bitumen, tar, oils, etc. shall be disposed of in a Department of Water Affairs and Forestry approved landfill site. Special care must be taken when using tar products such as tar prime or pre-coating fluid to avoid water-soluble phenols form entering the ground or contaminating water.

6.4 Soil management

6.4.1 Topsoil

The contract provides for the stripping and stockpiling of topsoil from the site for later reuse. Topsoil is considered to be of a minimum thickness of + 300 mm of the natural soil, including all the vegetation and organic matter. The areas to be cleared of topsoil shall include the storage areas. Weeds appearing on the stockpiled topsoil shall be removed by hand before seeding. Soils contaminated by hazardous substances shall be disposed of in an approved Department of Water Affairs and Forestry waste disposal site.

6.4.2 Borrow material

The Contractor's attention is drawn to the requirements set forth by the Department of Mineral and Energy Affairs in terms of the submission of EMPR's for establishment, operation and rehabilitation of borrow pits and quarries. The cost of complying with the requirements shall be deemed to be included in existing rates in the schedule of quantities. Read with the Specification Section 203.

6.5 Discovery of archaeology sites, artefacts or graves

6.5.1 Archaeology sites

If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately. The Contractor shall take reasonable precautions to prevent any person from removing or damaging any such article and shall immediately upon discovery thereof inform the Employer's Agent of such discovery. The National Monuments Council must be contacted who will appoint and archaeological consultant. Work may only resume once clearance is given in writing by the archaeologist. Read with General Conditions of Contract.

6.5.2 Graves

If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker as well as the National Monuments Council should be contacted. The undertaker will place advertisements in the newspapers concerning the grave. He will also provide for the relocation of bones, should it be necessary. Read with General Conditions of Contract.

6.6 Stockpiled material

The Contractor shall so plan his activities that materials excavated from borrow pits and cuttings, in so far as possible, can be transported direct to and placed at the point where it is to be used. However, should temporary stockpiling become necessary, the areas for the stockpiling of excavated and imported material must be indicated and demarcated on the site plan and approved in writing by the engineer.

The area chosen shall be devoid of indigenous trees and shrubs. Care shall be taken to preserve all vegetation in the immediate area of these temporary stockpiles. After the stockpiled material has been removed, the site shall be reinstated as closely as possible to its original condition. All areas affected by stockpiling shall be landscaped, top soiled and grassed to the Engineer's approval and at the Contractor's cost.

Material milled out of the existing road surface that is temporarily stockpiled within the road reserve shall:

- be stockpiled so as to be as inconspicuous as possible
- be prevented from contaminating water courses,
- be cleared of weeds.

In all cases, the areas for stockpiling and disposal of construction rubble shall be approved by the Employer's Agent before such operation commences.

Read with Section 203 of the Specifications.

6.7 Fuel, diesel and other hazardous materials

6.7.1 Hazardous Materials

All hazardous materials i.e. bitumen binders shall be stored in an appointed area that is fenced and has restricted entry. Storage of bituminous products shall only take place using suitable containers to the approval of the Engineer.

Under no circumstances shall the spoiling of bituminous products on the site, over embankments, in borrow pits or any burying, be allowed. Unused or rejected bituminous products shall be taken to the supplier's production plant. No spillage of bituminous products shall be allowed on site. Affected areas shall be promptly reinstated to the satisfaction of the Engineer.

6.7.2 Fuel

Should any fuel storage tank be required on site, the Contractor shall ensure that he has complied with the necessary legal requirements for the erection of such tanks. Leakage must be avoided. The fuel and diesel areas should be bonded to accommodate any spillage or overflow from these activities.

6.7.3 Oil, grease

Oil, grease and cleaning materials from the maintenance of vehicles and machinery shall be collected in a sump and sent back to the supplier or otherwise disposed of at a registered site.

6.7.4 Cooking oil

The Contractor should ensure that sufficient fuel is available for heating and cooking purposes should this be necessary.

6.7.5 Spillages

Streams, rivers and dams must be protected from direct or indirect spillage of pollutants such as refuse, garbage, cement, concrete, sewage, chemicals, fuels, oils, aggregate, tailings, wash water, organic materials and bituminous products. In the event of a spillage, prompt action must be taken by competent instances to clear the affected area.

6.8 General conditions

Complaints received regarding activities on the construction site pertaining to the environment shall be recorded in a designated register and the response noted with the date and action taken. This record must be submitted with the monthly reports.

Any avoidable non-compliance with the above-mentioned measures may be considered sufficient ground for withholding payment of part or all amounts to be paid for the said item.

7. MEASUREMENT AND PAYMENT

The Contractor shall not be separately reimbursed or compensated in respect of his compliance with the provisions of this part of the Scope of Works. All costs so incurred shall, save and except to the extent provided for the schedule of quantities under SECTION 001: GENERAL REQUIREMENTS AND CHARGES, be deemed to be included in the rates tendered for the various items of work listed in the schedule of quantities.

TABLE 1 SUMMARY OF MITIGATION MEASURES

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
Establishment of site offices	Siting of offices	Preferred areas would be flat areas along the route. Avoid steep areas as soil erosion could increase. Avoid water courses	001 002.02.01
	Site Plan	Contractor will provide Employer's Agent detail of layout of site facilities within two weeks of moving to the site i.e. chemical toilets, the demarcation of areas for stockpiling of materials, storage of hazardous materials and the provision of containers. The offices shall be fenced. The site plan will be submitted before the site hand over meeting.	001 002
Site rehabilitation	Clean-up	All construction material is to be removed from the site on completion of the contract.	001 002 104
Vegetation	On site	Vegetation planted on the site should be indigenous. Only trees directly affected by works as indicated in writing by Engineer, shall be sawn off/removed	104
	Weeds	Clearance of weeds must be done by	104

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
		hand before seeding.	
	Grass cover	The grass cover surrounding the construction site is to be left as intact as possible or restored to its original condition.	104
Water	Available for human consumption	Water for human consumption must be tested and treated in accordance with recommendations.	
Soil management	Topsoil	The topsoil (± 300 mm) of any excavation shall be removed and stockpiled separately from underlying material in an appointment area	203 104
	Borrow material	EMPR's for borrow pits to be submitted to the Department of Mineral and Energy Affairs for approval	201 203
Archaeological & Cultural sites	Discover of archaeological sites of artefacts	If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately and an archaeological consultant must be contacted. Work may only resume once clearance is given in writing by the archaeologist.	GCC
Graves	Discovery of graves	If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker should be contacted	GCC
Waste management	Solid & Construction waste	Solid waste is to be stored in an appointment area for collection and disposal. Disposal of waste will be in a DWAF licensed landfill, and no waste may be burnt on site.	
	Litter	The site is to be kept free of litter	001
Sewage treatment	Toilet facilities	Adequate toilet facilities are to be provided, and the siting of chemical toilets is to be done in consultation with the site engineer. Use of the veld for this purpose shall not be allowed.	001 002
Fuel, diesel & hazardous materials	Hazardous Materials	All hazardous materials i.e. bitumen binders will be stored in an appointed area that is fenced and has restricted entry. No spoiling of bituminous products on site, over embankments,	

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
		in borrow pits or any burning. No spillage of bituminous products shall be allowed on site.	
	Fuels	All fuel tanks will be stored in an appointed area. Leakage will be avoided.	
	Cooking fuel	The Contractor should ensure that sufficient fuel is available for heating and cooking purposes should this be necessary.	
	Oil, grease	Oil, grease and cleaning materials from maintenance of vehicles shall be collected in a sump and sent back to supplier.	
	Spillages	Streams, rivers or dams must be protected against spillages of pollutants mentioned in 6.7 (e). In the event of a spillage, prompt action must be taken to clear the affected area.	
General considerations	Lines of authority	A nominated representative of the contractor will be the designated environmental officer for the site.	
	Reports	The environmental officer will submit monthly reports to the Employer's Agent who will verify the information	
	Complaints	Complaints received regarding activities on the construction site pertaining to the environment should be recorded in a designated register, and the response noted with the date and action taken. This record must be submitted with the monthly report	

ANNEXURE C.3.5.B Health and Safety Specification

TABLE OF CONTENT

TABLE OF CONTENT 54
1. AIM 55
2. PURPOSE 55
3. Definitions and abbreviations 56
3.1 Abbreviations 56
3.2 Definitions 57
4. PROJECT DETAILS 60
5. PROJECT DOCUMENTATION 61
6. SHE File 62
7. PROCEDURE 66
8. Operational control 78
9. Construction Work Permit Application 88
10. Health and safety policy 89
11. Cost for health and safety measures during the construction process 89
12. REGULATION 21. Explosive Actuated Fastening Devices 89
13. Duties of the Designer 90
14. Potential Hazards 90
15. Dust 91
16. Vibration 91
17. Electrical Installations 91
18. Use of ladders 91
19. Fall Protection Plan 92
20. Procurement of construction materials for Construction 92
21. Site Establishment 93
22. Subcontractor Management 93
23. Occupational Hygiene 93
24. Night Work (After hours) 94
25. Working in Confined Spaces 94
26. Ramps 95
27. Hired Plant 95
28. Structure and Contents of the SHE Plan 96

C3.8 REFERENCES TO THE SCOPE OF WORKS IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT AND REGULATIONS: HEALTH AND SAFETY SPECIFICATION

1. AIM

The aim is to provide the necessary guidelines that will enable Management to safely start our construction and process operations in the construction for City of Tshwane with proper arrangements in place during UPGRADING OF STORMWATER SYSTEMS IN NETWORK 1A, 1C & 1F IN RAMOTSE.

The Client's further duties are as described in the Act and the Regulations made there-under. The Principal Contractor shall be responsible for the Health & Safety Policy for the site in terms of Section 7 of the Act and in line with Construction Regulation 5 as well as the Health and Safety Plan for the project.

The contractor shall set up a Risk Assessment Program to identify and determine the scope and details of any risk associated with any hazard at the construction site, in order to identify the steps needed to be taken to remove, reduce or control such hazard. This Risk Assessment should be aligned to the Client's Baseline Risk Assessment and the steps identified will be the basis or point of departure for the Health and Safety Plan. The Health and Safety Plan shall include documented "Methods of Statement" detailing the key activities to be performed to reduce as far as practicable, the hazards identified in the Risk Assessment.

City of Tshwane Social Performance Projects obligation is to enhance the social infra-structure in the local communities of operations and activities. A very large number of community interactions is required on all these projects and thus requires a sound and reliable approach to ensure allocation of Legal responsibilities.

2. PURPOSE

The SSHSS is a performance specification to ensure that the Client and any bodies that enter into formal agreements with the Client, Agents, Professional Designers (Engineers, Quantity Surveyors and Architects), Principal Contractors and Contractors achieve an acceptable level of OHS performance.

No advice, approval of any document required by the SSHSS, such as hazard identification and risk assessments, or any other form of communication from the Client shall be construed as acceptance by the Client of any obligation that absolves the Principal Contractor from achieving the required level of performance and compliance with legal requirements. Furthermore, there is no acceptance of liability by the Client, which may result from the Principal Contractor failing to comply with the SSHSS, i.e. the Principal Contractor remains responsible for achieving the required performance levels.

A Mandatary Agreement in terms of Section 37.2 of the OHSA will be signed between parties prior to any works commencing. If the JBCC 2000 contract is used a copy of the signed contract shall form part of the H&S file submission.

The SSHSS highlights the aspects to be implemented over and above the minimum requirements of current legislation. Requirements may be changed should new risks or issues are identified that could not have been foreseen during the design phase of the project, or during the construction phase. Any new legislation or standards (legislated or determined by the Client) that are promulgated or accepted during the contract will automatically be applied.

Environmental management shall receive due attention as per the requirements of the Environmental Control Officer (ECO) but will be managed by the ECO directly if applicable to the project.

3. Definitions and abbreviations

3.1 Abbreviations

AIA	*Approved Inspection Authority*
BoQ	*Bill of Quantities*
CC	*Compensation Commissioner*
CR	*Construction Regulations*
CHSO	*Construction Health and Safety Officer*
DMR	*Driven Machinery Regulations*
DEL	*Department of Employment and Labour*
FEMA	*Federated Employers Mutual Association*
GAR	*General Administration Regulations*
GSR	*General Safety Regulations*
HCSR	*Hazardous Chemicals Agents Regulations*
HIRA	*Hazard Identification Risk Assessment*
H&S	*Health and Safety*
ER	*Engineer's Representative*
LI	*Labour Intensive*
DMA	*Disaster Management Act*
OH	*Occupational Health*
OHSA	*Occupational Health and Safety Act No. 85 of 1993 (as amended)*
SSHSS	*Site Specific Health and Safety Specification*
PC	*Principal Contractor*
PPE	*Personal Protective Equipment*
SANS	*South African National Standards (Authority)*
SACPCMP	*South African Council for Project and Construction Management Professions*
SDS	*Safety Data Sheet*
SMME	*Small, Micro, Medium Enterprise*
SWP	*Safe Work Procedure PREAMBLE*

3.2 Definitions

The definitions as listed in the OHS Act and Construction Regulations (07 February 2014) shall apply.

"**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-

(a) 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

(b) 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 -

(a) the construction, erection, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure; or

(b) 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.

"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) a competent person who-

(i) prepares a design;

(ii) checks and approves a design;

(iii) 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

(iv) designs temporary work, including its components;

(b) an architect or engineer contributing to, or having overall responsibility for a design;

(c) a building services engineer designing details for fixed plant;

(d) a surveyor specifying articles or drawing up specifications;

(e) a contractor carrying out design work as part of a design and building project; or an interior designer, shopfitter or landscape architect.

"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.

"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 guardrails, screens, barricades, anchorages or similar equipment.

"Fall Protection Plan" means a documented plan, which includes and provides for-

(a) all risks relating to working from a fall risk position, considering the nature of work undertaken;

(b) the procedures and methods to be applied in order to eliminate the risk of falling; and

(c) 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 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 Construction 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-

(a) 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.

(b) any falsework, scaffold or other structure designed or used to provide support or means of access during construction work; or

(c) 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.

"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.

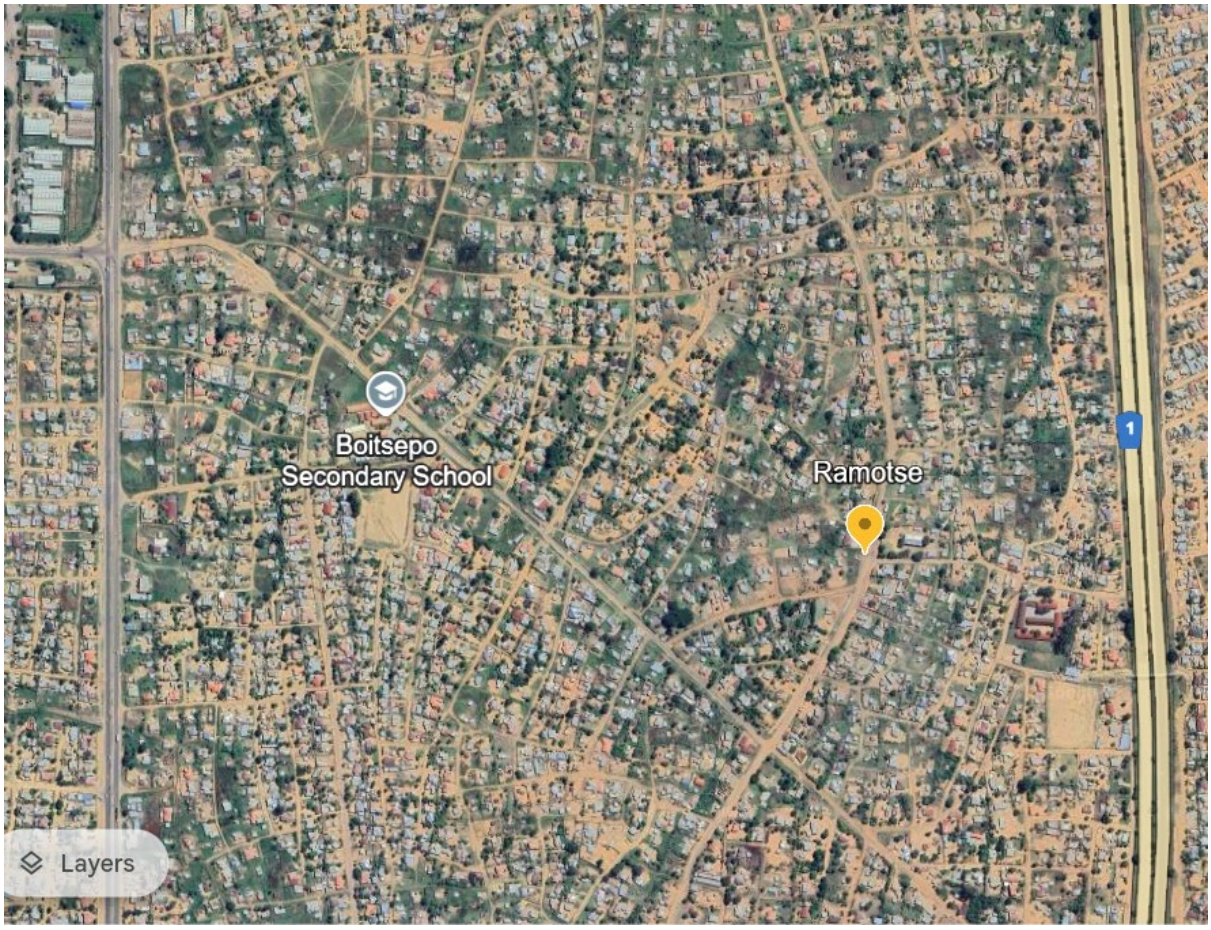
4. PROJECT DETAILS

Locality

Ramotse is a suburb in the City of Tshwane, Gauteng, with an elevation of 1,083 meters. It is located near the suburb of Marokolong and in proximity to Leboneng.

The location of the project within is illustrated.

Figure 1: Locality Map



5. PROJECT DOCUMENTATION

Project lifecycle SHE Document Requirements

Documents Required at					
Evaluation Stages		Awarding	Site Establishment	Construction	Project Closeout
Commercial (Part A)	Functional (Part B)				
• Complete pricing schedule for Health & Safety • Letter of Good standing	• Letter of Good standing – COID Act • Health & Safety System ISO45001 certification or in-house SHE Management System • Site Spec Health and Safety Plan • SHEQ Policy • DIFR Status • Appointment of Safety Officer • Baseline Risk Assessment • Preliminary SHE File	• Baseline Risk Assessment • Site Specification health & safety plan • Comprehensive SHE File • Appointments of key role players • Method Statements • Written agreements between CITY OF TSHWANE & contractor (section 37.2) including (CR 5k) appointment • Applicable permits and licences and licenses eg Notification to DOL, completion of CWP	• Medicals (COF) Annexure 3 • Operational Legal Appointments with certificate of competencies. This also is dependent on Works to be undertaken ie submission to Client before start date of activity onsite. • Safe Working Procedures as per Risk Assessment • Inductions • Activity based HIRA • Staff list with ID copies for each employee / valid Passports with work permits	• Maintained detailed SHE File • Operational Legal Appointments submissions to Client before start date of activity on site • Method statements / Activity based HIRA • Contractor weekly and monthly reports	• Detailed SHE File (hard and electronic copies)

6. SHE File

The contractor must have a SHE file in which records of this specification and the SHE plan are kept inside the file. All information required in the specification and plan, for the duration of the Principal Contractor and sub-contractors contract, is to be recorded in the file.

The SHE files that will be maintained will be for the construction site.

The Principal Contractor must also record on the file:

- Hands on information about equipment needing cleaning and maintenance, for the future purposes
- Nature, location and markings of services
- As-built drawings

The file must be kept onsite and must be available on request for audit and inspection purposes.

The completed Safety file (i.e. hard and soft copy) shall be handed over to the Client/Agent at the of the Principal Contractors' contract.

Required SHE File Contents

Description	**Evaluation Stage-Preliminary SHE File**	**Afterward – Comprehensive SHE File**
Company Profile	X	
Project Organogram	X	
SHEQ Policy	X	
Contact List including Emergency Numbers	X	
Project Scope of Works		X (City of Tshwane to issue)
SHE Specification & Baseline		X (Bosele to issue on behalf of City of Tshwane)
SHE Plan Approval Memorandum		X (Bosele to issue on behalf of City of Tshwane)
Workman Compensation COID: Letter of Good Standing	X	
Legal Permits: Construction Work Permit / or Notification to DOL		X
Section 37.2: Mandatary Agreement		X City of Tshwane
List of Sub-Contractors		X
CR 7(1)(c) (v): Agreements between Principal Contractors and Sub-Contractors		X
Environmental Authorizations		X City of Tshwane to issue
Environmental Management Plan	X	
Traffic Management Plan	X	

Certificates of Competencies		X (Key staff)	X (operational)
Pre and Exit Certificates of Medical Fitness (Annexure 3)			X
Annual Medical records			X
Staff list with copies of valid certified ID / Passports with valid work permits			X
Contractors Tools and Equipment inventory			X
SHE Plans: SHE Management System aligned to the Project Spec to be implemented on site . Refer to DOL website for sample of a SHE Plan. Include specific operational requirements. Emergency Management Plan, Traffic Plan, Fall Protection Plans to be submitted as separate documents		X	
Fall Protection Plan		X	
Structures		X	
Temporary Works		X	
Excavation Work		X	
Hoisted Materials		X	
Bulk Mixing plants		X	
Explosive actuated fastening device		X	
Cranes		X	
Construction Vehicles and Mobile Plant		X	
Flammable Liquids		X	
Water environments		X	
Confined Space		X	
Hazardous Chemicals Substance		X	
Stacking and Storage		X	
Fire Precautions		X	
Construction Welfare Facilities		X	
LEGAL APPOINTMENTS: - Required by the OHS Act & other Regulation (Depending on Works to be undertaken ie submissions to the Client before start date of activity on site)			
Legal Ref	**Appointment**		
Section 16(1)	Top management (CEO or MD)	X	
Section 16(2)	Assistant to Chief Executive Officer	X	
Section 17	Health and Safety Representative		X
Section 19	Health and Safety Committee Members and Co-opted Members		X

GRS 3	First Aider		X
GSR 5	Confined space inspector		X
ER9(1)	Fire Fighter		X
GAR 9(2)	Incident / Accident Investigator		X
DMR 17(2)	Goods Hoist Inspector		X
DMR 18(11)	Lifting Machinery Operator		X
DMR 18 (5)	Lifting Machinery Inspector		X
DMR 18(10)(e)	Lifting Tackle Inspector		X
VUP 10	Portable Gas Container Inspector		X
VUP13(1) (b)	Pressure Vessels Inspector		X
LEGAL APPOINTMENTS: - Required by the Construction Regulations (Depending on Works to be undertaken i.e. submissions to the Client before start date of activity on site)			
Reg	Appointment		
CR 5(1)(k)	Principal contractor		X
CR 7(1)(c)(v)	Contractor		X
CR 8(1)	Construction Manager		X
CR 8(2)	Assistant Construction Manager		X
CR 8(7)	Construction supervisor		X
CR 8(8)	Assistant Construction supervisor		X
CR 8(5)	Construction Health and Safety Officer		X
CR 9 (1)	Competent person to carry out Risk Assessment		X
CR 10(1)(a)	Fall Protection planner		X
CR 12(1)	Temporary works supervisor		X
CR 13(1)(a)	Excavation Supervisor		X
CR 13(2)(b)(ii)	Professional engineer or technologist		X
CR 19(8)(a)	Material hoist inspector		X
CR 20(1)	Bulk Mixing plant supervisor		X
CR 23(1)(d)(i)/(k)	Constriction Vehicle and mobile plant operator / inspector		X
CR 28(a)	Stacking and Storage supervisor		X
CR 29(h)	Fire Equipment inspector		X
Risk Assessments- Baseline and activity- based HIRA		X (Baseline)	X (Activity based)
Safe Work Procedures and Method Statement		X	X

Calibration Certificates		X
Load Test & Inspection Test Certificates for lifting and tackle equipment		X
Mandatory Registers Required for All Contracts:		
Incident recording Register	x	
Principal Contractor SHE Induction Register	x	
First Aid Box inspection register	x	
PPE issue register	x	
Risk Assessment communication Register	x	
Contract Specific Required Registers:		
Fall Protection Inspection Register		x
Structural Inspection Register		x
Temporary Work Inspection register		x
Excavation Inspection Register		x
Demolition Work Inspection register		x
Hoisted Materials Inspection register		x
Bulk mixing Plants Inspection Register		x
Flammable Liquids Inspection register		x
Water Environments Inspection register		x
Ladder Inspection Register		x
Compressor register		x
Construction Vehicles and Mobile Plant Inspection Register		x
Gas Equipment Register		x
Stacking and Storage Register		x
Fire Precaution Register		x
General Housekeeping Register		x
Incident Management	x	
Emergency Response and evacuation Procedures	x	
Emergency Drill Schedule		X
Minutes of SHE meeting		X (during construction)
SHE Toolbox Talks/DSTI's x Job Observations		X (during construction)
Material Safety Data Sheets		X
Training Records		X
SHE Rep Monthly Inspection Reports		X (during construction)
Monthly Inspection /Audit Reports		X (during construction)
Non-conformance Reports (Work Stoppages & Penalties /Spot fines)		X (during construction)

Client SHEQ/ EMS Audit and Inspection Reports		X (during construction)
Contractor SHEQ Reports i.e. Contractor weekly report, Monthly Statistics		X (during construction)
Temporary Site Closure Checklist		X (during long breaks)
Copy of the OSHACT		X

7. PROCEDURE

7.1 Overall supervision and responsibility for occupational health and safety

a. The principal contractor [appointed in terms of Construction Regulation 5(1)(k)] is responsible for implementing and maintaining the occupational health and safety plan approved by the Client.

b. The Chief Executive Officer (in terms of Section 16(1) of the OHS Act) of the principal contractor is to ensure that the Employer (as defined in the OHS Act) complies with the OHS Act.

c. Any person reporting to the CEO as Designated Person in terms of Section 16(2) of the OHS Act. Such a Designated Person is responsible to assist the Chief Executive Officer to ensure that the Employer complies with the requirements of the OHS Act.

d. The construction manager, assistant construction manager, construction supervisor and assistant construction supervisor(s) appointed in terms of Construction Regulation 8 are responsible for supervising the construction works to ensure that all work undertaken comply with the requirements of the OHS Act, its Regulations and

7.2 Operational responsibilities for occupational health and safety

The principal contractor shall appoint designated competent employees and/or other competent persons as outlined in the following list to assist with the operational responsibilities for occupational health and safety. This list is only the minimum requirement and is therefore in no way exhaustive.

Table 2: Minimum requirement of appointments to be made by a Contractor

Appointment description	Appointment required in terms of
Construction manager	Construction Regulation 8(1)
Assistant construction manager	Construction Regulation 8(2)
Construction supervisor	Construction Regulation 8(7)
Assistant construction supervisor	Construction Regulation 8(8)
Construction vehicle, mobile plant and machinery supervisor	Construction Regulation 23
Drivers of construction vehicles and operators of plant	Construction Regulation 23
Emergency, security and fire coordinator	Construction Regulation 29
Excavation supervisor	Construction Regulation 13

Demolition supervisor	Construction Regulation 14
First-aiders	General Safety Regulation 3
Fire-fighting equipment inspector	Construction Regulation 29
Hazardous Chemical Agents supervisor	Hazardous Chemicals Agents Regulations 10
Incident investigator	General Administrative Regulation 9
Lifting machines and equipment inspector	Construction Regulation 22 and DMR 18
Occupational health and safety committee	OHS ACT Section 19
Occupational health and safety officer	Construction Regulation 8(5)
Health and safety representatives	OHS ACT Section 17
Person responsible for machinery	Driven Machinery Regulation 18
Risk assessor	Construction Regulation 9(1)
Stacking and storage supervisor	Construction Regulation 28
Traffic management supervisor	OHS ACT Section 9(1)
Fall Protection Planner / Developer	Construction Regulation 10

These appointments shall be in writing for competent persons and the responsibilities must be clearly stated together with the period for which each appointment is made. This information must be communicated to and agreed with the appointees.

Copies of appointments shall be submitted to the Client together with concise CVs or competence certificates of the appointments included in the occupational health and safety file. Proof of competency must be submitted and included in the safety file. All appointments shall be approved by the Client and any changes of appointees or appointments must be communicated to the Client and agreed upon before being implemented.

The principal contractor shall, furthermore, provide the Client with an organogram of all contractors that he/she has appointed or intends to appoint and keep the list updated on a weekly basis.

Appointment description	Minimum Competency & Experienced required
Construction manager	10 years of Experience in Civil Engineering Minimum of National Diploma in Engineering Studies or Equivalent Plus HIRA, Legal liability, and Safety for managers training.
Assistant construction manager	8 years of Experience in Civil Engineering Minimum of National Diploma in Engineering Studies or Equivalent Plus HIRA, Legal liability, and Safety for managers training.
Construction supervisor	Minimum of 5 years of Experience in Civil Engineering Minimum of N5 in Engineering Studies or Equivalent Plus HIRA, Legal liability, and Safety for supervisors training.
Assistant construction supervisor	Minimum of 3 years of Experience in Civil Engineering Minimum of N5 in Engineering Studies or Equivalent Plus HIRA, Legal liability, and Safety for supervisors training.
Construction vehicle, mobile plant and machinery supervisor	CV competencies, medical certificate
Drivers of construction vehicles and operators of plant	CV competencies, medical certificate
Emergency, security and fire coordinator	Emergence preparedness training
Excavation supervisor	Minimum of 5 years of Experience in Civil Engineering Minimum of N5 in Engineering Studies or Equivalent Plus HIRA, Legal liability, and Safety for supervisors training.
First-aiders	At least level 2 first aid training
Fire-fighting equipment inspector	Basic firefighting training
Hazardous Chemicals Agents supervisor	Hazardous Chemicals Substances handling training
Incident investigator	Incident Investigation level 3
Lifting machines and equipment inspector	As prescribed in Construction Regulation 22

Appointment description	Minimum Competency & Experienced required
Occupational health and safety committee	OHS ACT
Occupational health and safety officer	Minimum 5 years in construction, NQF Level 5 safety qualification, CHSO SACPCMP status
Health and Safety Representatives	Safety Rep training
Person responsible for machinery	Driven Machinery Regulation 18
Risk assessor	HIRA
Stacking and storage supervisor	Stacking and Storage training
Traffic management supervisor	Traffic Management/ supervision training
Fall Protection Planner / Developer	FPPD training

7.3. Designation of Health and Safety Representatives (Section 17 of the OHS Act)

Where the principal contractor employs more than 20 persons [including the employees of other contractors (sub-contractors) and its supervisors];s/ he has to appoint one Health and Safety Representative for every 50 employees or part thereof. General Administrative Regulation 6 requires that the election, appointment and subsequent designation of the Health and Safety Representatives be executed in consultation with employee representatives or employees. (Section 17 of the OHS Act as well as General Administrative Regulation 6 and 7 refer).

Health and Safety Representatives shall be designated in writing and the designation must include the area of responsibility of the person and term of the designation.

7.4. Duties and functions of the Health and Safety Representatives (Section 18 of the OHS Act)

The principal contractor must ensure that the designated Health and Safety Representatives conduct a weekly/daily inspection of their respective areas of responsibility, using a checklist, and report thereon to the principal contractor.

a. Health and Safety Representatives must be included in accident and/or incident investigations.
b. Health and Safety Representatives must attend all occupational health and safety committee meetings.

7.5 Appointment of occupational health and safety committee (Section 19 of the OHS Act

The principal contractor shall establish an occupational health and safety committee consisting of all the designated Health and Safety Representatives together with a number of management representatives that are not allowed to exceed the number of Health and Safety Representatives on the committee and a representative of the Client who shall act as the chairperson without voting rights. The members of the occupational health and safety committee must be appointed in writing and copies of the appointments included in the occupational health and safety file.

The occupational health and safety committee must meet as a minimum monthly and consider, at least, the following agenda items:

1. Opening and welcome.
2. Members present, apologies and absent.
3. Minutes of previous meeting.
4. Matters arising from the previous meeting.
5. Incident and/or accident reports and investigations.
6. Incident, accident and/or injury statistics.
7. Other matters.
8. Endorsement of registers and other statutory documents by a duly authorized representative of the principal contractor.
9. Close and next meeting.
10. Health and Safety Representative

7.6. Mandatories

It is a requirement that the principal contractor, when he appoints contractors or subcontractors in terms of Construction Regulations 7(1(c) includes an OHS Act Section 37(2) agreement (i.e. Agreement with Mandatory) in his agreement with such contractor. A copy of such agreement shall be obtainable from the client and a signed document should be included in the SHE File.

7.7. Administrative controls and the occupational health and safety file

7.7.1 The occupational health and safety file [Construction Regulation 7(1)(b)]

As required by Construction Regulation 7(1(b), the principal contractor and other contractors shall each keep an occupational health and safety file on site which contain the following documents as a minimum:

a) Construction Work Permit (Construction Regulation 3)
b) Emergency contact numbers (that have been verified).
c) Contractor appointment letter from the Client.

d) Health and Safety policies and other policies (including HIV policy, Substance abuse policy and transport policy)

e) Organogram

f) Updated copies of the OHS Act and its Regulations as well as the COID Act (General Administrative Regulation 4.) as well as the COVID-19 OHS Measures in Workplaces (C19 OHS) 2020.

g) Proof of registration and good standing with the Compensation Commissioner or a COID Insurer [Construction Regulation 5(1)(j)].

h) Occupational health and safety plan agreed with the Client including the underpinning risk assessment(s), method statements [Construction regulation 7(1)] and COVID-19 measures to be implemented in the workplace. **The Occupational Health and Safety Plan must address the issues stated in the Health and Safety Specification and must be project specific.**

i) Fall Protection Plan.

j) Waste Management Plan.

k) A list of contractors (sub-contractors) including copies of the agreements between the parties, proof of good standing with the Compensation Commissioner or COID Insurer, and the type of work to be undertaken by each contractor (Construction Regulation 7).

l) Appointment and designation forms as per paragraphs 7.2 above.

m) Medical Fitness Certificates.

n) Proof of Competency and Copies of valid identity documents.

o) Occupational Health and Safety Workplace Environment, including provision for monitoring employee exposures to noise, dust, etc.

p) Rules and regulations including safety procedures the Principal Contractor has in place for recurring work activities.

q) Personal protective equipment rules and arrangements.

r) Control of dangerous and hazardous substances (Material Safety Data Sheets).

s) System of hazard identification and risk control, such as Risk assessments, Daily Safe Task Instructions and communication.

t) Audits to ensure compliance with safety plans.

u) Accident and incident reporting, recording, investigation and analysis, which ensure that corrective action, are taken and this action is communicated to report initiators.

v) Medical and first aid arrangements.

w) Evacuation and emergency planning.

x) Record keeping, including details of what is kept and for how long.

y) Detailed financial allocation for Health and Safety.

z) Safety committee meeting arrangements and minutes.

aa) Audit arrangements.

bb) Maintenance arrangements of machinery and equipment.

cc) Inspection of plant, tools and equipment prior to introduction to site and regularly thereafter.

dd) Daily site safety inspections and audits. The auditing role may be shared with other duties or provided within the resources of individual groups. The role may be rotated.

ee) The following registers:

- Accident and/or incident register (Annexure 1 of the General Administrative
- Regulations);
- Construction vehicles and mobile plant inspections by controller;
- Daily inspections of vehicles, plant and other equipment by the operator, driver and/or user;
- Inspection of electrical installations (including inspection of portable electrical
- tools, electrical equipment and other electrical appliances);
- First box content
- Record of first-aid treatment;
- Fire equipment inspections and maintenance.
- Record of Hazardous Chemicals Agents kept and used on site;
- Ladder inspections.
- Machine safety inspections (including machine guards, lock-outs etcetera); Inspection registers and logbooks for lifting machines and tackle (including daily inspections by drivers/operators); Inspections of stacking and storage; Pressure equipment inspections; and Workers welfare facilities.
- All other applicable records.

The Client shall conduct an evaluation of the principal contractor's occupational health and safety file from time to time.

7.8. Medical certificates of fitness (Construction Regulation 7)

As required by Construction Regulation 7(1(g), the principal contractor must ensure that all employees have a valid medical certificate of fitness specific to the construction work to be performed. These certificates shall be issued by an occupational health practitioner in the form of Annexure 3 (i.e. Annexure 3 of the Construction Regulations).

7.9. Training, awareness, and competence

The contents and syllabi of all training required by the OHS Act and Regulations shall be included in the SHE file documentation

7.9.1 General induction training

- All members of the contractor's site management as well as all the persons appointed as responsible for occupational health and safety
- in terms of the Construction and other Regulations, all employees shall be required to attend a general induction session.

- All employees of the principal and other contractors must be in possession of proof of general induction training.
- All subsequent and newly appointed employees must also be subjected to the induction training as soon as possible after the appointment but prior to starting to work on site.

7.9.2 Site-specific induction training

- The principal contractor shall be required to develop a construction work project specific induction training course based on the risk assessments for the contract work and train all employees and other contractors and their employees.
- All employees of the principal contractor and other contractors must be in possession of proof that they attended a site-specific occupational health and safety induction training.

7.9.3 Other training

1. All operators, drivers and users of construction vehicles, mobile plant and other equipment shall be in possession of valid proof of training and where applicable licenses or proof of competency.
2. All employees in jobs requiring training in terms of the OHS Act and Regulations must be in possession of valid proof of training.
3. Occupational health and safety training requirements [as required by the Construction Regulations and as indicated by the occupational health and safety specification and the risk assessment(s)] i.e. -
   a. General induction (Section 8 of the OHS Act);
   b. Site and job specific induction, including visitors (Sections 8 and 9 of the OHS Act);
   c. Site and project manager;
   d. Construction supervisor;
   e. Health and Safety Representatives [Section 18 (3) of the OHS Act];
   f. Training of the appointees indicated in paragraphs **7.2.**
   g. Operators and drivers of construction vehicles and mobile plant (Construction Regulation 23);
   h. Basic fire prevention and protection (Construction Regulation 29);
   i. Basic first-aid (General Safety Regulations 3);
   j. Storekeeping methods and safe stacking (Construction Regulation 28);
   k. Emergency, security and fire coordinator.

7.9.4 Awareness and promotion

The principal contractor is required to have a promotion and awareness program in place to create an occupational health and safety culture within employees as well as sub-contractors. The following are some of the methods that may be used:

- Toolbox talks
- Posters

- Videos
- Competitions
- Suggestion schemes

7.9.5 Notices and signs

The following notices and signs are, where applicable, compulsory on the construction site as well as

Table 1: Compulsory Notices and Signs

Area and/or activity where notice or sign is required	Notice or sign required in terms of
Display of notices and signs	General Safety Regulation 2B and SABS Code 1186
First-aid	General Safety Regulation 3(6)
Toilets and change rooms	Facilities Regulation 2 (5) 4(2)(f)
Storage of flammable materials	General Safety Regulation 4(8)(a)(i) and (ii) yards]
Workplace controls for COVID19 COVID 19 Guidelines	Disaster Management Act 2002 Sec 657
Machinery	General Machinery Regulation 9 (Schedule D)
Prohibition on smoking and eating or drinking at the workplaces where high-risk substances [FR5 (1)] are stored or handled	Facilities Regulation 6(b)
Non-potable water	Facilities Regulation 7(B)

7.10. Competence

Competence refers to all training required to undertake the work safely and without risk to health of their or other persons, has been successfully completed before work commences.

The principal contractor shall ensure that follow-up and refresher training is conducted on a regular basis as well as the contract work progresses, and the work situation or requirements changes.

Records of all training must be kept on the occupational health and safety file for auditing purposes.

7.11. Consultation, communication, and liaison

The following arrangements will apply-

a) Occupational health and safety liaison between the Client, the principal contractor, the other contractors, the designer and other concerned parties will be through the occupational health

and safety committee. In the absence of a health and safety committee, the Client and principal contractor will agree on an alternative communication forum to be implemented.

b) In addition to the above, communication may be directly to the Client or his appointed Agent, verbally (followed up in writing within 14 calendar days) or in writing, as and when the need arises.

c) Consultation with the workforce on occupational health and safety matters will be through their supervisors, Health and Safety Representatives, the occupational health and safety committee and their elected trade union representatives, if any.

d) The principal contractor will be responsible for the dissemination of all relevant occupational health and safety information to the other contractors, for example design changes agreed with the Client and the designer, instructions by the Client and/or his Agent, exchange of information between contractors, the reporting of hazardous and/or dangerous conditions and/or situations etcetera.

e) The principal contractor will be required to do site safety walks with the Client and/or his Agent on a basis to be determined and agreed between the parties.

f) The principal contractor and other contractors shall conduct toolbox talks with their employees on at least a weekly basis and records of those toolbox talks including the topics discussed must be kept on the occupational health and safety file. Employees must acknowledge the receipt of toolbox talks, for which all records must likewise be kept on the occupational health and safety file on site.

The Client or his Agent and the principal contractor will agree on the dates, times and venues of the occupational health and safety meetings. The Principal Contractor shall conduct at least one formal safety meeting per month with his employees to ensure safety awareness and shall maintain appropriate records of attendance and meeting content.

Such records shall be made available to the Employers' Safety Agent. Such meetings shall address at least the following:

i. Accident / safety incidents
ii. Hazardous conditions
iii. Hazardous materials / substances
iv. Job or work projections
v. Work procedures
vi. Protective clothing / equipment
vii. Housekeeping
viii. General safety topics

7.12. Checking, reporting and corrective actions

7.12.1. Monthly compliance assessment by Client [Construction Regulation 5(1)(0)]

The Client shall be conducting a periodic assessment to comply with Construction Regulation 5(1)(*o*) and confirm that the principal contractor has implemented and is maintaining the agreed and approved occupational health and safety plan.

7.12.2. Other assessments and inspections by the Client

The Client reserves the right to conduct other ad-hoc assessments and inspections as deemed necessary. This could include among others site safety walks.

7.12.3. Conducting an assessment

A representative of the principal contractor must accompany the Client on all assessments and inspections and may conduct his/her own inspection at the same time. Each party will, however, take responsibility for the results of his/her own assessment and/or inspection.

7.12.4. Contractor's assessments and inspections

The principal contractor shall conduct his own internal assessments and inspections to verify compliance with his own occupational health and safety plan and management system as well as the requirements of this specification and the compliance of other contractors under his/her control.

Inspections by occupational health and safety officers and other appointed Health and Safety Representatives within their areas of responsibility may be conducted monthly / weekly and report thereon to their foreman or supervisor whilst other appointees must conduct inspections and report thereon as specified in their appointments for example vehicle, plant and machinery drivers, operators and users must conduct daily inspections before start-up.

7.12.5. Recording and review of inspection results

All the results of the abovementioned inspections must be in writing, reviewed at occupational health and safety committee meetings, endorsed by the chairperson of the meeting and placed on the occupational health and safety file.

7.12.6. Reporting of inspection results

The principal contractor is required to provide the Client with a monthly report as required.

7.13. Incident reporting and investigation

7.13.1. Reporting of accidents and incidents (Section 24 and General Administrative Regulation 8 of the OHS Act)

The principal contractor shall report all incidents where an employee is injured on duty to the extent that he/she:

a) dies
b) becomes unconscious loses a limb or part of a limb
c) is injured or becomes ill to such a degree that he/she is likely either to die or to suffer a permanent physical defect or likely to be unable for a period of at least 14 days either to work or continue with the activity for which he/she was usually employed,
   - or where - a major incident occurred
   - the health or safety of any person was endangered where a dangerous substance was spilled the uncontrolled release of any substance under pressure took place.
   - machinery or any part of machinery fractured or failed resulting in flying, falling or uncontrolled moving objects.
   - machinery ran out of control

The PC shall report to the Client within two calendar days and to the Provincial Director of the Department of Employment and Labour within seven calendar days from date of incident (Section 24 of the OHS ACT and General Administrative Regulation 8), **except** that, where a person has died, has become unconscious for any reason or has lost a limb or part of a limb or may die or suffer a permanent physical defect, the incident must be reported to both the Client and the Provincial Director of the Department of Employment and Labour forthwith by telephone, telefax or e-mail. All other reports should still be completed and provided as required.

For any fatality or amputation or serious accident the Labour Inspector will be informed through the Health and Safety Agent.

The principal contractor is required to provide the Client with copies of all statutory reports required in terms of the OHS Act within seven calendar days of the incident occurring.

The principal contractor is required to provide the Client with copies of all internal and external accident/incident investigation reports, including the reports contemplated in 4.11.2 (3) and (4) above, within seven calendar days of the incident occurring.

7.13.2. Accident and incident investigation (General Administrative Regulation 9)

1. The principal contractor is responsible for the investigation of all accidents and/or incidents where employees and non-employees were injured to the extent that he, she and/or they had to be referred for medical treatment by a doctor, hospital or clinic.
2. The results of the investigation to be entered into the accident and/or incident register.
3. The principal contractor is responsible for the investigation of all minor and non-injury incidents as described in Section 24 (1) (b) and (c) of the OHS Act and keeping a record of the results of such investigations including the steps taken to prevent similar accidents/incidents in future.
4. The principal contractor is responsible for the investigation of all road traffic accidents, related to the construction activities, and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.
5. The Client reserves the right to hold its own investigation into an incident or call for an independent external investigation.

8. Operational control

8.1 Emergency preparedness, contingency planning and response

8.1.1 The Contractor must appoint a competent person to act as emergency controller and/or coordinator.

8.1.2 The principal contractor must conduct an emergency identification exercise and establish what emergencies could possibly develop. He/she must then develop detailed contingency plans and emergency procedures, considering any emergency plan that the Client may have in place.

8.1.3 The principal contractor and the other contractors must hold regular practice drills of contingency plans and emergency procedures to test them and familiarize employees with them.

8.2 First-aid (General Safety Regulation 3)

8.2.1 The principal contractor shall provide first-aid equipment and have qualified first-aider(s) on site as required by General Safety Regulation 3 of the OHS Act.

8.2.2 The contingency plan of the principal contractor must include arrangements for the speedily and timeously transportation of injured and/or ill person(s) to a medical facility or getting emergency medical support to person(s) who may require it.

8.2.3 The principal contractor must have firm arrangements with his/her contractors in place regarding the responsibility of the contractor's first-aid arrangements as well as treatment of injured and/or ill employees

8.3 Security

8.3.1 The principal contractor must establish site access rules and implement and maintain these throughout the construction period.

8.3.2 The principal contractor must develop a set of project applicable security rules and procedures and maintain these throughout the construction period.

8.4 Accommodation of traffic

8.4.1 Where construction work is undertaken in, next to or close to a public road, the use of appropriate as well as enough road signs is of paramount importance to protect employees against traffic and to warn all road users of the presence of construction work as well as construction employees/risks/vehicles.

8.4.2 The principal contractor shall ensure that appropriate as well as enough road signs are posted on the busy alongside the entrance gates to protect employees against traffic and to warn all road users of the presence of construction work as well as construction employees/vehicles. These signs shall be repeated and utilized, where appropriate, as actual construction work is approached.

8.4.3 The following signage is required as a minimum where construction work is undertaken in, next to or close to a public road:

a. construction work
b. lane narrow sign 30 meters before the start of the construction work;
c. work and again where the tapering begins; and
d. Delineators and cones every 5 meters for the entire stretch of construction work.

8.4.4 Where construction work includes excavations in or next to a public road, warning lights or visible boundary indicators should be provided after dark or when visibility is poor.

8.4.5 The maintenance of all signage and especially those that is suitable after dark should be duly managed.

8.4.6 Where appropriate duly trained flag persons should be deployed a good distance ahead of areas where traffic is deviated or lanes closed off. These flag persons should be managed assertively to ensure that they add optimal value and should they not do so they should be retrained and if necessary replaced.

8.4.7 The community liaison officer (CLO) should also be educated on the optimal management of traffic and the risks involved and then be instructed to increase community awareness through talking to all stakeholders including the distribution of suitable information brochures.

8.5 Lifting equipment (Construction Regulation 22)

Lifting equipment must be designed and constructed in accordance with the manufactures/designers specifications as well as generally accepted technical standards and operated, used, inspected and maintained

in accordance with the manufactures requirements as well as that of the Driven Machinery Regulation 18 of the OHS Act. The Driven Machinery Regulation requires that:

a. Lifting equipment to be clearly and conspicuously marked with the maximum mass load (MML) that it is designed to carry safely. When the MML varies with the conditions of use, the table of maximum loads should be used by the driver/operator;
b. Each winch on a lifting machine must at all-time have, at least, three full turns of rope on the drum when the winch has been run to its lowest limit;
c. Lifting equipment be fitted with a brake or other applicable device capable of holding the MML. This brake or device must automatically prevent the downward movement of the load when the lifting power is interrupted;
d. Lifting equipment fitted with a load limiting device that automatically arrest the lift when the load reaches its highest safe position or when the mass of the load is greater than the MML;
e. Every chain or rope on a lifting machine that forms an integral part of the machine must have a factor of safety as prescribed by the manufacturer of the machine and where no standard is available the factor of safety must be: chains 4 (four)steel wire ropes - 5 fibre ropes- 10 (ten)
f. Every hook or load attaching device must be designed as such or fitted with a device that will prevent the load from slipping off or disconnecting;
g. Every lifting machine must be inspected and load tested by a competent person every time it has been dismantled and re-erected and every 12 months after that. The load test must be in accordance with the manufacturers prescription or to 110% of the MML in addition all ropes, chains, hooks or other attaching devices, sheaves, brakes and safety devices forming an integral part of a lifting machine must be inspected every 6 months by a competent person;
h. All maintenance, repairs, alterations and inspection results must be recorded in a log book and each lifting machine must have its own log book; and
i. No person may be lifted by a lifting machine not designed for lifting persons unless in a cradle approved by an inspector of the Department of Employment and Labour.

8.6 Lifting tackle

The following requirements will apply to lifting tackle:

a. Manufactured of sound material, well-constructed and free from latent defects;
b. Clearly and conspicuously marked with an identity number;
c. Maximum mass load factor of safety:

Natural fibre ropes - 10(ten)

Man-made fibre ropes and woven webbing - 06(six)

Steel wire ropes single rope - 06(six)

Steel wire ropes combination slings - 08(eight)

Mild Steel chains - 05(five)

High tensile/alloy steel chains - 04(four)

d. Steel wire ropes must be discarded (not used any further for lifting purposes) when wear and corrosion is evident and must be examined by a competent person every three months for this purpose and the results recorded in a designated log book.

8.7 Construction vehicle and mobile plant operators

The following requirements will apply to construction vehicle and mobile plant operators:

a. Only certified and/or competent employees may be allowed to operate any construction vehicle and mobile plant.
b. Every lifting machine operator must be trained specifically for the type of lifting machine that he or she is operating.
c. Only employees duly authorized to do so may operate any construction vehicle and mobile plant.
d. Only employees physically and psychologically fit, i.e. in possession of a medical certificate of fitness, may be allowed to operate any construction vehicle and mobile plant.

8.8 Construction vehicles and mobile plant (Construction Regulation 23)

Construction vehicles and mobile plant will initially during the competency evaluation process be inspected by the Client prior to being allowed on a project site and suppliers of hired vehicles, plant and equipment will be required to comply with this specification as well as the OHS Act and Regulations.

Construction vehicles and mobile plant must be:

a. Of acceptable design and construction.
b. Maintained in good working order.
c. Used in accordance with their design and intention for which they were designed.
d. Operated and/or driven by trained, competent and authorized operators/drivers. No unauthorized persons to be allowed to drive construction vehicles and mobile plant.
e. Provided with safe and suitable means of access.
f. Fitted with adequate signaling devices to make movement safe including reversing.
g. Excavations and other openings must be provided with sufficient barriers to prevent construction vehicles and mobile plant from falling into same.
h. Provided with roll-over protection.
i. Inspected daily before start-up by the driver, operator and/or user and the findings recorded in a register/logbook and any defects addressed as matter of urgency.
j. Fitted with two head and two taillights that is in good working condition whilst operating under poor visibility conditions: and
k. Used for transporting persons must have seats firmly secured and sufficient for the number of persons being transported.

No loose tools, material etcetera is allowed in the driver and/or operators compartment/cabin nor in the compartment in which any other persons are transported.

No person may ride on construction vehicles and mobile plant except for in a safe place designed and provided for this purpose.

The construction site must be organized to facilitate the movement of construction vehicles and mobile plant in such a manner that pedestrians and other vehicles are not endangered. Traffic routes to be suitable, sufficient in number and adequately demarcated.

Construction vehicles and mobile plant left unattended after hours adjacent to roads and areas where there is traffic movement must be fitted with lights, reflectors or adequate barricades to prevent moving traffic from a sudden emergency, or to come into contact with the parked construction vehicles and mobile plant.

In addition, construction vehicles and mobile plant left unattended after hours must be parked with all buckets, booms etc. full lowered, the emergency brakes engaged and, where necessary, the wheels chocked, the transmission in neutral and the motor switched off and the ignition key removed and stored safely.

All construction vehicles and mobile plant daily inspection records must be kept in the occupational health and safety file.

8.9 Use and storage of flammables (Construction Regulation 25)

The principal contractor must ensure that:

a. No person is required or permitted to work in a place where there is the danger of fire or an explosion due to flammable vapors being present unless adequate precautions is taken;
b. Flammables stored on a construction site are stored in a well-ventilated, reasonably fire-resistant container, cage or room that is kept locked with consistent access control measures in place and sufficient fire-fighting equipment installed and fire prevention methods practiced for example proper housekeeping;
c. Containers (including empty containers) to be kept closed to prevent fumes/vapors from escaping and accumulating in low lying areas; and
d. Welding and other flammable gases to be stored segregated as to the type of gas and empty and full cylinders.

8.10 Hazardous Chemicals Agents

The principal contractor must ensure that:

a. Employees receive the necessary information and training to be able to use, handle and store Hazardous Chemicals Agents safely;

b. The risk assessments required in terms of Construction Regulation 9 include employee exposure to Hazardous Chemicals Agents and that the necessary measures be taken to protect persons from being detrimentally affected by Hazardous Chemicals Agents present or used in the workplace;
c. Suppliers provide the necessary information in the form of material safety data sheets regarding Hazardous Chemicals Agents required to ensure the safe use, handling and storage of these agents;
d. An up-to-date list is kept on site of Hazardous Chemicals Agents stored and used together with the material safety data sheet of the said Hazardous Chemicals Agents;
e. Hazardous Chemicals Agents containers be clearly marked as to the contents and main Hazardous Chemicals Agents on the list indicated above;
f. No person eats or drinks in a Hazardous Chemicals Agents workplace; and
g. Hazardous Chemicals Agents waste is disposed of safely in terms of hazardous waste disposal requirements.

8.11 Storage of flammable and hazardous chemicals (Hazardous Chemicals Agents Regulations)

See paragraphs **8.9** and **8.10** above.

8.12 Fire prevention and protection

The principal contractor must ensure that:

a. The risk of fire is avoided;
b. Sufficient and suitable storage of flammables is provided;
c. All employees are instructed in the use of the fire-fighting equipment and know how to attempt to extinguish a fire;
d. A sufficient number of employees are appointed and trained to act as an emergency team to deal with fires and other emergencies;
e. Employees are informed regarding emergency evacuation procedures and escape routes;
f. Evacuation assembly points are demarcated and made known to employees;
g. Evacuation is regularly practiced to ensure that all persons are evacuated timeously and;
h. Roll call is held after evacuation to account for all employees and to ensure that no-one including visitors and disabled persons have been left behind; and
i. A clearly audible, to all persons on site, siren or alarm is fitted and regularly tested.

8.13 Housekeeping (Construction Regulation 27)

The principal contractor must ensure that:

a. Housekeeping is continuously implemented and maintained;
b. Materials and equipment is properly stored;
c. Scrap, waste and debris is removed off site regularly;

d. Materials placed for use are placed safely and not allowed to accumulate or cause obstruction to the free-flow of pedestrians and vehicular traffic;
e. Where practicable, construction sites are fenced off to prevent entry of unauthorized persons; and
f. Every workplace is kept clean, orderly and free of tools and the likes that are not required for the work being done.
g. The construction side is to be curtained off as this is a residential complex.

8.14 Stacking and storage (Construction Regulation 28)

The principal contractor must ensure that:

a. A competent person is appointed in writing to supervise all stacking and storage on a construction site;
b. Adequate storage areas are provided and demarcated;
c. The storage areas are kept neat and under control;
d. The base of any stack is level and capable of sustaining the weight exerted on it by the stack;
e. The items in the lower layers can support the weight exerted by the top layers;
f. Cartons and other containers that may become unstable due to wet conditions are kept dry;
g. Pallets and containers are in good condition and no material is allowed to spill out;
h. The height of any stack does not exceed 3 times the base unless stepped back at least half the depth of a single container at least every fifth tier or the approval of an inspector of the Department of Employment and Labour has been obtained to build the stacks higher with the aid of a machine. (The operator of the machine must be protected against items falling from overhead or off the stack and no items may overhang);
i. The articles that make up a single tier are consistently of the same size, shape and mass;
j. Structures for supporting stacks are structurally sound and able to support the mass of the stack;
k. No articles are removed from the bottom of the stack first but from the top tier first;
l. Anybody climbing onto a stack can and does do it safely and that the stack is sufficiently stable to support him or her;
m. Stacks that are in danger of collapsing are broken down and restacked;
n. Stability of stacks are not threatened by vehicles or other moving plant and machinery;
o. Stacks are built in a header and stretcher fashion and that corners are securely bonded; and
p. Persons climbing onto stacks do not approach unguarded moving machinery or electrical installations.

8.15 Eating, changing, washing and toilet facilities (Construction Regulation 30)

8.15.1 Toilets

a. The provision of toilets for each sex is required in terms of the National Building Regulations and Construction Regulation 30 and facilities Regulations.
b. Chemical toilets are allowed instead of the water borne sewerage type. Toilets have to be provided at a ratio of at least 1 toilet per 30 employees.

8.15.2 Showers

At least cold-water showers of some sort for each sex have to be provided at a ratio of at least 1 shower per 15 employees and must comply with the Facilities Regulations and National Building Regulations.

8.15.3 Change rooms

Some form of screened off changing facility must be provided separately for each sex/gender and must comply with the Facilities Regulations and National Building Regulations.

8.15.4 Eating facility

Some form of eating facility sheltered from the sun, wind and rain must be provided and must comply with the Facilities Regulations and the National Building Regulations.

8.15.5 Living accommodation (if provided)

Where the site is in a remote location and transport to home is not readily available, reasonable and suitable living accommodation must be provided after obtaining of the necessary permission from authorities and adhering to requirements such as Bylaws of the Johannesburg municipality.

8.15.6 Portable electrical tools and equipment (Electrical Machinery Regulation 9)

Portable electrical tools and equipment includes every unit that takes electrical power from a 15 ampere plug point and is moved around for use in the workplace i.e. drills, saws, grindstones, portable lights, etcetera. In addition, electrical appliances such as fridges, hotplates, heaters, and etcetera must be inspected regularly but at least on a weekly basis and maintained to the same standards as portable electrical tools and appliances.

The use, inspection and maintenance of portable electrical tools and equipment must be governed by the following:

- Regular inspections by a competent person appointed in writing;
- Inspection results must be recorded in a register;
- Only competent authorized persons are allowed to use portable electrical tools and equipment; and
- The correct protective equipment is worn/used whilst operating portable electrical tools and equipment.
- This equipment -
- Must be maintained in good condition at all times to prevent an electrical shock to the user;

- The main source should incorporate an earth leakage protection device or receive power through a double wound transformer or be double insulated and clearly marked as such; and
- All equipment must be fitted with a switch to allow for safe and easy starting and stopping.

8.16 Public health and safety (Section 9 of the OHS Act)

The PC shall make all provisions to provide sufficient site hoarding (opaque fence which is at least two meters (2m) high) to make sure that the public cannot access the site without permission. Access control must, amongst other, include the rule that non-employees will not be allowed on site unaccompanied by appointed security personnel. The principal contractor is responsible for ensuring that non-employees affected by the construction work are made aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimize those dangers. This includes among others:

a. Non- employees entering the site for whatever reason;
b. The surrounding community; and
c. Passers-by the site.

Appropriate signage must be posted to this effect and all employees on site must be instructed to ensure that non-employees are always protected.

All non-employees entering the site must receive site applicable induction into the hazards and risks and the control measures for these.

8.16.1 Excavations (Construction Regulation 13)

All excavation work has to comply with the following:

8.18.1 Excavation work must be carried out under the supervision of a competent & experienced employees on excavation works who have been appointed in writing.

8.18.2 Before excavation work begins the stability of the ground must be evaluated.

8.18.3 Whilst excavation work is being performed, the principal contractor must take suitable and sufficient steps to prevent any person from being buried or trapped by a fall or dislodgement of material.

8.18.4 No load or material may be placed near the edge of an excavation if it is likely to cause a collapse of the excavation, unless suitable shoring has been installed to be able to carry the additional load. Best practice requires a one-meter clearance so as to reduce the pressure on the side walls as well as risk of material falling onto persons inside the excavation.

8.18.5 The location and nature of any existing services such as water, electricity, gas, telecommunication etcetera must be established before any excavation is commenced with and

any service that may be affected by the excavation must be protected and made safe for employees working in or near in the excavation.

8.18.6 Every excavation, must be inspected by the appointed competent person as follows:

- Daily before work commences
- After an unexpected collapse of the excavation or part thereof or after the rain

8.18.7 The results of any inspections must be recorded in a register kept on site in the health and safety file.

8.18.8 Every excavation accessible to the public or that is adjacent to a public road or thoroughfare or that threatens the safety of persons, must be adequately barricaded or fenced off, on all sides, to at least one-meter-high and as close to the excavation perimeter as practicable. All such excavations must also be provided with warning lights / visible boundary indicators when visibility is poor.

8.18.9 Tunneling and Pipe Jacking (CR15) and SANS 1200

The contractor shall follow the relevant guides and SANS standard as prescribed. The levels set out by land surveyor and designs should be adhered to by the pipe jacking contractor. The pipe jacking contractor must develop a method statement and submit it to the Safety Agent before commencing with excavations. The contractor must ensure that authorization and notification of pipe jacking has been sorted with the relevant department. The contractor must ensure that there is a suitable and sufficient barricading around pipe jacking area.

8.19 Transportation of employees

8.19.1 Any vehicle used to transport employees must have seats firmly secured and adequate for the number of employees to be carried.

8.19.2 Regulation 247 of the National Road Traffic Act, Number 93 of 1996 (NRTA) stipulates that the principal contractor shall not allow employees to be transported in a vehicle unless the portion of the vehicle in which the employees are being conveyed is enclosed to a height of

(a) at least 350 mm above the surface on which employees are seated; or

(b) at least 900 mm above the surface on which employees are standing, and with a material of sufficient strength to prevent employees from falling from such vehicle when it is in motion.

8.19.3 Regulation 247 of the NRTA also stipulates that the principal contractor shall also not allow any employees to be conveyed in the goods compartment of a vehicle together with any tools or goods, except their personal effects, unless that portion in which the employees are being conveyed is separated by means of a partition, from the portion in which such goods are being conveyed.

8.20 General Personal and other protective equipment (Sections 8, 15 & 23; OHS Act)

The principal contractor is required to proactively identify the hazards in the workplace and deal with them on an ongoing basis. He/she must either remove them or, where impracticable take steps to protect employees and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal protective equipment should, however, be the last resort and there should always first be an attempt to apply re-engineering and other solutions to mitigating hazardous situations before the issuing of personal protective equipment is considered.

Where it is not possible to create an absolutely safe and healthy workplace the principal contractor is required to inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the principal contractor maintain the said equipment that he/she instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s in a consistent and correct manner.

Employees do not have the right to refuse to use and/or wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other valid reason, the employee cannot be allowed to continue working under the hazardous condition(s) for which the equipment was prescribed but an alternative solution has to be found that may include relocating the employee.

The principal contractor may **not charge any fee** for protective equipment prescribed by him or her **but may charge for equipment under the following conditions,** following a disciplinary hearing:

- Where the employee requests additional issue in excess of what is prescribed;
- Where the employee has blatantly abused or neglected the equipment leading to early failure; and

9. Construction Work Permit Application

The Construction Regulation 3(1) requires that the client who intends to execute construction work must at least 30 days before that work is carried out apply to the provincial director in writing for a construction work permit to perform the construction work is applicable when:

1. Exceed 365 days.
2. Involve more than 3600 person days of construction
3. The tender value is Grade 7, 8, 9 of the of the Construction Industry Development Boad (CIDB) grading.

The application must be done on Annexure 1.

10. Health and safety policy

The principal contractor has to provide the Client, as an annexure to the health and safety plan, with a policy adopted for health and safety.

11. Cost for health and safety measures during the construction process

To enable the Client to comply with Construction Regulation 5(1)(g), all potential principal contractors submitting tenders/bids have to demonstrate to the Client that sufficient provision has been made for the cost to implement and maintain the health and safety plan proposed by the principal contractor to meet the requirements of this health and safety specification as well as that of the OHS Act and its Regulations. A detailed schedule of costs has to be included in the health and safety plan. The contractor to adhere to this requirement will force the Client to reject the tender/bid in terms of Construction Regulation 5(1(h).

12. REGULATION 21. Explosive Actuated Fastening Devices

(1) No contractor may use or permit to use an explosive actuated fastening device, unless –

(a) The user is provided with and uses suitable protective equipment.

(b) The user is trained in the operation, maintenance and use of such a device.

(c) The explosive actuated fastening device is provided with a protective guard around the muzzle end, which effectively confines any flying fragments or particles; and 2 2

(d) The firing mechanism is so designed that the explosive actuated fastening device, will not function unless –

(i) It is held against the surface with a force of at least twice its weight; and

(ii) The angle of inclination of the barrel to the work surface is not more than 15 degrees from a right angle.

(2) A contractor must ensure that –

(a) Only cartridges suited for the relevant explosive actuated fastening device, and the work to be performed, are used.

(b) An explosive actuated fastening device is cleaned and examined daily before use and as often as may be necessary for its safe operation by a competent person who has been appointed for that purpose.

(c) The safety devices of an explosive actuated fastening device are in good working order prior to use.

(d) When not in use, an explosive actuated fastening device and its cartridges are locked up in a safe place, which is inaccessible to unauthorized persons.

(e) An explosive actuated fastening device is not stored in a loaded condition.

(f) A warning notice is displayed in a conspicuous manner in the immediate vicinity wherever an ex-plosive actuated fastening device is used; and

(g) The issuing and collection of cartridges and nails or studs of an explosive actuated fastening device are –

(i) Controlled and done in writing by a person having been appointed in writing for that purpose; and

(ii) Recorded in a register by a competent person and that the recipient has accordingly signed for the receipt thereof as well as the returning of any spent and unspent cartridges.

13. Duties of the Designer

The Designer of a structure must-

a. Ensure compliance with safety standards in regulations, in accordance with section 44 of the Act

b. Consider the health and safety specification submitted by the client

State in a report to the client, before it is put out to tender:

a. All relevant health and safety information that may affect pricing of work

b. Geotechnical science aspects

c. Loading that the structure is designed to withstand

d. Inform client in writing of any dangers or hazards and make available information required for safe execution of work designed or for when the design is altered.

e. Refrain from use of dangerous procedures or materials hazardous to the health and safety of persons

Take into account hazards and minimize risks.

14. Potential Hazards

The following potential hazards have been identified and the Contractor shall address the following hazards in their Risk Assessments and shall be submitted to the client for review but not limited to:

a. Noise

b. Potential presence of asbestos that forms part of the structure (cement fibre)

c. Dust

d. Working at height (fall protection

e. Drilling (Breaking of walls)

f. Vibration

g. Construction vehicles and mobile equipment.

h. Electrical installations and electrical machinery

i. Stacking and storage practices

j. Fire risks and fire precautions

k. Use of jackhammers

l. Hot work (steel cutting and welding)

m. Portable electrical tools

n. Intoxicated persons on site

o. Use of ladders

p. Impact of construction work upon the community members

q. Adverse weather conditions

r. Biological agents

s. Community interference

t. Excavations

15. Dust

Persons involved in construction activities may be exposed to several types of dusts, including:

i. Cement

ii. Silica

The Principal Contractor must provide the employees with the adequate and specific personal protective equipment that will used in preventing/reducing the risks of inhaling any form of dust.

16. Vibration

The sources of noise are frequently sources of vibration within the construction environment.

Jack hammers and similar pneumatic vibrating tools which carries a risk of hand-arm vibration, whilst construction vehicles carry the risk of whole-body vibration.

Jack hammers are going to be used during the blasting process, so the contractor must take in to account the safe procedures and mitigations prior and during working activities. It must be inspected prior its use to check if there are not any defects and if there is any it must not be used before it is fixed.

The Principal Contractor must ensure that the employees who work with Jack Hammers are rotated to ensure that the is no overexposure.

NB: Inspection registers must be recorded and filed.

17. Electrical Installations

The Principal Contractor must comply with the Electrical Installations Regulations.

Over and above the precautions usually associated with electrical installations, extra control measures are necessary for an installation temporarily on construction site. The installation should be of adequate strength to withstand the working conditions of the construction site. Designed and inspected by a competent person and appropriate demarcation and protection provided.

The COC must be issued for the Electrical Installations.

18. Use of ladders

The Principal Contractor must refer and comply to General Safety Regulation 13A.

Portable ladders

Only ladder built in accordance to an accepted standard or code should be permitted to be used on a construction site.

No self-made ladders should be allowed.

Like all construction equipment, they should be strong enough to endure site conditions. They should be systematically and regularly inspected for potential problems, including:

i. Loose runs or stiles

ii. Cracks

iii. Missing foot pods/rubbers

iv. Twisted stiles or bent stiles

The users should be trained on the proper use and maintenance of ladders. This should include:

i. The need to secure and stabilize ladders to the structures on which they rest

ii. The need to use them on level surfaces

iii. Restricting use to person at a time.

iv. Utilization of tool belts

The Principal Contractor shall ensure that all fixed ladders are in good condition and are inspected regularly before use.

19. Fall Protection Plan

The Principal contractor must refer and comply with the Construction Regulation 10.

The Principal Contractor must:

i. Appoint competent person to prepare Fall Protection Plan (FPP), ensure FPP is implemented, amended and maintained and ensure adherence to FPP. This competent person must sign the fall protection plan.
The contents of the fall protection plan must cover all the requirements as stated in the sub-regulation.
The level of supervision is to be stated in the fall protection plan

ii. FPP must include the risk assessment of work from a fall risk position, and procedures and methods used, that must be carried out prior fall protection activities.

iii. FPP to include process for evaluation of employee's medical fitness and records thereof.

iv. FPP to include programme for training and records thereof.

v. FPP to include the rescue plan, equipment inspection, testing and maintenance.

The Principal Contractor must refer to the Construction Regulations and

Contractor must ensure that:

i. Unprotected stairways are guarded or barricaded.

ii. Protection is provided for persons from falling through openings: signage is to be provided as well.

iii. No person is required to work in a fall risk position, unless work is performed safely

20. Procurement of construction materials for Construction

The Principal Contractor shall ensure that all materials procured for use on site are reasonably safe and without risk to health and safety of employees on site when properly used and that they comply with the prescribed requirements.

The Principal Contractor shall also undertake to ensure that necessary information is made available:

i. With regard to the use of the substance at work and provided by the seller of the material;

ii. With regard to the risks to health and safety associated with such substance;

iii. With regard to the conditions necessary to ensure that the substance will be safe and without risk to health and safety when properly used; and

iv. The procedures to be followed in the case of an accident involving such substances.

21. Site Establishment

The Principal Contractor must consult with the Client and the end user when site establishment has to be done.

The Principal Contractor must ensure that the following minimum items are catered for:

a. The Principal Contractor's safety file must be on-site from the day of site establishment.

b. The Inductions will be conducted, and records kept in the safety file.

c. Ablution facilities for both gender (labelled) with sanitary.

d. First aid box

e. Site security and site visit register

f. Well-ventilated offices for all the respective personnel and must be labelled

g. Fire at each office, park bays, storage areas and fuel/gas area accompanied with their signage

h. Assembly point sign, emergency contact numbers board, Construction permit board, construction safety board, project board with work permit displayed on it and all other respective signage

i. Drinking water

j. Separated waste labelled bins

k. Emergency air horn

22. Subcontractor Management

The Principal Contractor shall appoint all subcontractors in writing as per the Construction Regulations 2014.

All subcontractors must be appointed based on competency for the work they are appointed for.

All Subcontractors must have their own Health and Safety file.

All subcontractors must have a letter of Good Standing.

All contractors must have the Public liability insurance.

The Section 37.2 agreement shall be signed.

No contractor shall be appointed without all the above requirements.

23. Occupational Hygiene

The Principal Contractor will ensure that workers are not exposed to occupational hazards and risks that are very common in construction.

The Principal Contractor will ensure that proper health and hygiene measures are put in place to prevent exposure to these hazards through inhalation, ingestion, and absorption. All noise generating activities shall be identified, analyzed and appropriate noise prevention strategies be implemented.

All employees exposed to noise shall undergo audiometric tests and noise prevention induction.

Dust generation shall also be kept to a minimal and dust reduction strategies be implemented to safeguard the health of employees, visitors and neighbouring community. Lighting must be adequate for all activities including confined spaces and night activities. Care should be taken to ensure optimal exposure to vibration producing events and machinery and rest breaks be instituted where the activity cannot be stopped or substituted.

Where employees are exposed to extreme hot or cold temperatures, care must be taken to ensure that means to protect them from worst impact of such exposures are implemented. In very high temperatures appropriate PPE to cover hands and limbs must be provided.

Employees must always be hydrated at regular intervals and a first aider be made available.
Rest breaks must be instituted where applicable.

24. Night Work (After hours)

The Principal Contractor shall ensure that where work has to be carried out at night adequate lighting is provided. Risk Assessments and method statement for the intended activities shall be submitted to the Health and Safety Agent for approval prior to such work taking place.

25. Working in Confined Spaces

The concentration of gas in a confined space must be tested by means of measuring equipment (Gas Monitor) prior to work commence and ventilation should be done for at least 15 minutes by blower to neutralize concentration of gas or any substances.
If possible, locate the source of any such substances and isolate.
All open manholes must be barricaded and protected at all times.
Before signing off the permit the responsible person must confirm that all the employees are accounted for and ensure that all the manholes are properly closed, and barricading removed.
Entering a manhole: Person entering the confine space or manhole must wear a safety harness, fully operational gas monitor.

A lifeline must be attached to the safety harness and a person on the surface must be in continuous contact with the person in the manhole.

Depending on the condition on the confine space a rotational work practices must be introduced if and no person shall remain within a confined space or manhole for a longer period. Should the alarm sound on the gas monitor, the employees must exit the confined space or manhole and the immediate area must also be evacuated immediately.

The area must be properly ventilated and re-tested before re-entering the confined space or manhole.

Employees must be provided with flame-proof lighting when entering deep manholes or manholes with flammable gases. No hot work, smoking or unprotected electrical apparatus which may cause sparks shall be permitted in any manhole or confine space.

Safety equipment: All teams must be issued with fully functional gas monitoring equipment and safety harnesses and self-rescuers where applicable.

All employees must be trained (including refresher training on a continuous basis) in the use thereof.

General records: The following records shall be implemented and maintained by the principal contractor, confined space entry permits, confined space entry registers, and safety harness registers.

The Principal Contractor shall refer and comply to General Safety Regulation 5.

Training: Training shall be provided by principal to employees before work commence in a confined space. Awareness in terms of that must be discussed frequently with all employees.

The Contractor will ensure that a Permit to Work System is in Place for these activities.

26. Ramps

The Principal Contractor shall ensure that every ramp is constructed in accordance with an accepted technical standard and has a safety factor of at least two with respect to the load it is expected to carry.

The ramp shall have an inclination to the horizontal level of not more than 34 degrees.

The ramp shall have an inclination which renders additional foothold necessary and have stepping laths to the full extent of the ramp width.

The ramp which is higher than 2m and is provided on both sides with substantial guardrails which are at least 900mm and not exceeding 1000m in height and toe boards which are at least 150mm high and so affixed that no open space exist between the toe-board and the ramp.

The Principal contractor shall refer and comply with General Safety regulation 13B.

27. Hired Plant

a. The responsibility for the safe condition and use of all hired plant shall be that of the contractor.
b. The operators of such equipment must have the necessary competency training.
c. All daily checklists must be completed whenever the equipment is used.
d. The service records of such equipment and mandatary services in terms of the legislation must be available on request.
e. No noncompliant equipment will be allowed on site.

28. Structure and Contents of the SHE Plan

NB: This structure is just a guidance for the Contractor to follow when developing the project plan; hence it is not exhaustive

1. Index of the H&S Plan
2. Letter of Good Standing (COIDA)
3. Appointment Letter from the Employer
4. Agreement Between Employer and Principal Contractor
5. Occupational Health & Safety Policy
6. Quality Policy
7. Environmental Policy
8. Waste Management Policy
9. HIV & AIDS Policy
10. Alcohol/Drug Policy
11. PPE/C Policy
12. Health & Safety BOQ
13. Employers Site Specific Safety Specification
14. Project Specific Baseline Hazard Identification and Risk Assessment
15. Site Specific Risk Assessment
16. Safe Operating Procedures and Safe Work Procedures
17. Site Specific Organogram
18. Signed Appointment Letters and CV's for the Site Personnel (+ other applicable appointments not on this list)
    - 18.1 Responsible Person
    - 18.2 Construction Manager
    - 18.3 Construction Supervisor
    - 18.4 Construction Health and Safety Officer
    - 18.5 Risk Assessor + Fall Protection Planner
    - 18.6 Incident Investigator
    - 18.7 First Aider
    - 18.8 Fire-Fighter

19 A Site Plan (Indicating the Following):

- 19.1 Positions of Emergency Assembly Points & Equipment at the Site
- 19.2 Traffic Routes for Plant, Pedestrians & Parking Areas
- 19.3 Storage Areas (Flammable Stores, Materials Etc.)
- 19.4 Location of Facilities
- 19.5 Electrical Installations

20 First Aid, Accident, Incident and Emergency Management Procedure

21 Safety and Access Signage Management Procedure

22 Traffic Safety Management Procedures

23 Waste Management Procedure

24 Hazardous Biological Agents (+ Covid19) Management Procedure

25 Construction Plant and Machinery Management Procedure

26 Public Health and Safety Management Procedure

27 Employee Facilities Management Procedure

28 PPE Management Procedure

29 Occupational Medical Examinations Procedure

30 Safety Inspections and Inspection Register Management

31 Internal Audit Management Procedure

32 Contractor Management Procedure

BASELINE RISK ASSESSMENT

Document Description	Baseline Risk Assessment	Signature
Project:	COO 01-2021/22 (HS 08-2024) **Project Title**: THE UPGRADING OF STORMWATER SYSTEM IN RAMOTSE	
Risk Assessor Name	Tinashe Kamupira	
Risk Assessor Professional Registration Number:	CHSM/1062/2022	
Date Of Risk Assessment	20 March 2025	
Reviewed by:	Ntsako Martin Mabunda CHSA/138/2023	
Review Date:	23 March 2025	

Severity Index

		Probability				
		A	B	C	D	E
Impact	1	1	2	4	7	11
	2	3	5	8	12	16
	3	6	9	13	17	20
	4	10	14	18	21	23
	5	15	19	22	24	25

Probability		Impact	
E	Common	5	Fatality or permanent disability
D	Has happened	4	Major injury
C	Could happen	3	Average lost time injury
B	Not Likely	2	Minor injury
A	Practically impossible	1	Medical treat only or less

16 – 25	HIGH
7 – 15	MEDIUM
1 – 6	LOW

		BASELINE RISK ASSESSMENT				
				Risk Scoring		
No.	Activity	Hazard	**Risk/s**	Risk score	Low/ Medium / High	**Specific Control Measures**
1.	Site Establishment	Use of mobile machinery	• Community unrests. • Injuries. • Fatality • Property damage. • Theft.	**8**	**MEDIUM**	• The contractor is to be formally introduced to the community. • Training is to be provided to employees prior to commencement of work. • Employees are to be provided with the relevant PPE. • Existing services are to be identified prior to site establishment. • Site camp to be fully fenced off. • Fulltime security personnel to be available on site. • Supervision. • Monitoring. • OHS audits. • OHS inspections. • DSTI. • Toolbox talks.
2.		Community unrest	• Work stoppages • Injuries • Property damage	**20**	**HIGH**	• Use Community Liaison Officer. • Use Social facilitator. • Use Community Councillor. • Use Project steering committee. • DSTI. • Toolbox talks.

		BASELINE RISK ASSESSMENT				
				Risk Scoring		
No.	Activity	Hazard	**Risk/s**	Risk score	Low/ Medium / High	**Specific Control Measures**
3.		Dust from mobile equipment and vehicles	• Respiratory illnesses	**18**	**HIGH**	• Use of water tankers for spray on gravel roads or area where mobile equipment and vehicles move. • Use dust masks. • Supervision. • Monitoring. • DSTI. • OHS audits. • OHS inspections. • Toolbox talks.
4.		Use of mobile equipment	• Injuries • Fatality • Property damage	**20**	**MEDIUM**	• Use competent operators. • OHS Inspections. • OHS audits. • Supervision. • Monitoring. • Use of spotters. • DSTI. • Toolbox talks.
5.		Extortion groups (Construction Mafias)	• Work stoppages • Injuries • Property damage	**20**	**HIGH**	• Use Community Liaison Officer. • Use Social facilitator. • Use Community Councillor. • Use Project steering committee. • Report to the SAPS. • Toolbox talks.

		BASELINE RISK ASSESSMENT				
				Risk Scoring		
No.	Activity	Hazard	**Risk/s**	Risk score	Low/ Medium / High	**Specific Control Measures**
6.		Unhygienic facilities	• Inadequate welfare facilities. • Unhygienic ablutions.	**7**	**MEDIUM**	• Adequate ablution facilities to be provided at a ratio of 1:30 employees and separate per gender. • Portable drinking water is to be provided for employees. • Designated eating areas are to be allocated. • If mobile chemical ablution facilities are used, are to be emptied and cleaned regularly. • Supervision. • Monitoring. • OHS audits. • OHS inspections. • DSTI. • Toolbox talks.
7.		Manual handling	• Back injuries • Equipment damage	**13**	**MEDIUM**	• Training on lifting techniques must be provided for employees. • Full PPE to be always worn. • Lifting Safe Working Procedures to be in place. • An employee should not carry any load heavier than 25kg by himself and buddy system is to be implemented. • When handling material employees should be observant of sharp edges and pinch points. • Supervision. • Monitoring. • OHS audits.

		BASELINE RISK ASSESSMENT				
				Risk Scoring		
No.	Activity	Hazard	**Risk/s**	Risk score	Low/ Medium / High	**Specific Control Measures**
						• OHS inspections. • DSTI. • Toolbox talks.
8.	Scrap and rumble removal	Manual handling	• Injuries and cuts from sharp metallic objects • Dust inhalation that may lead to respiratory problems.	**25**	**HIGH**	• Contractor to train and supervise workers on scrape removal • Contractor may consider dampening the work area with water to suppress dust. • Use of PPE (hand protection, respiratory protection, eye protection, body protection). • Supervision. • Monitoring. • OHS audits. • OHS inspections. • DSTI. • Toolbox talks.
9.		Mobile equipment	• Injuries • fatalities	**25**	**HIGH**	• Use of competent operators. • Monitoring. • Use of spotters. • OHS inspection checklists. • OHS audits. • Supervision. • Toolbox talks.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
10.	Working in a live environment (People and Vehicles	People and Vehicles interface with construction mobile plant, activities, and processes	• Fatalities or severe injuries due to interface between tenants and construction activities.	**25**	**HIGH**	• Traffic management plan. • Site Hoarding and protection of works segregation of tenants from construction activities. • Noise control Plan.
	interface with construction mobile plant, activities, and processes)		• Tenants exposed to extreme noise and dust.		**HIGH**	• Dust suppression. • Supervision. • Monitoring. • OHS audits. • OHS inspections. • DSTI. • Toolbox talks.
11.	Loading and Offloading of Material	Loading and offloading material	• Fatalities or severe injuries due to interface between tenants and construction activities. • Tenants exposed to extreme noise and dust.	**15**	**MEDIUM**	• Areas where offloading or loading takes place to be cordoned off. • Adequate measures to be implemented to prevent material from rolling. • The task is to be carried out under supervision.
12.	Management of Subcontractors	Contractor Management	• Conflict. • Production delays • Fatalities	**9**	**MEDIUM**	• Safety file review and approval. • Mentorship and training to be provided for subcontractors. • Regular meetings and clear lines of communication. • Supervision. • OHS Inspections. • OHS Audits. • Monitoring. • Toolbox talks.
No.	Activity	Hazard	**Risk/s**	**Risk Scoring**		

				Risk score	Low/ Medium/ High	**Specific Control Measures**
13.	Use of Portable Electrical equipment	Use of portable electrical equipment	• Electric shocks • Burns • Fire • Property damage	**18**	**HIGH**	• All portable electrical equipment must be inspected on the relevant checklist. • Electrical cables and plugs should be regularly inspected by the user for damage. • Always ensure cables are adequately insulated. • Any defective equipment should be removed from site. • Electrical equipment must always be operated in accordance with manufacturers' instructions. • Servicing or maintenance of the equipment to be done by a competent person. • Supervision. • Monitoring. • OHS audits. • OHS inspections. • Toolbox talks.
14.		Use of electricity	• Electric shocks • Fire	**18**	**HIGH**	• Portable electrical equipment registers. • OHS inspections. • Supervision. • OHS audits. • Use competent personnel. • Toolbox talks. • DSTI.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
15.	Use of Hand Tools	• Use of hand tools	• Use of defective tools may lead to minor to major injuries.	**8**	**MEDIUM**	• Hand tools must be inspected visually before use to make sure there are no defective parts. • Hand tools to be stored safely when not in use. • Hand tools are not to be placed in walkways where they can cause trip and fall hazards. • Sharp tools are to remain sheathed when not in use. • Relevant PPE is to be worn. • Correct tools fit for the tasks at hand are to be used. • Supervision. • Monitoring. • OHS audits. • OHS inspections. • DSTI. • Toolbox talks.
16.	Hazardous Biological Agents	Hazardous Biological Agents	• Skin sensitisation • Dermatitis • Irritating vapours • Burns • Skin contact over a long period can lead to skin cancer.	**8**	**MEDIUM**	• Safe working procedures for working with hazardous chemicals must be done. • Safety Data Sheets (SDS) must be kept together with a risk assessment onsite for reference. • Employees to be trained on SWPs, Risk assessment and SDS. Proof of training to be kept. • All containers used for storage of hazardous and non-hazardous substances must be suitably labelled indicating their contents. • Relevant gloves to be supplied and used by employees handling HCA.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
						• Workers to clean hands thoroughly after contact with hazardous substances; and • HCA to be stored in a bunded and lockable area with relevant warning signs displayed. • Only small quantities to be kept on site. • Use of drip trays and a fire extinguisher to be available. • Supervision. • Monitoring. • OHS audits. • OHS inspections. • DSTI. • Toolbox talks.
17.	Veld Fire	Veld fire	• Property damage • Burns • Fatalities • Smoke inhalation. • Pollution	**8**	**MEDIUM**	• All fire-fighting equipment must be inspected and tested for electrical safety. • Spillages must be cleared immediately. • Fuel must be decanted in safe places. • Flammable substances must be kept away from naked flames and ignition sources. • Flammable substances must be kept in an appropriate fire-resistant metal cabinets. • Employees to be trained on Fire/ Emergency Procedures. • Fire-fighting equipment to be inspected monthly. • Employees to be trained on MSDSs. • Emergency fire drills are to be practised twice a year. • Toolbox talks.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
18.	Working at Heights(Use of Ladders)	•	• Fall from heights Minor to major • injuries Fatalities	**16**	**HIGH**	• A stepladder should have a visual inspection by the user prior to use for damage. • Stepladders must be individually identified, and formal inspections must be carried out and records of inspection kept. • Any defective ladders should be clearly labelled and taken out of use until the repair has been done. • Buddy system to be used. One employee on the ladder while another holds the ladder in place. • Suitable storage of ladders to prevent damage. • Correct ladder to be used for the job. • The ladders to extend 900mm above the working platform. • Supervision. • Monitoring. • OHS audits. • OHS inspections. • Toolbox talks. • DSTI.
19.	Working at Heights (Use of Scaffolding)	Working at Heights (Use of Scaffolding)	• Minor to severe or fatal injuries	**25**	**HIGH**	• Competent and certified scaffold erectors and supervisors to be appointed. • Scaffolding is to be inspected daily prior to use. • Scaffolding is not to be used in adverse weather conditions.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
20.			•			• All employees working at heights to receive training on the Fall Protection Plan and Work at Heights prior to performing such work. • Fall prevention equipment like harnesses are to be used. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
21.	Working at Heights (Excavation Works)	Working at Heights (Excavation Works)	• Minor to major injuries • Fatalities	**25**	**HIGH**	• Only trained persons, who are medically and psychologically fit may work on the roof. • Openings in roofs must be secured and covered to prevent falling through. • Method statement, risk assessment and safe work procedures to be in place and communicated to employees. • No roof work in inclement weather. • Safe access onto roofs is to be provided. • Lifelines should be used. • A Fall protection plan is to be developed. • Harnesses are to be used. • Adequate barricading and edge protection. • Inspections are to be done by competent inspectors. • Monitoring.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
						• Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
22.	Lifting Equipment	Lifting equipment	• Lack of operator competency/training • Poorly maintained equipment • Manual handling injuries associated with setting up slings and rigging equipment. • Loss of load due to failure of machine or poorly rigged/tied equipment	**15**	**MEDIUM**	• Operator to be competent or trained on the machine operation. • Safe working procedures to be in place for lifting devices. All relevant safety signs i.e. safe working load and no unauthorized use must be displayed. • Ensure the presence of valid load test certificates. • Ensure all lifting tackle are inspected quarterly. • Ensure that lifting tackle is clearly marked with maximum load capacity and checked regularly for visible defects. • Ensure lifting hooks used are fitted with an anti-slip device. Correct lifting equipment must be used which is compatible with the loads to be lifted. • Lifting Plan should be in place • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.

		BASELINE RISK ASSESSMENT				
				Risk Scoring		
No.	Activity	Hazard	**Risk/s**	Risk score	Low/ Medium / High	**Specific Control Measures**
23.	Construction Vehicles and Mobile Plant (TLBs, Tipper Trucks etc.)	Construction vehicles and mobile plant (TLBs, Excavators, tipper trucks, etc)	• Workers can be struck by moving vehicles resulting in severe injuries or fatalities.	**20**	**HIGH**	• Road worthy vehicles are to be used. • Daily prestart inspections are to be done. • All construction vehicles to be fitted with a Construction Vehicle identification sign. • Tyres to be kept in safe, good working conditions. • Drivers to adhere to speed limits. • No passengers to be carried on mobile plant such as TLB etc. • No vehicles should be left with the engine running unattended. • All drivers must have a valid driver's license/ proof of competency and medical fitness certificate. • All drivers must be appointed in writing as per CR23. • Drivers not to drive intoxicated. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
24.	Plumbing	Plumbing work	• Minor to severe injuries • Fatalities • Hepatitis B	**25**	**HIGH**	• Locate underground services. • Use service detectors where possible. • Excavate by hand around services. • Use of relevant PPE. • Good hygiene practises.

		BASELINE RISK ASSESSMENT				
				Risk Scoring		
No.	Activity	Hazard	**Risk/s**	Risk score	Low/ Medium / High	**Specific Control Measures**
						• Ensure all employees doing commissioning work have Hepatitis B vaccination • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • Toolbox talks. • DSTI.
25.	Wet trades (Brick Work and Plastering)	Brick work	• Back strains from lifting cement bags. • Minor hand injuries. • Skin irritations and respiratory diseases from cement inhalation.	**12**	**MEDIUM**	• Employees are to be trained on correct lifting procedures. • Relevant SDS are to be acquired and communicated to employees. • Use of relevant PPE. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • Toolbox talks. • DSTI.
26.	Hot Works (i.e. cutting, grinding and welding)	Hot Works (i.e. cutting, grinding and welding)	• Property damage. • Burns. • Major injuries. • Fatality	**25**	**HIGH**	• Before carrying out any hot work on site, permission should be granted by the construction supervisor. • Fire-fighting equipment to be readily available. • Train employees on safe work procedures. • Portable Electrical Equipment inspections must be up to date. • Welding screens and welders' masks to be used.

		BASELINE RISK ASSESSMENT				
				Risk Scoring		
No.	Activity	Hazard	**Risk/s**	Risk score	Low/ Medium / High	**Specific Control Measures**
						• Remove any flammable materials from the hot works area. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks. Remove any flammable materials from the hot works area. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
27.	Painting	Paint work	• Irritation of the skin, eyes and mucous membranes. • Headaches, dizziness and nausea.	**13**	**MEDIUM**	• Ensure adequate ventilation is provided. • Use of relevant PPE. • Training employees on Safe Working procedures. • Availability of SDS and training employees on them. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
28.	Housekeeping	Housekeeping	• Trips and Falls. • Minor to major injuries	**13**	**MEDIUM**	• Good housekeeping to be always maintained. • Good stacking storage practices to be done. • Sufficient waste receptacles are to be provided onsite. • Employees are to be trained on the benefits of good housekeeping. • Monitoring. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
29.	Stacking and storage	Stacking and storage	• Property damage. • Minor to major injuries	**6**	**LOW**	• Ensure stacking and storage surfaces are levelled. • The base of any stack be able to support the weight exerted on it by the stack. • The items on lower levels must be able to support the weight of the upper items. • Pallets and containers must be in good condition so that no material can spill out. • The height of stack must not be more than 3 times its base width. • Stacking and storage areas to be clearly demarcated. • No double stacking is to be allowed onsite. • Stacking and storage of material onsite not to obstruct pedestrian and vehicle movement. • Monitoring. • Supervision.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
						• OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
30.	Electrical Installations	Electrical installations	• Electrical burns. • Electrocution. • Arc flash. • Fire. • Explosions. • Property damage.	**21**	**HIGH**	• Regular maintenance of equipment. • Defective tools to be removed from site. • Ensure electrical equipment don't get inContact with water. • Use competent electricians. • Inspections of electrical equipment by competent persons. • Lockout procedures to be in place. • Task specific risk assessment and safe work procedures to be in place and communicated to employees. • Registered electrical installation contractor to be used. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
31.	Excavation / Trenching	Excavations/Trenching	• Minor to severe injuries. • Slip and falls. • Fatalities • Buried alive. • Damage to underground existing services.	**25**	**HIGH**	• Contractor to appoint excavation supervisor. • All excavations to be adequately barricaded. • Excavation spoil material to be 1meter away from excavation edges. • Excavations to be inspected daily for stability. • Safe walkways to be maintained around excavations. • Access ladders to be provided on excavations. • Use of relevant PPE. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • DSTI. • Toolbox talks.
32.	Blasting with explosives	Blasting with explosives	• Misfiring • Minor to severe injuries. • Slip and falls. • Fatalities • Buried alive. • Damage to underground existing services.	**25**	**HIGH**	• Contractor to comply with CR 21 • reduce the quantity of dangerous substances to a minimum. • avoid or minimise releases of dangerous substances. • control releases of dangerous substances at source. • prevent the formation of an explosive atmosphere, including by ventilation.
33.	Security	Security issues	• Theft. • Property damage. • Fatality.	**25**	**HIGH**	• Access control register to be in place. • Security personnel to be on site 24/7. • Emergency Procedure.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
34.	Stray animals	Animal bites	• Zoonotic diseases.	**25**	**HIGH**	• Stay away from stray animals. • Vigilance. • Emergency Procedure.
35.	Biological hazards	Insect bites Snake bites	• Allergic reactions. • Fatality.	**25**	**HIGH**	• Emergency procedure.
36.	Extreme weather conditions	Extreme weather conditions (Heat)	• Dehydration. • Sunburns. • Heat stroke. • Fainting.	**25**	**HIGH**	• Employees to stay hydrated. Rest breaks. • Appropriate PPE to be worn. • Ensure employees are trained on emergency procedures. • No work to take place during adverse weather conditions. • Work activities and tasks to be planned with consideration of the daily weather forecasts for the work area. • Ensure that employees drink water frequently.
37.		Extreme weather conditions (Storms)	• Fatalities. • Injuries.	**25**	**HIGH**	• Emergency Procedure. • DSTI. • Toolbox talks.
38.		Extreme weather conditions (Cold)	• Hypothermia. • Fatality.	**25**	**HIGH**	• Emergency Procedure. • Dress warm PPE. • DSTI. • Toolbox talks.
39.		Extreme weather conditions (Heavy rains)	• Flooding. • Drowning.	**25**	**HIGH**	• Emergency Procedure. • DSTI. • Toolbox talks.
		BASELINE RISK ASSESSMENT				

No.	Activity	Hazard	Risk/s	Risk Scoring		Specific Control Measures
				Risk score	Low/ Medium / High	
40.	Ergonomics	Ergonomics	• Stiff back and neck muscles. • Musculoskeletal disorders.	**5**	**LOW**	• Rest periods to be taken; • Ask for assistance when handling and lifting heavy equipment or machinery. • Monitoring. • Supervision. • OHS inspections. • OHS Audits. • Toolbox talks. • DSTI.

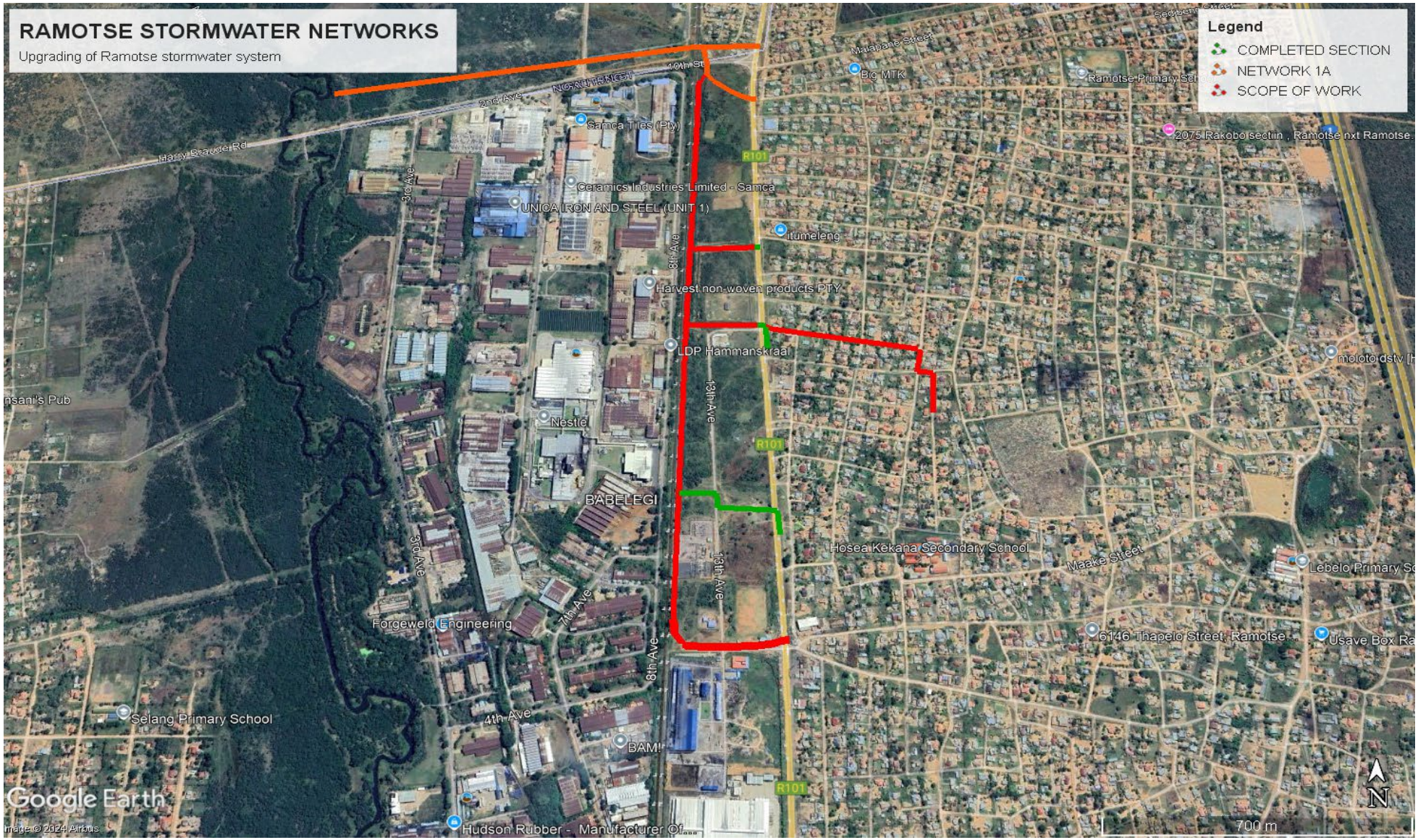
CITY OF TSHWANE
ROADS AND TRANSPORT DEPARTMENT

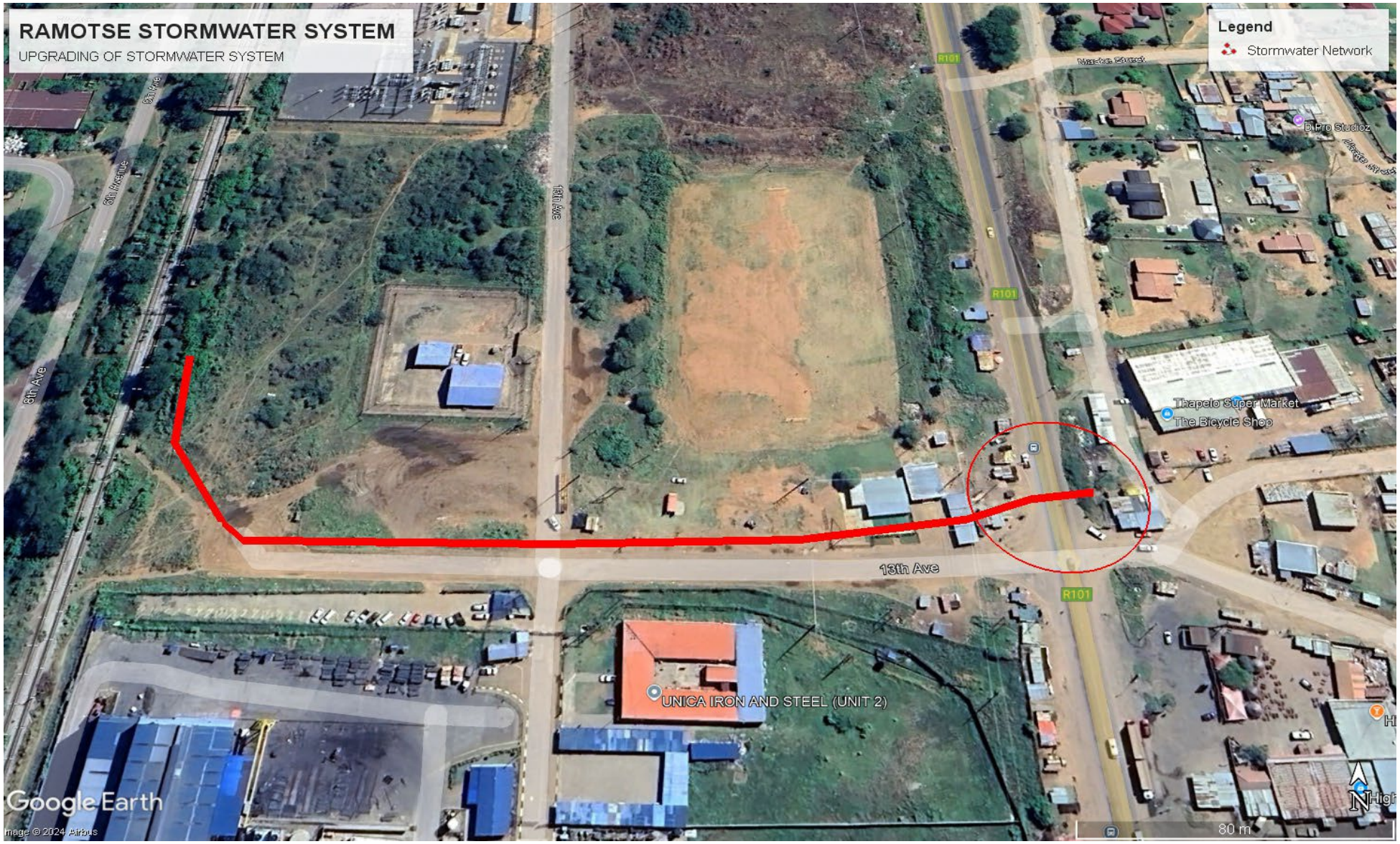
CONTRACT: RTD26 – 2024/25

TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF STORMWATER SYSTEMS IN RAMOTSE NETWORK 1A, 1C & 1F – PHASE 2 FOR A DURATION OF 18 MONTHS.

C4 SITE INFORMATION

C4.1 LOCALITY


RAMOTSE STORMWATER NETWORKS
Upgrading of Ramotse stormwater system
Legend
COMPLETED SECTION
NETWORK 1A
SCOPE OF WORK
Harry Swart Rd
2nd Ave
NORTHERN
10th St
Samca Ties (Pty)
Ceramics Industries Limited - Samca
UNICA IRON AND STEEL (UNIT 1)
3rd Ave
8th Ave
Itumeleng
Harvest non-woven products PTY
LDP Hammanskraal
13th Ave
Nestlé
R101
BABELEGI
Hosea Kekana Secondary School
Maake Street
Malahane Street
Big MTK
Ramotse Primary Sch
2075 Rakobo section , Ramotse nxt Ramotse
Lebelo Primary Sc
6146 Thapelo Street, Ramotse
Usave Box Ra
Forgeweld Engineering
7th Ave
4th Ave
BAM!
Selang Primary School
Hudson Rubber - Manufacturer Of
Google Earth
Image © 2024 Airbus
700 m
N


RAMOTSE STORMWATER SYSTEM
UPGRADING OF STORMWATER SYSTEM
Legend
Stormwater Network
8th Ave
13th Ave
R101
Thapelo Super Market
The Bicycle Shop
D.Pro Studioz
UNICA IRON AND STEEL (UNIT 2)
Google Earth
80 m

C4.2 SOIL CONDITIONS

Soil Conditions

1. Geology

The Geological Map Series, sheet number 2528 Pretoria, published at a scale of 1:250 000 by Council of Geoscience Department of Mineral and Energy Affairs indicate that the area is underlain by shale, shaly sandstone, sandstone and conglomerate of the Ecca Formation, Karoo Supergroup. The lithology formed during the Permian Period. Refer to **Annexure B**.

2. Seismic Activity

According to Fernandez and Guzman (1979), the area investigated is classified as having a seismic intensity of not more than VI on the modified Mercalli scale (MMS) with a 10% probability of being exceeded at least once during a 50-year recurrence period. An earthquake with an intensity of VI on the MMS is described as follows:

- All people, in and outdoors feel it.
- Windows, dishes and glassware are broken.
- Pictures and books fall off walls and shelves.
- Furniture is moved and overturned.
- Weak plaster and poorly constructed masonry structures crack.

The expected peak ground acceleration associated with this magnitude of earthquake are:

- Horizontal acceleration; 56 cm/s^2
- Vertical Acceleration; 18 cm/s^2

The peak ground acceleration indicates a low intensity of seismic activity. Furthermore, the peak horizontal ground acceleration may be 50 to 100 cm/s^2 at least once in a period of 50 years.

With the above in mind, it is expected that serious damage to well-built masonry structures constructed from good quality materials and of good workmanship will not occur. There is therefore no need for special measures to resist natural seismic events.

3. Soil Profiles

Total of nine (9) test pits were excavated and profiled by an engineering geologist, with detailed analysis carried out based on the field works and interpretation of laboratory results obtained from the representative soil sample collected during the ground investigation around the study area. The following soil horizons were encountered on site for the nine (9) excavated test pits.

3.1 Fill / Imported Material

These are imported materials from the other sources (not originating the that area). Fill material was encountered on site at a maximum depth of 0.40m and was encountered at only three test pits; TP 02, TP 05 and TP 06. This material was described as silty gravel sand. The Consistency of this material was dense and firm. The structure of the observed fill material is intact.

3.2 Colluvium Material

These are naturally transported materials from the hill wash. Colluvium material was encountered at all test pits at a maximum depth of 2.00 m. This material was described as sandy clay, silty sand, and clayey sand. The consistency of this material is soft to stiff and medium dense to dense, the observed structure is intact and slickensided.

3.3 Podogenic Material

This horizon is cemented together by iron-oxides that precipitated from groundwater to form and erosion resistant later. This was encountered at a maximum thickness of 2.30 m. This material is described as clayey gravel. The consistency of this material is dense, and the observed structure is fissured. This horizon was only encountered at TP 07, TP 08 and TP 09. **Refer to Annexure E for the test pits soil profiles**.

4. Excavatability

The excavation characteristics of the different soil horizons encountered have been evaluated according to the Soth African Bureau of Standards; standard excavation classification for earthworks (SABS-1200D) and earthworks (small works SABS-1200DA). The soil on site can be classified as soft to intermediate excavation. It is anticipated therefore that the excavatibility of the in-situ material with an excavator will not pose any problem depending on the in-situ moisture content.

5. Stability Of Trenches

The test pits excavations were all vertical and there was no evidence of side wall collapse during excavation of the test pit, therefore any trenches excavated to within the limits of the tests pit depths are expected to be stable. However, in case where water ingress is encountered, or the slopes are left open for an extended period, there could be instability problems. In such case(s), the excavated trenches would have to be battered to stable angles or shored to avoid sidewall collapse.

6. Construction Material

Construction materials, i.e., coarse and fine aggregates suitable for construction are not present within the site and therefore should be acquired from commercial sources.

7. Designs Analysis And Recommendations

The test pits were not perfectly backfilled and any structural construction over such areas might lead to some degree of settlement if not properly designed for. It is recommended that such areas e identified and recompacted.

8. Stormwater Drainage Proposed

Where necessary the excavation of the trenches for subsurface drains shall comply with the requirements specified. The trench shall be backfilled with approved impermeable material, in layers not exceeding 30mm and compacted to 90% modified AASHTO density, unless otherwise specified by the Engineer.

9. Earthworks

It is recommended that all earthworks be carried out in accordance with SANS 1200 D (latest version). All unsuitable fill, i.e., garden refuse and general waste, should be removed from the site. All vegetation should be cleared from the areas over which fills are to be built. In addition, the upper loose topsoil should be removed and stockpiled for rehabilitation process as it will be replaced by the competent foundation construction material i.e., G5 to G7 material.

10. Groundwater

Groundwater seepage encountered during investigations at TP 03 (1.10 m & 1.40m), TP 05 (1.30m), TP 06 (1.80 m) and TP 09 (1.60 m). It is important that the design of the stormwater management system allow for the drainage of accumulated surface water from the platforms into the stormwater system or natural drainage lines. Refer to Annexure E: Test Pit/Soil Profiles.

11. Conclusions

Based on the investigations, conditions on the site are suitable and there appears to be no (geotechnical or other) reasons for the proposed development bot to continue, provided that precautionary measures as discussed in this report are incorporated in the design and development of the site.

The recommendations made are based on the information obtained from the 9 test pits and 9 DCP's. it is possible that the ground profile varies at other areas on site where these investigations were not performed. Hence it is highly recommended that an experienced geologist or geotechnical engineer is engaged to assess the foundation conditions during construction to ensure that the ground conditions are as anticipated and to make recommendations if conditions change.