

ROADS & TRANSPORT DEPARTMENT



TRANSPORT INFRASTRUCTURE DESIGN & CONSTRUCTION DIVISION

TENDER REFERENCE: RTD 05-2025/26

RTD 05-2025/26: TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF ROADS AND STORMWATER SYSTEMS IN GA-RANKUWA ZONE 5: PHASE 1 FOR A DURATION OF 18 MONTHS

VOLUME 1

A Tender for Category 7CE or higher CIDB registered Contractors

ISSUED BY:	PREPARED BY:
The Director <u>Supply Chain</u> PO Box 480 PRETORIA 0001 Tel: 012 358-0343	The Divisional Head <u>Transport Infrastructure Design & Construction Division</u> PO Box 1409 PRETORIA 0001 Tel: 012 358-3768

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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Part T2: Returnable Documents

PART T2: RETURNABLE DOCUMENTS

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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	
Proof of registration in terms of the South African Council for the Project and Construction Management Professions	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

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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	
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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 state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

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

3.1 Full name of bidder or his/her representative:

3.2 Identity Number:

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

3.4 Company Registration Number:

3.5 Tax Reference Number:

3.6 VAT Registration Number:

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

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

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Part T2: Returnable Documents

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 <i>audi alteram partem</i> 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:		

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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 ³invited.
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 rigging⁴). 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:

RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 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 than 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 consortium⁵ 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 or arrangement with any competitor regarding:
 - a. Prices;
 - b. Geographical area where product or services will be rendered (market allocation);
 - c. Methods, factors or formulas used to calculate prices;
 - d. The intention or decision to submit or not to submit, a tender;
 - e. The submission of a tender which does not meet the specifications and conditions of the tender; or
 - f. Tendering with the intention not to win the tender.

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.

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Part T2: Returnable Documents

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: _____

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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:

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Tender Description:	Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 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 <u>must</u> 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.	

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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 PROOF OF REGISTRATION IN TERMS OF THE SOUTH AFRICAN COUNCIL FOR THE PROJECT AND CONSTRUCTION MANAGEMENT PROFESSIONS

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The tenderer must provide proof of persons in their **full-time employ** that are registered in terms of Project and Construction Management Professions Act, 2000 (Act No 48 of 2000). The tenderer must confirm that registered employees are in their full-time employ by means of a declaration to this effect on the company's letterhead and duly signed.

NAME	REGISTRATION			Confirm full time employed
	Professional Category	Discipline	SACPCMP Number	

(Attach required documentary proof to this page)

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: _____

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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 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 specific goals.

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

1. GENERAL CONDITIONS

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

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

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

a) The applicable preference point system for this tender is the 80/20 preference point system.

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

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

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

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
TOTAL POINTS FOR PRICE AND SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method

envisaged in legislation;

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

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

80/20	or	90/10
$Ps = 80 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$	or	$Ps = 90 \left(1 - \frac{Pt - P_{min}}{P_{min}} \right)$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

80/20	or	90/10
$Ps = 80 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$	or	$Ps = 90 \left(1 + \frac{Pt - P_{max}}{P_{max}} \right)$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. 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:
- 4.2. 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 organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

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

Specific goals	80/20 preference point system	Number of points claimed (80/20 system) (To be completed by the tenderer)
BB-BEE score of companies <ul style="list-style-type: none"> • Level 1 • Level 2 • Level 3 • Level 4 • Level 5 • Level 6 • Level 7 • Level 8 • Non-compliant 	<ul style="list-style-type: none"> • 8 Points • 7 Points • 6 Points • 5 Points • 4 Points • 3 Points • 2 Points • 1 Point • 0 Points 	
EME and/ or QSE	2 Points	
At least 51% of Women-owned companies	2 Points	
At least 51% owned companies by People with disability	2 Points	
At least 51% owned companies by Youth	2 Point	

Specific goals	80/20 preference point system	Number of points claimed (80/20 system) (To be completed by the tenderer)
Local Economic Participation <ul style="list-style-type: none"> City of Tshwane Gauteng National 	4 Points 2 Points 1 Point	

N.B For points to be allocated as per above the tenderers will be required to submit proof of documentation as evidence for claims made. Any tenderer that does not submit evidence as stated in the bid document to claim applicable points will be allocated zero points.

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. 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]

4.6. 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.

 SIGNATURE(S) OF TENDERER(S)
SURNAME AND NAME:
DATE:
ADDRESS:

FORM RD.B.2 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.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 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.

Person authorized to sign the tender:

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:

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part T2: Returnable Documents

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	<input type="checkbox"/>
Private Company	<input type="checkbox"/>
Closed Corporation	<input type="checkbox"/>
Partnership	<input type="checkbox"/>
Sole Proprietary	<input type="checkbox"/>
Joint Venture / Consortium	<input type="checkbox"/>
Co-operative	<input type="checkbox"/>

(Mark the appropriate option)

2. Information to be provided

If the Tendering Entity is a:		Documentation to be submitted with the tender
1	<u>Closed Corporation</u> , 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	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 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	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 in which any, or all, <u>shares are held by another</u> 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	<u>Public Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 (Including Companies incorporated under Art 21)	A signed statement of the Company's Secretary confirming that the Company is a public Company.
5	<u>Sole Proprietary</u> or a <u>Partnership</u>	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.

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part T2: Returnable Documents

If the Tendering Entity is a:		Documentation to be submitted with the tender
6	<u>Co-operative</u>	CIPRO CR2 - Certified copies of Company registration document.
7	<u>Joint Venture / Consortium</u>	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.

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part T2: Returnable Documents

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)

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part T2: Returnable Documents

FORM RD.D.4 COMPANY EXPERIENCE

Tendering Company's experience of at least two (2) successfully completed Roads and Stormwater projects, with the largest of these projects valued at a minimum of R9 000 000. **(Attach appointment letters and completion certificates for each project as proof)**

Refer to clause C.3.11 of Part T1: Evaluation of tender offers (mandatory requirements)

Note: Form RD.D.4 must be complete for each project.

PORTION 2: CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

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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:

RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 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. _____

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part C1: Agreement and Contract Data

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

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Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part C1: Agreement and Contract Data

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	<p>1.1.1.3 Certificate of Completion</p> <p>Add the following to the clause:</p> <p><i>Unless specified otherwise in the Contract Data, separate Certificates of Completion will not be issued for portions or phases of the Works.</i></p> <p>1.1.1.24 Practical Completion</p> <p>Add the following to the clause:</p> <p><i>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.</i></p> <p>Add the following new clause:</p> <p>1.1.1.35 Construction Work Permit</p> <p><i>Construction Work Permit” means a statutory permit as defined in the Construction Regulations 2014.</i></p>
1.2.1	Delivery of notices	<p>Add the following to the clause:</p> <p>1.2.1.3 <i>Sent by facsimile, electronic or any like communication irrespective of time of transmission;</i></p> <p>1.2.1.4 <i>posted to the Contractor’s address, and delivered by the postal authorities; or</i></p> <p>1.2.1.5 <i>delivered by a courier service or messenger, and signed for by the recipient or his representative.</i></p>
1.2.3	Authority representatives of	<p>Add the following to the clause:</p> <p>1.2.3.1 <i>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:</i></p> <p>1.2.3.1.1 <i>which other holders of office ex officio execute on behalf of the Employer; or</i></p> <p>1.2.3.1.2 <i>for which the Divisional Head: Transport Infrastructure Design & Construction has no authority and the Employer’s approval is required before execution thereof.</i></p>
2.4.1	Ambiguity or Discrepancy	<p>Delete the contents of the clause and insert the following:</p>

		<p><i>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:</i></p> <ul style="list-style-type: none"> <i>a) Form of Offer and Acceptance</i> <i>b) Contract Data</i> <i>c) General Conditions of Contract</i> <i>d) Drawings</i> <i>e) Scope of Work</i> <i>f) Standard Specifications</i> <i>g) Bill of Quantities</i> <i>h) any other documents forming part of the Contract</i> <p><i>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.</i></p>
3.2.3	Specific approval of the Employer required	<p>Replace clause 3.2.3 with the following:</p> <p><i>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:</i></p> <ul style="list-style-type: none"> <i>3.2.3.1 certification of expenditure that exceeds the Contract Price in terms of Clause 1.1.1.10;</i> <i>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;</i> <i>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</i> <i>3.2.3.4 approval of any claim submitted by the Contractor in terms of Clause 10.1.</i>
4.1.2	Contractor's liability for own design errors	<p>Add the following to the clause:</p> <p><i>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:</i></p>

		<p>4.1.2.1 <i>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.</i></p> <p>4.1.2.2 <i>Proof of registration and of adequate and current professional indemnity insurance cover held by the designer(s).</i></p> <p>4.1.2.3 <i>Design calculations should the Employer's Agent request a copy thereof.</i></p> <p>4.1.2.4 <i>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.</i></p> <p>4.1.2.5 <i>"As-Built" drawings in DXF electronic format after completion of the Works.</i></p> <p><i>The Contractor shall be responsible for the design of the Temporary Works.</i></p>
4.3	Legal Provisions	<p>Add the following new sub-clause:</p> <p>4.3.3 <i>Wages and conditions of work:</i></p> <p>i. <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.</i></p> <p>ii. <i>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.</i></p> <p>Add the following new sub-clause:</p> <p>4.3.4 <i>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.</i></p> <p>Add the following new sub-clause:</p> <p>4.3.5 <i>The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health</i></p>

		<p><i>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.</i></p>
		<p>Add the following new sub-clause:</p> <p>4.3.6 Contractor's Designer</p> <p><i>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</i></p>
		<p>Add the following new sub-clause:</p> <p>4.3.7 Construction Work Permit</p> <p><i>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.</i></p> <p><i>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.</i></p>
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	<p>Add the following to the clause:</p> <p><i>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.</i></p>
5.7.1	Rate of progress	<p>Delete the last paragraph of the clause and replace with the following:</p> <p><i>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</i></p>

		<i>compensation and cites the amount of such compensation or the basis upon which it is to be determined.</i>
5.9.2	Further drawings and instructions	<p>Add the following to the clause:</p> <p><i>All instructions shall be in writing</i></p>
5.12	Extension of time for Practical Completion	<p>Add the following new sub-clause</p> <p>5.12.5 Critical path provision</p> <p><i>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.</i></p> <p>Add the following new sub-clause</p> <p>5.12.6 Extension of time due to abnormal rainfall</p> <p><i>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.</i></p> <p><u>Method 1: Rainfall formula method</u></p> <p><i>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.</i></p> <p><i>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:</i></p> $V = (N_w - N_n) + \frac{(R_w - R_n)}{X}$ <p><i>If V is negative and its absolute value exceeds N_n, then V shall be equal to minus N_n.</i></p> <p><i>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.</i></p>

		<p><i>The symbols shall have the following meaning:</i></p> <p>V = Extension of time in calendar days in respect of the calendar month under consideration</p> <p>N_w = Actual number of days during the calendar month on which a rainfall of Y mm or more has been recorded.</p> <p>R_w = Actual rainfall in mm for the calendar month under consideration.</p> <p>N_n = Average number of days as derived from existing rainfall records, on which a rainfall of 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.</p> <p>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.</p> <p>X = 20 unless otherwise provided in the Project Specifications</p> <p>Y = 10 unless otherwise provided in the Project Specifications</p> <p><i>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.</i></p> <p><i>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.</i></p> <p><i>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.</i></p> <p><i>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.</i></p> <p><i>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 Path Provision) hereof.</i></p> <p><u><i>Method 2: Expected delay method</i></u></p> <p><i>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.</i></p>
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		<p><i>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.</i></p> <p><i>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.</i></p> <p><i>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.</i></p>
6.1	Payment to Contractor	<p>Add the following new sub-clause:</p> <p>6.1.2 <i>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.</i></p> <p>Add the following new sub-clause:</p> <p>6.1.3 <i>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.</i></p> <p>Add the following new sub-clause:</p> <p>6.1.4 <i>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.</i></p>
6.2	Security	<p>Add the following new sub-clause:</p> <p>6.2.4 <i>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.</i></p>
8.6	Insurances	<p>Replace clause 8.6 with the following:</p> <p>8.6 Insurances</p>

		<p>8.6.1 <i>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):</i></p> <p>8.6.1.1 <i>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:</i></p> <ul style="list-style-type: none"> <i>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;</i> <i>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;</i> <i>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;</i> <i>d. Removal of debris;</i> <i>e. Surrounding property</i> <i>f. Work away;</i> <i>g. Off-site storage</i> <i>h. Temporary repairs;</i> <i>i. Contribution clause – marine;</i> <i>j. Escalation during Contract Period;</i> <i>k. Post loss escalation;</i> <i>l. Automatic reinstatement;</i> <i>m. Principals maintenance;</i> <i>n. Property taken over;</i> <i>o. Beneficial occupation;</i> <i>p. Escalation due to currency fluctuation;</i> <i>q. Manufacturers guarantees</i> <p>8.6.1.2 <i>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:</i></p> <ul style="list-style-type: none"> <i>a. Accidental death of or bodily injury to or illness or disease contracted by any person (excluding employees of the Contractor/Subcontractor);</i> <i>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).</i>
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		<p>8.6.2 Insurance premium payable</p> <p><i>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.</i></p> <p>8.6.3 Additional insurance by the Employer</p> <p><i>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.</i></p> <p>8.6.4 Additional insurance by the Contractor / Subcontractor</p> <p><i>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.</i></p> <p>8.6.5 Contractor satisfied with insurance</p> <p><i>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.</i></p> <p>8.6.6 Contractor to observe conditions</p> <p><i>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.</i></p> <p>8.6.7 Contractor to insure</p> <p><i>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:</i></p> <p><i>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.</i></p>
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		<p>b. <i>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.</i></p> <p>c. <i>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.</i></p> <p>d. <i>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 complied with the provisions of this Sub-Clause by ensuring that such Subcontractors have similarly insured such Plant and Materials and Equipment and Motor Vehicles.</i></p> <p>e. <i>Proof must also be submitted that the Contractor complies with the conditions of the following legislation:</i></p> <ul style="list-style-type: none"> - <i>Compensation for Occupational Injuries and disease, 1993</i> - <i>Unemployment Insurance Act, 1996</i> - <i>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.</i> <p>8.6.8 <i>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.</i></p> <p>8.6.9 <i>Reporting of incidents</i></p> <p><i>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:</i></p> <p>a. <i>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.</i></p> <p>b. <i>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</i></p>
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		<p><i>insurers rights have been compromised as a result of the late reporting.</i></p> <p>c. <i>The following documentation must be included with the claim documentation:</i></p> <ul style="list-style-type: none"> - <i>Photos of damages caused or suffered as proof or substantiation of the claims.</i> <p>d. <i>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.</i></p> <p>e. <i>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.</i></p> <p>8.6.10 Reporting of catastrophic incidents</p> <p><i>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:</i></p> <ul style="list-style-type: none"> a. <i>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.</i> b. <i>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.</i> c. <i>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.</i> d. <i>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.</i>
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		<p>8.6.11 Reporting of crime related incidents</p> <p><i>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.</i></p> <p>8.6.12 Claim documentation</p> <p><i>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.</i></p> <p><i>The Employer's Agent must submit with the Contractor Claim Form a detailed cost sheet indicating the estimate of the loss or damage.</i></p> <p><i>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.</i></p> <p>8.6.13 Authorization of claim forms</p> <p><i>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.</i></p> <p>8.6.14 Contractor to pay deductibles</p> <p><i>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.</i></p> <p>8.6.15 Settlement of claims</p> <p><i>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.</i></p> <p><i>The Contractor <u>shall negotiate</u> for the settlement of claims with the Employer or the Employer's insurer through the Section: Insurance</i></p>
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Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part C1: Agreement and Contract Data

		<p><i>and Risk Management. The Employer's Chief Financial Officer will authorize all settlements of claims.</i></p> <p><i>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.</i></p> <p><i>The foregoing provisions of this Sub-Clause shall apply mutatis mutandis to any such claim received by the Contractor directly.</i></p>
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C1.2.3 DATA PROVIDED BY THE EMPLOYER

CLAUSE/OPTION		DATA																							
1.1.1.13	The Defects Liability period is:	12 (twelve) 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 Street, Pretoria																						
		Postal Address:	P.O. Box 1409 PRETORIA 0001																						
1.1.1.16	The name of the Employer's Agent is:	Ndalamo Engineering Consultants																							
1.2.1.2	The address of the Employer's Agent is:	Physical Address:	2nd Floor Corner House 77 Commissioner Street, Marshalltown Johannesburg, 2001																						
		Postal Address:	2nd Floor Corner House 77 Commissioner Street, Marshalltown Johannesburg, 2001																						
		E-Mail Address:	mulalot@ndalamo.co.za																						
3.1.3		<ul style="list-style-type: none">• The Employer's Agent is required to obtain approval of the Employer:<ul style="list-style-type: none">▪ for expenditure on the Contract to exceed the Contract Price;▪ prior to the execution of any of the following duties of functions: <table><tr><th>CLAUSE</th><th>DUTY/FUNCTION</th></tr><tr><td>3.2.1</td><td>Nomination of person as Employer's Agent's Representative</td></tr><tr><td>3.3.4</td><td>Authorization to Employer's Agent's Representative or any other person</td></tr><tr><td>4.10.1</td><td>Approval to use the Site for any other purpose such as housing</td></tr><tr><td>5.3.1</td><td>Delivery of the written notice to commence the execution of the works</td></tr><tr><td>5.6.3</td><td>Approval of programme of construction</td></tr><tr><td>5.7.2</td><td>Permission to carry out work by day and by night</td></tr><tr><td>5.8.1.1</td><td>Approval to work on special non-working days and between sunset and sunrise</td></tr><tr><td>5.9.7</td><td>Approval of Contractor's designs</td></tr><tr><td>5.11</td><td>Suspension of progress of the Works</td></tr><tr><td>5.13.2</td><td>Reduction of penalty for delay</td></tr></table>		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
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CLAUSE/OPTION		DATA	
		5.14.2	The issue of a Certificate of Practical Completion
		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:	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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:	<ul style="list-style-type: none"> • 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	

CLAUSE/OPTION		DATA																		
6.8.2	Adjustment in rates and/or prices	<ul style="list-style-type: none"> The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: <table border="1"> <thead> <tr> <th>Coefficient</th><th>Description</th><th>Value</th></tr> </thead> <tbody> <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> </tbody> </table> <p>(Coefficients a, b, c and d must sum to one)</p> The area nearest the Site is Gauteng. The base month is the month and year prior to the closing of the tender. 	Coefficient	Description	Value	x	Portion not subject to adjustment	0.10	a	Labour	0.21	b	Civil Engineering Plant	0.27	c	Civil Engineering Materials	0.42	d	Fuel	0.10
Coefficient	Description	Value																		
x	Portion not subject to adjustment	0.10																		
a	Labour	0.21																		
b	Civil Engineering Plant	0.27																		
c	Civil Engineering Materials	0.42																		
d	Fuel	0.10																		
6.8.3	Price adjustment for variations in the cost of special materials	Allowed																		
6.10.1.5	The percentage on delivered materials not yet built into the Permanent Works is:	80% (Eighty percent)																		
6.10.3	Percentage retention is:	10% (ten percent) of the value of works, excluding contingencies and VAT																		
	The limit of retention money is:	5% (five percent) of Contract Sum, excluding contingencies and VAT.																		
8.6	Insurance of the Works and Public Liability Insurance	<p>The Employer shall arrange this insurance.</p> <p>A copy of the policy and the list of excesses may be obtained from</p> <p>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) (ronetm@tshwane.gov.za) Mr Lawrence Matjila (Tel: 012 358 1374) (lawrencem@tshwane.gov.za)</p>																		
	The value of plant and materials supplied by the Employer to be included in the insurance sum is:	R 0 (zero)																		
	Responsibility for payment of deductibles in respect of Insurance of Works as well as Public Liability Insurance:	Deductibles are the responsibility of the Contractor																		
	Construction Plant:	Contractor to insure. Policy to be approved by Employer																		
10.5	Determination of disputes	Ad-hoc Adjudication Board																		

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part C1: Agreement and Contract Data

CLAUSE/OPTION		DATA
10.5.3	Number of Adjudication Board members to be appointed:	One
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:	<ul style="list-style-type: none"> Physical Address: 		
		<ul style="list-style-type: none"> Postal Address: 		
		<ul style="list-style-type: none"> Fax to E-Mail: 		
		<ul style="list-style-type: none"> 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:	<p>_____ %. (Maximum of 15% will be allowed)</p> <p><i>(In the case of the Contractor not providing a percentage the percentage as per the General Conditions of Contract will prevail)</i></p>		
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. _____

ANNEXURE B

LIST OF INSTITUTIONS FROM WHO CONTRACT/DEPOSIT GUARANTEES CAN BE ACCEPTED.

1. ABSA Bank
2. CAPITEC Bank
3. Credit Agricole Indosuez (South Africa Branch)
4. Development Bank of South Africa
5. FirstRand Bank
6. ING Bank N.V. (South Africa Branch)
7. Investec Bank
8. Landbank
9. National Housing Finance Co.
10. Nedcor Bank
11. South African Reserve Bank
12. Standard Bank
13. AIG South Africa
14. Credit Guarantee Insurance Co
15. Emerald Insurance Company
16. Federated Employers Mutual Assurance Co
17. Global Insurance Company
18. Guardrisk Insurance Company
19. Hannover Re:
20. Home Loan Guarantee Company
21. Lion of Africa Insurance Company
22. Metropolitan Life
23. Metropolitan Odyssey Ltd
24. MUA Insurance
25. Mutual & Federal Insurance Company
26. Rand Mutual Assurance Company
27. Regent Insurance Company
28. SA Eagle Insurance Company
29. Lombard Insurance.

C1.4 CASH DEPOSIT GUARANTEE

Contract:	Contract RTD 05-2025/26
Description of Contract:	Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months
Employer:	CITY OF TSHWANE METROPOLITAN MUNICIPALITY
Contractor:	

I/We, the undersigned, deposit herewith ¹cash / 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

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

Part C1: Agreement and Contract Data

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

RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5:Phase 1 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 arisen¹ between the Parties under a Contract dated _____ and

known as _____

and these disputes or differences shall be/have been² 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:

Name:

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

SIGNED by:

Name:

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

SIGNED by:

Name:

the Adjudicator in the presence of

Witness

Name:

Address:

Witness:

Name

Address:

Witness:

Name:

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

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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 or as specified in terms of a "B" item.
- 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 hand written above in black ink and the full signature of the Tenderer shall be placed next to the correction.**

C2.2 PRICING SCHEDULE

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 0	GENERAL				
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	Months	18		
001.02	Locating Existing Services	lump sum	1		
001.02.01	Protection of existing services	lump sum	1		
001.02.02	Relocation of existing services and re-instatement on completion of the project	lump sum	1		
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		
001.04.03	Provision of a safety officer-	months	18		
001.04.03.01	Provision of safety representatives	months	18		
001.04.05	Health and safety training	lump sum	1		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
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		
B001.05	Environmental Management				
B001.04.08.02	(a) Provision of Environmental Officer- (Full Time)	Monthly	18		
B001.05	Community liaison officer				
B001.05.01	Monthly Wage	Monthly	18	16120	
B001.05.02	Percentage on item B001.05.01 for charges and profit	%			
B001.06	Contract Notice Board (See Drawing STD-001)	no	2		
B001.07	Accredited Training				
B001.07.01	Accredited training for Labourers	Prov.Sum	1	R 300 000,00	R 300 000,00
B001.07.02	Percentage on item B001.0701 for charges and profit	%			
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date
--	------

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 0	GENERAL				
Section 002	Engineer's Accommodation				
002.01	Services				
002.01.01	Services for offices	lump Sum	1		
LI 002.02	Treatment and maintenance of areas surrounding offices	lump Sum	1		
002.03	Office accommodation				
002.01.06	The treatment and maintained of access surrounding the offices	Lump Sum	1		
002.04	Provision of survey equipment and assistants	lump Sum	1		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 1	ANCILLARY WORK				
Section 101	Site Clearing and Grubbing				
101.01	Clearing and grubbing				
101.01.01	Strips				
LI 101.01.01.01	20m Wide	m ²	3 971		
101.01.01.02	Etc for other widths	m	913		
LI 101.01.02	Areas not classified as strips	m ²	199		
101.02	Cutting and removing large trees with a girth -				
LI 101.02.01	exceeding 1m and up to and including 2m	no	10		
101.02.02	exceeding 2m and up to and including 3m	no	10		
101.02.03	exceeding 3m and up to and including 4m	no	5		
101.03	Grubbing and the removal of the stumps and roots of large trees with girth -				
LI 101.03.01	exceeding 1m and up to and including 2m	no	10		
101.03.02	exceeding 2m and up to and including 3m	no	10		
101.03.03	exceeding 3m and up to and including 4m	no	5		
101.05	Removal and disposal of specific elements	m	150		
101.05.01	Concrete kerbing / kerbing	m ²	50		
TOTAL CARRIED TO SUMMARY					

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa
Zone 5: Phase 1 for a duration of 18 Months
Part C2: Pricing Data

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 1	ANCILLARY WORK				
Section 102:	Accommodation of Traffic				
102.01	Accommodation of traffic and maintenance of bypasses	m	3 971		
102.02	Earthworks for bypasses				
102.02.01	Shaping of bypasses	m	3 971		
102.02.02	Cut and borrow to fill	m ³	893		
102.02.03	Cut to spoil	m ³	179		
102.03	Gravel wearing courses for bypasses	m ³	223		
102.04	Watering of bypasses	kℓ	20 000		
102.05	Blading of bypasses by motor grader	km.pass	8		
102.07	Existing roads used as bypasses	prov sum	1	R 100 000,00	
102.08	Maintenance of surfacing of pavement layers of bitumen-surfaced bypasses and existing bitumen-surfaced roads used as bypasses	prov sum	1	R 100 000,00	
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
102.14	Temporary traffic-control facilities				
LI 102.14.01	Flagmen	item	1		
102.14.02	Portable Stop and Go signs	no	18		
102.14.03	Amber flashing lights	no	8		
102.14.04	Road signs, TR-series, 1200mm in diameter or 900mm x 675mm if rectangular	no	18		
102.14.05	Road signs, TW-series, 1524mm sides	no	18		
102.14.06	Danger plates and delineators	no	50		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
102.14.08	Moveable barricade / road sign combination	no	12		
102.14.09	Traffic cones	no	500		
102.15	Re-use or removal of traffic-control facilities				
102.15.01	Amber flicker lights	no	8		
102.15.02	Road signs, TR and TW series	no	18		
102.15.03	Danger plates and delineators	no	50		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 1	ANCILLARY WORK				
Section 103	Overhaul				
103.01	Overhaul on material hauled outside the defined free-haul boundaries (Free-haul boundaries will be defined as 1 km outside the indicated site boundaries)	m ³ .km	22 756		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
104.07.03	Planting and establishing of -				
LI 104.07.03.01	Trees	no	10		
LI 104.07.03.02	Shrubs	no	10		
LI 104.07.03.03	Ground covers	no	10		
104.08	Extra work for landscaping	prov sum	1	R 100 000,00	
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 1	ANCILLARY WORK				
Series 106	Service Ducts				
106.01	Bedding and backfilling up to 300mm above pipes				
106.01.01	Using selected excavated material	m ³	30		
106.01.04	Using crushed stone	m ³	6		
106.02	The casting of in situ concrete in bedding and the encasing of pipes (Class 20/19 concrete)				
		m ³	7		
106.03	Soilcrete	m ³	5		
106.04	Service duct pipes				
106.04.01	Ordinary pipes				
106.04.01.01	oPVC or similar approved	m	75		
106.04.03	Pipe fittings				
106.04.03.01	oPVC coupling for 110mm pipes or similar approved	no	15		
106.04.03.02	oPVC sealing ring for 110mm pipes or similar approved	no	15		
106.04.03.03	oPVC end plug for 110mm pipes or similar approved	no	8		
106.04.03.04	oPVC spacer module for 110mm pipes or similar approved	no	15		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
106.05	Duct markers	no	15		
106.06	Extra over item 106.01 and 106.03 for using material obtained from sources provided by the Contractor	m ³	10		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 1	ANCILLARY WORK				
Section B107	Dayworks				
B107.01	Labour during normal working hours				
B107.01.01	Unskilled labour	h	150		
B107.01.02	Semi-skilled labour	h	150		
B107.01.03	Skilled labour	h	100		
B107.02	Extra-over item B107.02 for charges and overheads				
B107.02.01	Unskilled labour	%	0,25		
B107.02.02	Semi-skilled labour	%	0,25		
B107.02.03	Skilled labour	%	0,25		
B107.03	Construction Plant				
B107.03.01	Tipper trucks				
B107.03.01.01	6m³ capacity	h	75		
B107.03.01.02	10m³ capacity	h	75		
B107.03.02	Backhoe loaders (Mass 7 - 8 ton)	h	75		
B107.03.03	Bulldozer (Mass 20 - 25 ton, Power 135 - 165 kW)	h	10		
B107.03.04	Tracked Excavator (Mass 18 - 22 ton, Power 70 - 105 kW)	h	75		
B107.03.06	Grader (Mass 16 - 20 ton)	h	75		
B107.03.07	Wheel Loader (Mass 10 - 13 ton)	h	38		
TOTAL CARRIED FORWARD					

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa
Zone 5: Phase 1 for a duration of 18 Months
Part C2: Pricing Data

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
B107.03.09	Rollers				
B107.03.09.01	Pneumatic Roller (14 - 21 ton)	h	20		
B107.03.09.02	Single drum vibratory padfoot roller (7 - 10 ton)	h	10		
B107.03.09.03	Single drum vibratory padfoot roller (10 - 14 ton)	h	20		
B107.03.09.04	Single drum vibratory smooth roller (7 - 10 ton)	h	20		
B107.03.09.05	Single drum vibratory smooth roller (10 - 14 ton)	h	20		
B107.03.09.10	Pedestrian roller (500 - 550kg, width 390mm)	h	19		
B107.03.09.11	Pedestrian roller (1000 - 1500kg, width 900mm)	h	19		
B107.03.10	Compressor (185 cfm) including 2 drills and hoses	h	19		
B107.03.11	Concrete Mixer (250 litre)	h	19		
B107.03.12	Cranes				
B107.03.12.01	Capacity 50 ton	h	8		
B107.03.12.02	Capacity 100 ton	h	8		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
B107.04	Transport of Construction Plant				
B107.04.01	Flatbed truck (2 - 4 ton)	km	67		
B107.04.02	Lowbed (30 - 40 ton)	km	67		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 2	EARTHWORKS				
Section 202	Trenching				
202.01	Trench excavation				
202.01.01	Up to 1,0m wide				
202.01.01.02	Over 1,0m deep and up to 1,5m deep	m ³	1 557		
202.01.01.03	Over 1,5m deep and up to 2,0m deep	m ³	1 864		
202.01.01.04	Over 2,0m deep and up to 2,5m deep	m ³	201		
202.01.01.06	<i>Etc for other depths in 0,5 m increments</i>				
202.01.02	Over 1,0m and up to 2,0m wide				
202.01.02.03	Over 1,5m deep and up to 2,0m deep	m ³	2 184		
202.01.02.05	Over 2,5m deep and up to 3,0m deep	m ³	475		
202.01.03	Over 2,0m and up to 3,0m wide				
202.01.03.01	Over 2,0m deep and up to 2,5m deep	m ³	832		
202.01.03.02	Over 2,5m deep and up to 3.0m deep	m ³	345		
202.01.03.03	Over 3,0m deep and up to 3.5m deep	m ³	1 827		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
202.02	Extra over items 202.01, 202.03 and 202.09 for excavating in -				
202.02.01	Intermediate material	m ³	1 857		
202.02.02	Hard material	m ³	1 857		
202.04	Hand excavation (extra over item 202.01)	m ³	464		
202.06	The backfilling of trenches (excluding the backfill around the pipe barrel) with material obtained from excavations	m ³	4 834		
202.07	Extra over items 202.06 and 202.13 for using backfill material obtained -				
202.07.01	From borrow areas	m ³	2 417		
202.07.02	From sources provided by the contractor	m ³	967		
202.08	Backfilling additional excavations in trench floor using -				
202.08.01	Class 1 : 3 :6 / 19 concrete	m ³	100		
202.08.02	Concrete aggregate, max size 38 mm	m ³	100		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
202.10	Removal of spoil material -				
202.10.01	To positions indicated on the Drawings or by the Engineer	m ³	2 215		
202.10.02	To dumping areas to be provided by Contractor	m ³	4 642		
202.12	Extra over item 202.06 for additional compaction of backfill to 93% of modified AASHTO density in road reserves	m ³	300		
202.13	Backfilling trenches with soilcrete	m ³	483		
202.15	Reinstatement of bitumen surfaced roads	m ²	1 000		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 2	EARTHWORKS				
Section 203	Mass Earthworks				
203.01	Excavation and borrow to fill				
203.01.01	Compaction to 90% of modified AASHTO density	m ³	17 647		
203.01.02	Rock-fill processing and compaction	m ³	9 173		
203.01.03	Twelve-pass roller compaction	m ³	17 647		
203.02	Extra over item 203.01 for excavating in -				
203.02.01	Intermediate material	m ³	2 118		
203.02.02	Hard material	m ³	882		
203.02.03	Boulder material class A	m ³	75		
203.02.04	Boulder material class B	m ³	100		
203.03	Excavate and spoil of -				
203.03.01	Soft material	m ³	26 058		
203.03.02	Intermediate material	m ³	5 212		
203.03.03	Hard material	m ³	2 606		
203.03.04	Boulder material class A	m ³	1 200		
203.03.05	Boulder material class B	m ³	1 200		
203.04	Removal of oversize material	m ³	150		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
203.05	Variations in compactive effort (applicable to sub item 203.01.03 and item 203.07)				
203.05.01	Vibratory rollers	m ² .pass	26 471		
203.05.02	Impact rollers	m ² .pass	26 471		
203.05.03	All other rollers	m ² .pass	26 471		
203.06	Widening of cuttings (extra over items 203.01 and 203.03)				
203.06.01	In hard material	m ³	521		
203.06.02	In intermediate and soft material	m ³	521		
203.06.03	In boulder material class A or class B	m ³	480		
203.07	Three-pass roller compaction				
203.07.01	Vibratory roller	m ² .pass	38 916		
203.07.02	Impact roller	m ² .pass	38 916		
203.08	Preparation and compaction of construction bed material to 90% of modified AASHTO density	m ³	1 376		
203.09	Material bladed to windrow	m ³	1 588		
203.10	In situ treatment of the construction bed				
203.10.01	In situ treatment by ripping	m ³	156		
203.10.02	In situ treatment by blasting	m ³	83		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
203.11	Finishing off slopes				
LI 203.11.01	Excavation slopes	m ²	17 472		
LI 203.11.02	Fill slopes	m ²	17 472		
203.12	Provision of impact roller (extra over items 203.07)	no	1		
203.13	Keeping impact rollers available on the Site (extra over item 203.07)	roller-day	10		
203.14	Extra over item 203.01 for borrow material from sources to be supplied by the Contractor	m ³	26 820		
203.15	Extra over items 203.03 and 203.04 for disposing of spoil material to sites to be provided by the Contractor	m ³	43 855		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 5	DRAINAGE AND EROSION PROTECTION				
Section 501	Subsurface Drains and Drainage Blankets				
501.01	Crushed stone				
501.01.01	Graded crushed stone	m ³	250		
501.01.02	Single-sized crushed stone:				
501.01.02.02	19mm nominal aggregate size	m ³	300		
501.02	Procuring of filter sand	prov sum	1	R 100 000,00	
501.03	Placing of filter sand	m ³	3 125		
501.04	Geotextiles				
501.04.02	Bidim grade A2 (1.6mm thick) or equivalent approved	m ²	35 342		
501.05	Pipes in subsurface drains				
501.05.01.01	Perforated PVC 110mm pipes (similar approved)	m	3 971		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 5	DRAINAGE AND EROSION PROTECTION				
Section 502	Prefabricated Culverts and Stormwater Sewers				
502.01	Backfilling with selected excavated material compacted to -				
502.01.01	90% of modified AASHTO density	m ³	479		
502.01.02	93% of modified AASHTO density	m ³	2 649		
502.01.03	95% of modified AASHTO density	m ³	2 649		
502.02	Supplying and laying of concrete pipe culverts (type SC-pipes)				
502.02.01	Class B bedding / Class 50D				
502.02.01.01	450 mm Ø	m	2 349		
502.02.01.02	525 mm Ø	m	290		
502.02.01.03	600 mm Ø	m	83		
502.02.01.05	750 mm Ø	m	549		
502.02.01.07	900 mm Ø	m	95		
502.02.01.08	1050 mm Ø	m	85		
502.02.01.09	1200 mm Ø	m	59		
502.02.01.10	1500 mm Ø	m	13		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
502.06	Supplying and laying portal and rectangular culverts				
502.06.01	Complete with precast invert slab				
502.06.01.03	450 mm x 450 mm	m	139		
502.06.01.06	600 mm x 600 mm	m	10		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
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 20/19	m ³	100		
502.10.01.02	Class 25/19	m ³	19		
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	m ³	19		
502.10.03	Inlet and outlet structures, catchpits, manholes and junction boxes excluding formwork, but including U2 surface finish				
502.10.03.01	Class 20/19	m ³	13		
502.10.03.02	Class 25/19	m ³	19		
502.11	Class 1 : 4 : 8 / 38 concrete backfill for culverts	m ³	19		
502.12	Cover Slab	no	36		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
502.13	Welded-steel fabric				
502.13.03	Reference 395	kg	751		
502.14	Reinforcement				
502.14.01	High Tensile steel				
502.14.01.01	Varying Diameters	t	1		
502.14.01.02	Brickwall Reinforcement	m	630		
502.16	Manholes, catchpits, precast inlet and outlet structures and junction boxes complete				
502.16.01	Manholes				
502.16.01.01	Type and standard depth indicated in Drawings	no	110		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
502.16.02	Catchpits				
502.16.02.01	<i>4,8m Side Inlet</i>	no	55		
502.16.02.02	<i>6m Side Inlet</i>	no	51		
502.16.03	Precast inlet and outlet structures				
502.16.03.01	<i>1200mm x 1200mm</i>	no	4		
502.16.04	Transitions before and after cathcpits				
502.16.04.01	<i>Type and length indicated</i>	no	110		
502.16.05	Junction boxes				
502.16.05.01	<i>Precast concrte using 1050mm dia rings 1m-1,5m</i>	no	55		
502.16.05.02	<i>Precast concrte using 1050mm dia rings 1,5m-2,0m</i>	no	55		
502.16.06	Extra over item 502.16.01 for variation in depth of manholes from the standard depth designated for the purpose of tendering				
502.16.06.01	<i>Manhole type indicated</i>	m	10		
502.16.06.02	<i>Etc for other manhole types</i>	m	20		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
502.17	Brick work				
LI 502.17.01	one brick wall	m ²	38		
LI 502.18	Plaster	m ²	200		
LI 502.19	Benching	m ²	33		
502.20	Accessories				
502.20.01	Manhole covers including frames (See drawing STD004 - Sheet 6)				
502.20.01.01	Precast concrete frame and cover	no	55		
502.20.01.02	Combination precast concrete / cast iron frame and cover	no	55		
502.20.03	Step Irons	no	110		
502.20.04	Precast concrete elements				
502.20.04.01	Catchpit cover slabs Class 25/19 concrete (See drawing STD003 - Sheet 2)				
502.20.04.01.01	Splayed corner slab 1.5m long	no	10		
502.20.04.01.02	Rectangular slab 1.5m long	no	20		
502.20.04.01.03	Extra over Items 502.20.04.01.01 and 502.20.04.01.02 for variation in length from the standard 1,5m length	m	5		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
502.20.04.02	Junction box cover slab Class 25/29 concrete (See drawing STD004 - Sheet 1)				
502.20.04.02.01	Span (L) 1,0m	no	55		
502.20.04.02.02	Extra over Item 502.20.04.02.01 for variation in span from the standard 1,0m span	m	10		
502.20.05	Catchpit steel frame (see drawing STD003 - Sheet 2)	no	10		
502.21	Soilcrete	m ³	19		
502.22	Extra over Items 502.01 and 502.21 for using material obtained				
502.22.01	From borrow areas provided by Employer	m ³	75		
502.22.02	From sources provided by Contractor	m ³	256		
LI 502.23	Cleaning existing culverts	m ³	293		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 5	DRAINAGE AND EROSION PROTECTION				
Section 503	Kerbing and Channelling				
503.01	Concrete kerbing Class 20/19 concrete				
503.01.01	Edge beam 150mm x 150mm	no	2 813		
503.01.02	Figure 8b Precast mountable kerbs	no	2 813		
503.02	Concrete kerbing-channelling combination (See drawing STD007 - Sheet 1)				
503.02.01	Semi-vertical kerb (Fig. 8C) with concrete channel	m	141		
503.02.02	Barrier kerb (Fig. 3) with concrete channel	m	14		
503.03	Transition sections (See drawing STD007 - Sheet 2)				
503.03.01	Semi-vertical kerb (Fig. 7) to edge beam	no	10		
503.03.02	Semi-vertical kerb (Fig. 7) to 300mm sloping kerb	no	10		
503.03.03	Semi-vertical kerb (Fig. 7) to 400mm sloping kerb	no	10		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 5	DRAINAGE AND EROSION PROTECTION				
Section 504	Open Drains				
504.01	Mitre drains and catchwater drains				
504.01.01	Mitre drains	m ³	50		
504.01.02	Catchwater drains	m ³	50		
504.03	Side drains (See drawing STD17 - Sheet 2)				
504.03.01	Type 1.1 - Small side drain allowing erf access	m	397		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
504.05	Construction of chutes, side drains, channels, inlet and outlet structures, transition sections and auxiliary structures (Measured by components)				
504.05.01	Excavation	m ³	143		
504.05.02	Preparation of excavations for concrete-lined open drains	m ²	119		
504.05.03	Cast in situ concrete for the lining of of open drains, or open drains constructed in concrete (concrete class and type of drain stated. Class U2 surface finish)	m ³	12		
504.05.04	Formwork for cast in situ concrete (Class F2 surface finish)				
504.05.04.01	To vertical sides of open drains (formwork on internal face only)	m ²	79		
504.05.05	Joints in the concrete lining of open drains				
504.05.05.01	Soft Board Filled Joints (10mm) (See drawing STD17 - Sheet 2)	m	238		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
504.05.06	Welded-steel fabric				
504.05.06.03	Reference 395	kg	471		
504.05.06.04	<i>Etc for other pitches and diameters</i>				
504.05.07	Mild steel				
504.05.07.01	8 mm dia.	t	1		
504.05.07.02	10 mm dia.	t	1		
504.05.07.03	12 mm dia.	t	1		
504.05.07.04	<i>Etc for other diameters</i>				
504.05.08	High-yield-stress steel				
504.05.08.01	8 mm dia.	t	1		
504.05.08.02	10 mm dia.	t	1		
504.05.08.03	12 mm dia.	t	1		
504.05.08.04	16 mm dia.	t	1		
504.05.08.04	<i>Etc for other diameters</i>				
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
504.06	Polyethylene sheeting (0,150 mm thick) for concrete-lined open drains	m ²	477		
504.07	Excavation in hard material (Extra over items 504.01, 504.02 504.03, 504.04 and 504.05)	m ³	14		
504.08	Hand excavations (Extra over subitem 504.05.01)	m ³	143		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 5	DRAINAGE AND EROSION PROTECTION				
Section 505	Erosion Protection				
505.01	Foundation trench excavation and backfilling				
505.01.01	In solid rock (material which requires blasting)	m ³	10		
505.01.02	In all other classes of material	m ³	45		
LI 505.02	Surface preparation for the bedding of gabions	m ²	72		
505.03	Gabions				
505.03.01	Gabion boxes, mesh type 80 with 2.7mm Class A galvanised wire -				
505.03.01.01	1.0m x 1.0m x 1.0m	m ³	20		
505.03.01.02	1.5m x 1.0m x 1.0m	m ³	15		
505.03.01.03	2.0m x 1.0m x 1.0m	m ³	13		
505.03.01.04	3.0m x 1.0m x 1.0m	m ³	9		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
505.03.02	Reno mattresses, mesh type 60 with 2.2mm Class A galvanised wire				
505.03.02.01	2.0m x 2.0m x 0.30m	m ³	20		
505.03.02.02	3.0m x 1.0m x 0.30m	m ³	100		
505.04	Extra over item 505.03 for supplying gabions with PVC-coated wire				
505.04.01	3.7mm PVC thickness	m ³	20		
505.04.02	3.2mm PVC thickness	m ³	30		
505.05	Filter fabric for gabions and riprap				
505.05.01	Bidim A4 or equivalent approved	m ²	350		
505.06	Stone pitching				
505.06.01	Plain pitching				
LI 505.06.01.01	Method 1	m ²	100		
LI 505.06.01.02	Method 2	m ²	100		
LI 505.06.02	Grouted pitching	m ²	100		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
LI 505.06.03	Wired-and-grouted pitching	m ²	35		
505.08	Masonry walls				
LI 505.08.01	Plain	m ³	100		
LI 505.08.02	Cement-mortared	m ³	50		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
505.10	Concrete in edge beams and foundation trenches				
505.10.01	Class20/29 concrete	m³	10		
505.10.02	Class 25/19 concrete	m³	10		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 6	ROADS AND PARKING AREAS				
Section 601	Gravel Pavement Layers				
601.01	Preparation and compaction of in situ subgrade material to -				
601.01.01	90% of modified AASHTO density	m ³	165		
601.01.02	93% of modified AASHTO density	m ³	1 376		
601.02	Gravel layers constructed from material obtained from borrow pits				
601.02.01	Subgrade				
601.02.01.01	Compacted to 93% of modified AASHTO density	m ³	2 500		
601.02.01.02	Compacted to 95% of modified AASHTO density	m ³	5 700		
601.02.02	Subbase				
601.02.02.01	Compacted to 95% of modified AASHTO density	m ³	5 406		
601.02.02.02	Compacted to 97% of modified AASHTO density	m ³	3 500		
601.02.03	Base				
601.02.03.01	Compacted to 98% of modified AASHTO density	m ³	4 128		
601.03	Gravel layers constructed from material obtained from excavations				
601.03.01	Subgrade				
601.03.01.02	Compacted to 93% of modified AASHTO density	m ³	1 376		
TOTAL CARRIED FORWARD					

Contract: RTD 05-2025/26: Tender for the appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa
Zone 5: Phase 1 for a duration of 18 Months
Part C2: Pricing Data

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
601.06	Extra over Item 601.02 for borrow material from sources to be supplied by the Contractor				
601.06.01	G5 material compacted to 95% of modified AASHTO Density	m ³	5 700		
601.06.02	G6 material stabilized to C4 compacted to 95% of AASHTO density	m ³	5 406		
601.06.03	G2 material compacted to 98% of AASHTO density	m ³	4 128		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 6	ROADS AND PARKING AREAS				
Section 603	Unpaved areas				
603.01	Compacted gravel shoulder or gravel wearing course to 93% of modified AASHTO density				
603.01.01	Shoulder	m ³	2 957		
603.01.02	Wearing course	m ³	700		
603.02	Extra over Item 603.01 for borrow material from sources to be supplied by the Contractor	m ³	887		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 6	ROADS AND PARKING AREAS				
Section 604	Stabilization				
604.01	Chemical stabilization extra over unstabilized compacted layers				
604.01.03	Subbase	m ³	5 406		
604.02	Chemical stabilizing agent				
604.02.01	Cement	t	476		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 6	ROADS AND PARKING AREAS				
Section 605	Prime Coat				
605.01	Prime coat				
605.01.02	MC-30 cut-back bitumen	ℓ	17 647		
605.01.03	MC-70 cutback bitumen	ℓ	1 941		
605.01.04	Invert bitumen emulsion which complies with SANS 4001-BT5	ℓ	971		
605.01.05	<i>Etc. for other prime types</i>				
605.02	Aggregate for blinding	m ²	400		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 6	ROADS AND PARKING AREAS				
Section 606	Asphalt Base and Surfacing				
606.02	Asphalt surfacing				
606.02.01	Continuously graded (14mm NMA S - 70/100 penetration grade bitumen)	t	1 165		
606.05	Tack coat of 30% stable grade emulsion	ℓ	14 415		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
606.07	Variations in active filler content				
606.07.01	Cement	t	5		
606.09	100mm cores in asphalt paving	no	20		
606.10	Saw-cutting of asphalt, asphalt base or paving (<i>depth of cut indicated</i>)	m	120		
	Traffic Calming Measures - Speed humps and Traffic Signs Complete - See Drawing	No	16		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 6	ROADS AND PARKING AREAS				
Section 609	Segmented Paving				
609.01	Construction of segmental block paving made from -				
LI 609.01.01	60mm Type S-A, Class 25 gray precast blocks with 20mm bedding sand	m ²	7 863		
609.03	The construction of edge restraints with				
609.03.01	Rectangular precast concrete kerb (Figure 10)-Drawing No STD008	m	4 368		
609.03.02	In situ concrete according to Drawing No STD008	m ³	145		
609.04	Lifting of existing segmental paving, loading and transporting it to the stockpile site specified in the Project Specifications				
LI 609.04.01	Segmental blocks	m ²	250		
LI 609.04.02	Concrete paving slabs	m ²	150		
609.06	Construction of pedestrian ramps for the disabled				
LI 609.06.01	Type A Pedestrian Crossing including Warning/Directional Tactile - complete as per Drawing STD009 sheet 1 and 2	No.	57		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 6	ROADS AND PARKING AREAS				
Section 612	Traffic Signs				
612.01	Sign boards with painted back-ground, symbols, lettering and borders in engineering-grade retro-reflective material with sign boards constructed from -				
612.01.01	Aluminium sheet (2,0 mm thick) with an				
612.01.01.01	Area not exceeding 2m ²	m ²	25		
612.01.01.02	Area exceeding 2m ² but not 10m ²	m ²	25		
612.01.01.03	Area exceeding 10m ²	m ²	15		
612.01.03	Aluminium extrusions (<i>type indicated</i>) all sizes	m ²	15		
612.01.03	Sheet steel (Chromadek) with an -				
612.01.03.01	Area not exceeding 2m ²	m ²	15		
612.01.03.02	Area exceeding 2m ² but not 10m ²	m ²	25		
612.01.03.03	Area exceeding 10m ²	m ²	15		
612.02	Extra over Item 612.01 for -				
612.02.01	Background of retro-reflective material of -				
612.02.01.01	Engineering grade	m ²	25		
612.02.01.02	High-intensity grade	m ²	25		
612.02.01.03	Super-engineering grade	m ²	25		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 6	ROADS AND PARKING AREAS				
Section 613	Traffic Markings				
613.02	Retro-reflective road-marking paint				
613.02.01	White lines (broken or unbroken) 100mm wide	km	3		
613.02.02	Yellow lines (broken or unbroken) 100mm wide	km	6		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
613.04	Variation in the rate of application				
613.04.01	White paint	ℓ	178		
613.04.02	Yellow paint	ℓ	356		
613.04.03	Glass beads	kg	78		
613.04.04	Proprietary brand plastic paints	ℓ	103		
613.05	Road studs (SANS approved)				
613.05.01	Single sided road stud	no	25		
613.06	Setting out and the premarking of lines (excluding traffic-island markings, lettering and symbols)				
		km	6		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 9	QUALITY CONTROL				
Section 903	Testing				
903.01.03	150mm x 150mm x150mm concrete-				
903.01.06	Concrete and asphalt core-drilling cores	no	75		
903.01.07	Concrete and asphalt saw	no	2		
903.01.09	Rolling straight-edge	no	1		
B903.06.01	Other special tests requested by				
903.02	Extraction of concrete and asphalt cores for special test	lump Sum	1	R 100 000,00	
903.02.01	Extraction of cores when a coring machine has been ordered under item 903.01.06	%			
903.02.01.01	100mm concrete cores	no	10		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

SUMMARY OF PRICING SCHEDULE

SECTION	DESCRIPTION	AMOUNT
SERIES 0	GENERAL	
001	General Requirements and Charges	
002	Engineers Accommodation	
SERIES 1	ANCILLARY WORK	
101	Site Clearing and Grubbing	
102	Accommodation of Traffic	
103	Overhaul	
104	Landscaping and Grassing	
105	Fencing	
106	Service Ducts	
B107	Dayworks	
SERIES 2	EARTHWORKS	
201	General	
202	Trenching	
203	Mass Earthworks	
SERIES 5	DRAINAGE AND EROSION PROTECTION	
501	Subsurface Drains and Drainage Blankets	
502	Prefabricated Culverts and Stormwater Drainage	
503	Kerbing and Channelling	
504	Open Drains	
505	Erosion Protection	
SERIES 6	ROADS AND PARKING AREAS	
601	Gravel Pavement Layers	
602	Crushed-stone Pavement Layers	
603	Unpaved Areas	
604	Stabilization	
605	Prime Coat	
606	Asphalt Base and Surfacing	
607	Bituminous Surface Treatments	
608	Road and Surfacing Rehabilitation and Overlay Construction	
609	Segmented Paving	
610	Concrete Paving	
611	Guardrails	
612	Traffic Signs	
613	Traffic Markings	
SERIES 9	QUALITY CONTROL	
903	Testing	

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Zone 5: Phase 1 for a duration of 18 Months
Part C2: Pricing Data

TOTAL OF SCHEDULED PRICES	
Add 10% for contingencies	
SUBTOTAL	
Add 15% VAT	
CONTRACT PRICE CARRIED FORWARD TO FORM OF OFFER	

Signature of person authorised to sign the tender:	Date

Scope of Work

PART C3: SCOPE OF WORK

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Scope of Work

C3.1 DESCRIPTION OF THE WORKS

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Scope of Work

C3.1.1 Employers objectives

The project objective is to upgrade the roads and stormwater infrastructure in Ga-Rankuwa Zone 5: Phase 1. The ultimate aim is to ensure that the standard of living for local residents is improved, safety enhanced and damage to related infrastructure (like roads for instance) is reduced.

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.

C3.1.2 Overview of the works

The project involves the upgrading of internal roads and stormwater in Ga-Rankuwa Zone 5. The proposed length of the streets to be upgraded is roughly 2252 meters. Stormwater runoff will be managed using a combination of trapezoidal concrete channels, edge beams, and existing kerb inlets to minimize potential damage to the road, surrounding property, infrastructure, and the environment. Subsoil drainage pipes will also be installed where necessary. The project focuses on upgrading the existing Road to improve its functionality and resilience.

The total length of roads to be constructed and surfaced is 2252 meters. Below is the list identified roads to be surfaces and their km chainage:

Road	Length (m)
Phutu (Roads and Storwater)	311
Masike (Roads and Storwater)	150
Nyakale (Roads and Storwater)	450
Masenyane (Roads and Storwater)	660
Mafale (Roads and Storwater)	681
TOTAL LENGTH	2 252

C3.1.3 Extent of the works

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

Scope of Work

- 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 project is located approximately 37 km north-west of Pretoria, the proposed Upgrading of Roads and Stormwater Systems is situated in Ga-Rankuwa Zone 5- Phase 1, City of Tshwane Metropolitan Municipality, Gauteng. The area can be accessed via Molefe Makinta Road (M31); development areas accessible through Molatlhoa Street.



Scope of Work

C3.2 ENGINEERING

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Scope of Work

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 tender drawings for the Upgrading of Roads and Stormwater Systems for Ga-Rankuwa Zone 5:Phase 1 are as listed below:

DRAWING NO.	DESCRIPTION OF DRAWING
KSB-GA-RANK--GA-L001	ROADS STORMWATER LAYOUT PLAN
KSB-0021-COT-GAR-02	ROADS SETTING OUT DATA
KB-0021-COT-GAR-CR-01-CS	MAFALE STREET CROSS SECTION
KB-0021-COT-GAR-CR-02-CS	MASENYE STREET CROSS SECTION
KB-0021-COT-GAR-CR-03-CS	MASIKE STREET CROSS SECTION
KB-0021-COT-GAR-CR-04-CS	PHUTU STREET CROSS SECTION
KB-0021-COT-GAR-CR-05-CS	MAKOTO STREET CROSS SECTION
KB-0021-COT-GAR-CR-06-CS	LEBELO STREET CROSS SECTION
KS-0021-COT-GAR-CR-07-CS	TLOBORO STREET CROSS SECTION
KB-0021-COT-GAR-CR-08-CS	MOEPI STREET CROSS SECTION
KB-0021-COT-GAR-CR-09-CS	TABANE STREET CROSS SECTION
KB0021-COT-GAR-CR-10-CS	SERATA STREET CROSS SECTION
KB-0021-OCOT-GAR-CR-11-CS	MALILA & MPURU STREET CROSS SECTION
KB-0021-COT-GAR-CR-12-CS	MATHIBE STREET CROSS SECTION
MKSC-TY-X-01	TYPICAL ROAD CROSS-SECTIONS
KB-0021-COT-GAR-CR-01-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION MAFALE STREET
KB-0021-COT-GAR-CR-02-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION MASENYE STREET
KB-0021-COT-GAR-CR-03-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION MATHIBE STREET
KB-0021-COT-GAR-CR-04-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION MASIKE & PHUTU STREET

Scope of Work

DRAWING NO.	DESCRIPTION OF DRAWING
KB-0021-COT-GAR-CR-05-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION MAKOTO STREET
KB-0021-COT-GAR-CR-06-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION MAKOTO STREET.
KB-0021-COT-GAR-CR-07-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION LEBELE & TLOBORO STREET.
KB-0021-COT-GAR-CR-08-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION MOEPI, MPURU & MATILA STREET
KB-0021-COT-GAR-CR-10-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION TABANE STREET
KB-0021-COT-GAR-CR-10-LS	GEOMETRIC LAYOUT AND LONGITUDINAL SECTION SERATA STREET
KB-0021-COT-GAR-CSW-01	STORMWATER SITE LAYOUT
KSB-0021-COT-GAR-CSW-02	STORMWATER SETTING OUT DATA
KSB-0021-COT-GAR-CSW-03- LS	STORMWATER SETTING LONGITUDINAL SECTIONS
KSB-0021-COT-GAR-CSW-04- LS	STORMWATER SETTING LONGITUDINAL SECTIONS
KSB-0021-COT-GAR-CSW-05- LS	STORMWATER SETTING LONGITUDINAL SECTIONS
KSB-0021-COT-GAR-CSW-06- LS	STORMWATER SETTING LONGITUDINAL SECTIONS
KSB-0021-COT-GAR-CSW-07- DT	STORMWATER DRAINAGE OUTLET STRUCTURE
1STD002 SHEET 1 OF 1	TYPICAL STORMWATER AND KERB LAYOUT
2STD003 SHEET 1 OF 2	CATCHPIT DETAILS ISOMETRIC VIEW AND CROSS SECTION
3STD003 SHEET 2 OF 2	CATCHPIT DETAILS ISOMETRIC VIEW AND CROSS SECTION
4STD004 SHEET 1 OF 6	JUNCTION BOX MANHOLE DETAILS TYPICAL BOX CONFIGURATION AND COVER
5STD004 SHEET 2 OF 6	JUNCTION BOX MANHOLE DETAILS TYPICAL BOX A JUNCTION BOX
6STD004 SHEET 3 OF 6	JUNCTION BOX MANHOLE DETAILS TYPICAL BOX B JUNCTION BOX
7STD004 SHEET 4 OF 6	JUNCTION BOX MANHOLE DETAILS TYPICAL BOX C JUNCTION BOX
8STD004 SHEET 5 OF 6	JUNCTION BOX MANHOLE DETAILS TYPICAL BOX D JUNCTION BOX

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DRAWING NO.	DESCRIPTION OF DRAWING
9STD004 SHEET 6 OF 6	JUNCTION BOX MANHOLE DETAILS TYPICAL BOX MANHOLE
10STD005 SHEET 1 OF 1	STORMWATER INLET STRUCTURE- FIELD INLET AND STORMWATER OUT LET
11STD006 SHEET 1 OF 1	TYPICAL CROSS SECTIONS ROAD RESERVE, STORMWATER PIPELINE AND FURROW
12STD007 SHEET 1 OF 2	KERBING DETAILS-SLOPING KERB, SEMI-VERTICAL KERB AND EDGE BEAM
13STD007 SHEET 2 OF 2	KERBING DETAILS TRANSITION SECTIONS AND VEHICLE ENTRANCE
14STD017 SHEET 1 OF 4	ROAD AND SURFACE DRAINAGE DETAILS FOR LOW-COST DEVELOPMENT- ROAD CROSS SECTIONS
14STD017 SHEET 2 OF 4	ROAD AND SURFACE DRAINAGE DETAILS FOR LOW-COST DEVELOPMENT- ROAD CROSS SECTIONS
14STD017 SHEET 3 OF 4	ROAD AND SURFACE DRAINAGE DETAILS FOR LOW-COST DEVELOPMENT- DRAINAGE STRUCTURE
14STD017 SHEET 4 OF 4	ROAD AND SURFACE DRAINAGE DETAILS FOR LOW COST DEVELOPMENT- ACCESS SRTIP: GRASS
14PLN01 SHEET 1 OF 4	SERVICE LAYOUT - 13M TO 25M ROAD RESERVES
14PLN01 SHEET 2 OF 4	SERVICE LAYOUT - 5M.8M AND 10M ROAD RESERVES

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,

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C3.3 PROCUREMENT

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C3.3.1 Preferential procurement procedures

C3.3.1.1 Requirements

The City of Tshwane 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 City of Tshwane 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.

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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). 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

Scope of Work

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

Scope of Work

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:	Mr. Phillip Huma
	Target area:	

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	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	<i>The min. goal is 10% and the maximum goal is 20% (The combined goal for the contract will not exceed 30%)</i>
	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	<p>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 quantitative 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> $P = 0.15 \times \frac{(D - D_o)}{100} \times N_A$ <p>Where</p> <p>D = required Contract Participation Goal percentage</p> <p>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</p> <p>N_A = Net Amount</p> <p>P = Rand value of penalty payable</p>

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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 amended 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

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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. Phillip Huma
	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)

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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	<p>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 quantitative 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> $P = 0.15 \times \frac{(D - D_o)}{100} \times N_A$ <p>Where</p> <p>D = required Contract Participation Goal percentage</p> <p>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</p> <p>N_A = Net Amount</p> <p>P = Rand value of penalty payable</p>

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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:

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- 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.

Scope of Work

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 undertaken by sprigging, sodding, or seeding by hand.

15 Stone pitching and rubble concrete masonry

Scope of Work

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	0,494	0,660	0,305	0,481	0,655
	0,335	0,470	0,610	0,350	0,444	0,579
	0,325	0,493	0,638	0,340	0,494	0,606
	0,295	0,522	0,690	0,295	0,054	0,690
$Y^{(1)}$	0,315	0,505	0,340	0,315	0,518	0,345
	0,345	0,480	0,340	0,360	0,476	0,341
	0,355	0,457	0,312	0,370	0,426	0,314
	0,325	0,477	0,310	0,325	0,454	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

Scope of Work

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 $\geq 150 \text{ mcd/m}^2/\text{lx}$

Yellow road markings $\geq 90 \text{ mcd/m}^2/\text{lx}$

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.

C3.4.1.3.4 Required performance characteristics on Traffic signs

1. Poles

1.1 For standard regulatory and warning signs, poles used shall be of a "D" section obtained by rolling flat mild steel plate of 2mm wall thickness to the desired form, and seam-welding it along the entire Length (the d-section extrude from standard pipe section is not acceptable).

1.2 The d section must have a flat base of approximately 63mm measured externally and the circular part an external diameter of 76mm. Each pole is to be blanked-off at the top by means of at least 2mm mild steel plate welded to the top, with the same form as the d section.

1.3 The welding joint must be watertight and smoothed off after Welding.

Scope of Work

1.4 The base plate for D section poles and 76mm diameter. Round poles to be 150mm square and 2mm thick, and welded to the base of each pole by means of 4 evenly spaced welds, each not less than 20mm long. The base plate for 100mm diameter round poles to be 200mm square

1.5 The poles shall be hot dipped zinc coated (galvanised).

1.6 All poles >3.6m length to be 100mm diameter round poles with 3mm wall thickness.

1.7 Poles used for signs >15 square meter to be designed in line with SARTSM volume 2 chapter 15.

1.8 All poles used for street name signs shall be 3.6m round sections and 76mm diameter

1.9 Signs must be installed onto break away footings on paved concrete Islands.

1.10 Holes to be drilled as directed by the engineer.

1.11 Sign date needs to be applicate to the front of the pole 50mm high Vinyl.

1.12 No jointing of poles allowed.

2. Signs

2.1 All signs to be manufactured with class i engineering grade

Prismatic material having a 7 year warranty period, while all hazard markers to be manufactured with class 3 high intensity prismatic material having a 10 year warranty period.

All panel signs to be class 3 reflective ground mounted and class 4 reflective for overhead signs.

All temporary signs to be class 3 reflective material.

2.2 No unistruts on signs are allowed for 600mm r series and up to 900mm W series signs, while signs > 1200mm require unistruts.

2.3 All sign corners to be round r=25mm (excluding r1).

2.4 All signs to be fixed flat against the poles.

2.5 All vinyl to be cast vinyl with 10 year warranty for road signs.

2.6 All ink used for silk screening must be from the same supplier as the reflective material.

2.7 Symbols for w416/7 to be silk screened.

2.8 Street name font to be din "a" as per SARTSM vol. 4

2.9 Type 2 & 3 street names >1500mm require 2 poles and brackets.

2.10 Reflective sheet only to be applied onto the vertical section of the street name plate.

2.11 No jointing of reflective material allowed on sign face.

2.12 All bolts to have washers.

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.

Scope of Work

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

Scope of Work

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

Scope of Work

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 for his exclusive use. An ablution unit for his exclusive use.

The engineer does not require housing for personnel.

C3.4.5.3 Storage 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.

Scope of Work

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 determined by the Engineer and will be site specific.

Scope of Work

C3.5 MANAGEMENT

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Scope of Work

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

Scope of Work

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.

B001.2	COMPLIANCE WITH THE ENVIRONMENTAL ACT AND APPLICABLE REGULATIONS	
	Provision of an Environmental Management Plan (EMP)	
		Unit
B001.2	Compliance with the Environmental Act and applicable regulations	
	i) Monitoring of compliance with and reporting on the EMP	Month (m)
	ii) Dedicated environmental officer	Month (m)

The unit of measurement for item i) B001.2 is the month or part thereof that the service is required and provided during the approved contract period. The contract rate shall include full compensation for the regular monitoring of compliance with and reporting on the EMP in accordance with the specified requirements.

The unit of measurement for item ii) B001.2 is the month or part thereof that the service is provided during the approved contract period. The contract rate shall include full compensation for the provision of a dedicated environmental officer including all employment costs, accommodation and transport costs and all other associated overhead costs.

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

Scope of Work

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)

Scope of Work

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.

B903.06	Other Special	Prime Cost Sum
B903.06.01	Tests Requested	percentage (%)
B903.06.02	by the Engineer	
	Cost of Testing	
	Percentage on	
	item B903.06.01	
	for charges and	
	profit	

Scope of Work

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

Scope of Work

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 1991 to 2024 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	123.8	4.0	July	0.8	0.0
February	108.5	3.0	August	3.2	0.0
March	105.4	3.0	September	12.2	0.0
April	39.1	1.0	October	56.2	2.0
May	14.3	0.0	November	90.9	5.0
June	4.5	0.0	December	120.2	6.0
			TOTAL	679.2	24.0

Scope of Work

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

Scope of Work

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

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

Contract: RTD 05-2025/26: Tender for the Appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5: Phase 1 for a duration of 18 months

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Scope of Work

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.

Scope of Work

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 away, 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

Scope of Work

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 from 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.

Scope of Work

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

Scope of Work

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 hand before seeding.	104
	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.	

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ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
Soil management	Topsoil	The topsoil (\pm 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, 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.	

Scope of Work

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
	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	

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ANNEXURE C.3.5.B Health and Safety Specification

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Scope of Work

PROJECT NAME & No. :

CLIENT : CITY OF TSHWANE METROPOLITAN MUNICIPALITY

1. INTRODUCTION, PROBLEM STATEMENT AND OBJECTIVES OF THE PROJECT

The need to upgrade the existing roads can be ascribed to the manifestation of a number of problems with the current conditions. The identified problems manifest in a number of ways, which can be summarized as follow:

- Inconvenience: Residents and road users are inconvenienced by dust caused by the existing gravel roads.
- Erosion: Stormwater causes erosion damage, on and adjacent to the road. The erosion damages the environment but also cause dangerous conditions for the road user.
- Maintenance costs: Due to the lack of stormwater infrastructure, it is anticipated that maintenance costs may be excessive.
- Safety: The geometric layout, dust and erosion may cause unsafe conditions for road users and pedestrians alike.
- Perceptions: The difference in level of service may create an enhanced perception of a substandard level of service. The existing gravel roads link existing tarred roads.

The actual problem can be stated as:

“Existing roads do not meet the expectations of the level of service, both of the road user and the residents adjacent to the road.”

The objective, to solve the problem, can be stated as:

“To design and construct roads, which will meet the level of service expectations of the road user at an appropriate standard.”

Scope of Work

2. DESCRIPTION OF THE SITE

The project is located approximately 37 km north-west of Pretoria, the proposed Upgrading of Roads and Stormwater Systems is situated in Ga-Rankuwa Zone 5- Phase 1, City of Tshwane Metropolitan Municipality, Gauteng. The area can be accessed via Lucas Mangophe Road (M31); development areas accessible through Molatlhoa Street.



3. PROJECT SCOPE OVERVIEW AND PURPOSE OF THE SHE SPEC

Project Scope overview

The project involves the upgrading of unpaved residential streets in Ga-Rankuwa Zone 5. The proposed length of the streets to be upgraded is roughly 2252 meters. Stormwater runoff will be managed using prefabricated concrete pipe culverts, edge beams, and kerb inlets to minimize potential damage to the road, surrounding property, infrastructure, and the environment. Subsoil drainage pipes will also be installed where necessary. The project focuses on upgrading the residential streets in Ward 31 to improve its functionality and resilience.

In summary the project tasks entail (but not limited) to the following:

- Site establishment
- Setting out of works
- Accommodation of traffic
- Excavation of trenches
- Construction of bedding
- Installation of stormwater sewers including construction of inlet, outlet structures and junction boxes
- Backfilling
- Structures and appurtenant to stormwater systems (inlets, junction boxes and manholes)
- Quality control
- Maintenance of the work during the construction and subsequent liability periods
- And other related civil works

Scope of Work

Purpose of the Site-Specific Health and Safety Specification

This health and safety specification aims to inculcate a positive safety culture in the project and outlines the working behaviours and safe work practices that must be implemented and complied with by, the Principal Contractor, Contractors, Consultants, Visitors and Suppliers, that will be undertaking activities associated with the UPGRADING OF ROADS AND STORMWATER SYSTEMS IN GARANKUWA ZONE 5: PHASE 1 project. The Site-Specific Health and Safety Specification has been developed in accordance with the requirements of Occupational Health and Safety Act 85 of 1993 and related Regulations, the Construction Regulation of 2014, and as partial fulfilment of the Construction Regulation 5(1)(b) as well as any other applicable legislation.

The appointed Principal Contractor and other contractors must identify all requirements applicable to their scope of works and address these accordingly in their Contractor 's Site Specific Health and Safety Management Plan. It is the Principal Contractor 's responsibility to ensure that all other sub-contractors comply fully with all legal requirements as well as the requirements of this Specification.

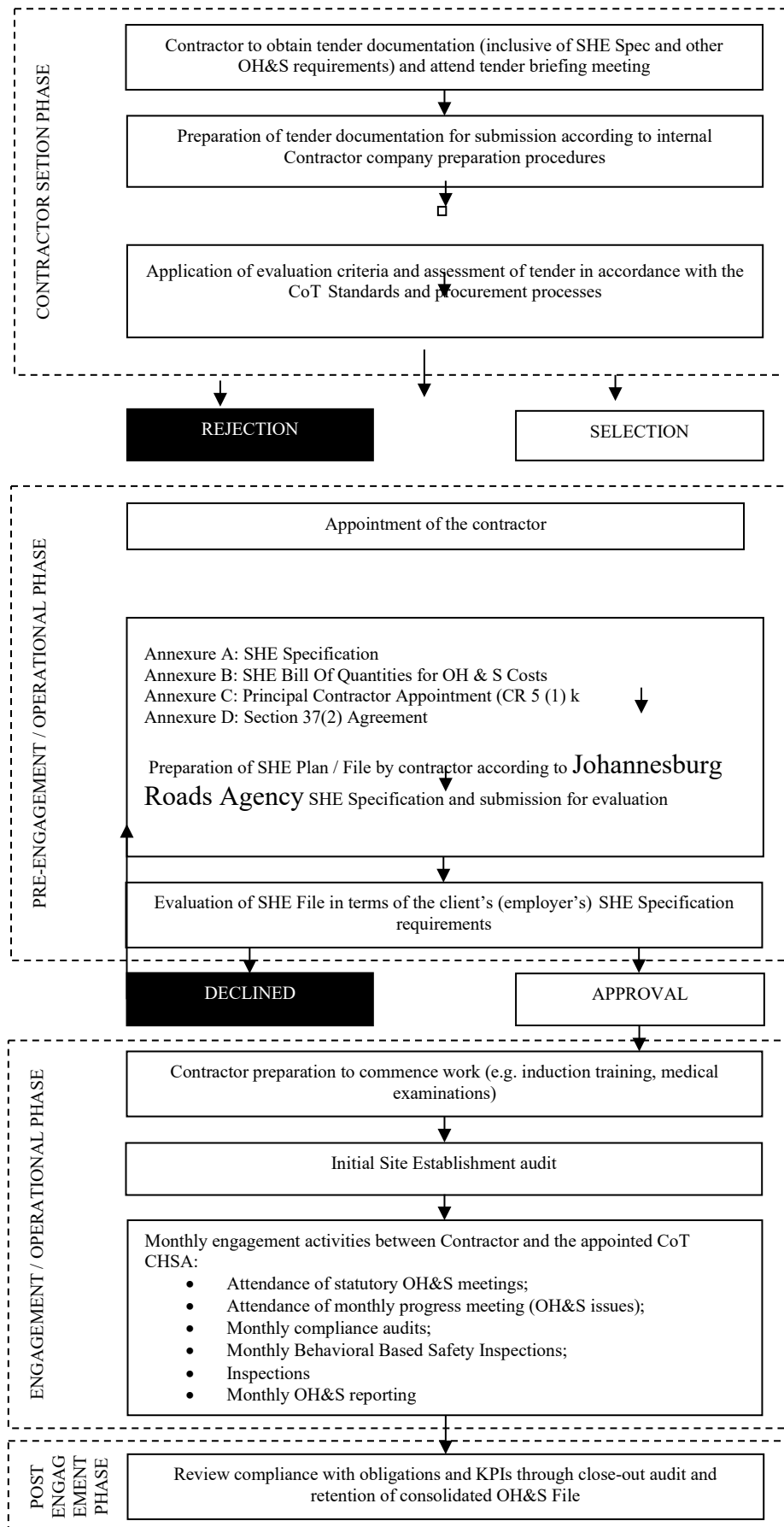
This Site-Specific Health and Safety Specification will be reviewed and updated periodically as and when necessary to address and / or include:

- Changes in legislation;
- As per Client requirements;
- Change in scope of work
- Construction Design review must consequently be followed by review of the Baseline Risk Assessment for the project and the SSHSS;
- Lessons learnt from incidents.

4. CONTRACTOR SELECTION, ENGAGEMENT AND MANAGEMENT PROCESS OVERVIEW

Figure 2: Contractor selection, engagement and management process overview

Scope of Work



Scope of Work

4.1 DEFINITIONS

The Act

Means, unless the context indicates otherwise, the Occupational Health and Safety Act, 85 of 1993 and Construction Regulations 2014 promulgated there under, (OHSA).

Acceptable Risk

A risk that has been reduced to a level that can be tolerated having regard for the applicable legal requirements and the Health and Safety Policy adopted for the project.

Agent

Means in terms of Construction Regulations, 2014, 'a competent person who acts as a representative for a client'.

ALARP (As Low as Reasonably Practicable)

The concept of weighing a risk against the sacrifice needed to implement the measures necessary to avoid the risk. With respect to health and safety, it is assumed that the measures should be implemented unless it can be shown that the sacrifice is grossly disproportionate to the benefit.

Applicant (Permit to Work)

A person requesting permission to perform work for which a Permit to Work is required. Applicants must be authorised (in writing) to receive (or accept) Permits to Work and must be competent to do so by virtue of their training, experience and knowledge of the area or plant in which the work is to be performed.

Authorised Person (Permit to Work)

A person (typically a Project employee or an employee of the client) who has been authorised (in writing) by the nominated project management representative to issue Permits to Work within the scope of his designation. A person may only be appointed to issue Permits to Work if he has undergone training and has been assessed and found competent in systems, plant and equipment operation within the scope of his designation.

Barricade

A temporary structure that is erected as a physical barrier to prevent persons from inadvertently coming into contact with an identified hazard.

Battering

Sloping the sides of an excavation to a predetermined angle (usually less than the natural angle of repose) to ensure stability.

Benching

The creation of a series of steps in the sides of an excavation to prevent collapse.

Client

Means any person for whom construction work is being performed.

Consequence

The outcome of an event expressed qualitatively or quantitatively.

Contractor

An employer performing construction work, or providing related or supporting services, on a project site.

Competent Person

A person who has in respect of the work or task to be performed the required knowledge, training, experience and as per OHS Act, 1993 (Act 85 of 1993) and CR 2014.

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.

Scope of Work

Construction Supervisor

A competent person responsible for supervising construction activities on a construction site.

Excavation

Any man-made cut, cavity, pit, trench, or depression in the earth's surface formed by removing rock, sand, soil or other material using tools, machinery, and / or explosives. Tunnels, caissons and cofferdams are specifically excluded and are not addressed in this standard.

First-Aid Injury (FA)

A first-aid injury is any one-time treatment and any follow up visit for observation of minor scratches, cuts, burns, splinters and the like which do not normally require medical care. Such treatment is considered to be first aid even if administered or supervised by a medical practitioner.

Hazard

A source of potential harm in terms of human injury or ill health, or a combination of these.

Hierarchy of Controls

A sequence of control measures, arranged in order of decreasing effectiveness, used to eliminate or minimise exposure to workplace health and safety hazards:

- Elimination – Completely removing a hazard or risk scenario from the workplace.
- Substitution – Replacing an activity, process or substance with a less hazardous alternative.
- Isolation (Engineering) Controls – Isolating a hazard from persons through the provision of mechanical aids, barriers, machine guarding, interlocks, extraction, ventilation or insulation.
- Administrative Controls – Establishing appropriate policies, procedures and work practices to reduce the exposure of persons to a hazard. This may include the provision of specific training and supervision.
- Personal Protective Equipment – Providing suitable and properly maintained PPE to cover and protect persons from a hazard (i.e. Prevent contact with the hazard).

Health and safety by Design- this is the process of managing health and safety risks throughout the lifecycle of structures, plant, substance or other products.

Incident

An event (or a continuous or repetitive series of events) that results or has the potential to result in a negative impact on people (employees, contractors and visitors), the environment, operational integrity, assets, community, process, product, legal liability and / or reputation.

Likelihood

A description of probability or frequency, in relation to the chance that an event will occur.

Lost Time Injury (LTI)

Any occurrence that resulted in a permanent disability or time lost from work of one day/shift or more. If an employee is injured and cannot return to work in the next shift (will ordinarily miss one whole shift), and the department brings the employee in to only receive treatment by the Supervisor/ Return to Work Coordinator in that shift, this is still considered an LTI.

Lost Time Injury Frequency Rate (LTIFR) - Number of LTI's multiplied by 1 million or 200,000 and divided by labour hours worked.

Light Vehicle

A vehicle that:

- Can be licensed and registered for use on a public road;
- Has four or more wheels, and seats a maximum of 12 adults (including the driver);
- Requires the driver to hold only a standard civil driving licence; and
- Does not exceed 4.5 tonnes gross vehicle mass (GVM), which is the maximum loaded mass of the motor vehicle as specified by:

Scope of Work

- ♦ The vehicle's manufacturer; or
- ♦ An approved and accredited automotive engineer, if the vehicle has been modified to the extent that the manufacturer's specification is no longer appropriate.

Examples of light vehicles include passenger cars, four-wheel drive vehicles, sports utility vehicles (suvs), pick-ups, minibuses, and light trucks.

Any vehicle falling outside of this definition must be considered mobile equipment.

Mobile Equipment

A vehicle (wheeled or tracked) that generally requires:

- The driver to hold a specific state or civil license; or
- The operator to hold a nationally recognized certificate of competency.

Examples of mobile equipment include, but are not limited to, dump trucks, water trucks, graders, dozers, loaders, excavators, forklifts, tractors, back-actors, bobcats, mobile cranes, tele- handlers, drill rigs, buses and road-going trucks.

Near-Miss

An incident that has occurred that did not result in any injuries, illnesses, environmental or property damage but had the potential to cause an injury, illness, environmental or property damage.

Personal Lock

A single lock with one unique key controlled by the owner. Used for personal protection.

Regulation

In the context of this guideline, 'Regulation(s)' refers to the Construction Regulations, 2014 required by Section 43 of the Occupational Health and Safety Act 85 of 1993, published under Government Notice R 84 in Government Gazette 37305 of February 2014.

Risk

A combination of the likelihood of an occurrence of a hazardous event or exposure and the severity of injury or ill health that can be caused by the event or exposure.

Risk Assessment

A process of evaluating the risk arising from a hazard, taking into account the adequacy of any existing control measures, and deciding on whether or not the risk is acceptable.

Risk Management

The systematic application of management policies, processes and procedures to identifying hazards, analysing and evaluating the associated risks, determining whether the risks are acceptable, and controlling and monitoring the risks on an ongoing basis.

Abbreviations

CR – Construction Regulations

CHSA- Construction Health and Safety Agent

CIDB- Construction Industry Development Board

CHSO- Construction Health and Safety Officer

DSTI - Daily Safety Task Instruction

DoL- Department of Employment and Labour

LTI- Lost Time Injury

HIRA - Hazard Identification and Risk Assessment

IMS - Integrated Management System

MS - Management System

OHS Act - Occupational Health and Safety Act

SSHSS- Site Specific Health and Safety Specification

SHE- Safety, Health and Environment

PTO – Planned Task Observation

PM- Project Manager

VFL - Visible Felt Leadership

Contract: RTD 05-2025/26: Tender for the Appointment of a Contractor for the Upgrading of Roads and Stormwater Systems in Ga-Rankuwa Zone 5:
Phase 1 for a duration of 18 months

Scope of Work

OHS - Occupational Health and Safety

VCT - Voluntary Counselling and Testing

SACPCMP - The South African Council for Project and Construction Management Professions, here in refer to as the registrar of Health and Safety Professionals

5. LEGAL REQUIREMENTS

Execution of project tasks must be in line with relevant applicable legislation throughout the project lifecycle, applicable standards and specifications and code of practice must be adhered to by the Principal Contractor and other contractors on the project. The Principal Contractor must compile a legal register that must also include applicable standards and specifications, code of practice including applicable municipal by-laws. The Principal Contractor must demonstrate SHE legal compliance throughout the project lifecycle.

5.1 GENERAL ADMINISTRATIVE REGULATIONS (GAR) REQUIREMENTS

- 5.1.1 Copy of the Act (OHS Act)
- 5.1.2 Health and Safety Representative
- 5.1.3 Health and Safety Committee
- 5.1.4 Reporting of Incidents and Occupational Diseases
- 5.1.5 Recording and Investigation of incidents
- 5.1.6 Registration in terms of the COID Act
- 5.1.7 Health and Safety File

5.1.1 Copy of the Act (Reg. No. 4 of GAR)

The contractor shall retain the copy of the OHS Act and the relevant regulations on site all the times, where there are more than five people on site.

Basic Conditions of Employment Act, Employment Equity Act and the General Machinery Regulations must also be available on site. The Principal Contractor must ensure that these are communicated to the construction personnel and an attendance register must be completed to certify this.

5.1.2 Designation of Health and Safety Representatives (Reg. No. 6 of GAR)

The team of employees on site must have a health and safety representative deployed on the project site(s). A Health and Safety Representative must be elected and appointed. Taking into consideration the number of employees deployed, the geographical area in which the work is taking place, the different work disciplines, and the shift pattern (if applicable), the contractor must ensure that an adequate number of Health and Safety Representatives (at a minimum ratio of one Health and Safety Representative per 50 employees) are elected and appointed to effectively represent all site personnel as required by the OHS Act 85 of 1993, section 17 - 18.

Each Health and Safety Representative must attend an accredited training course for health and safety representatives. The cost of this training shall be for the contractor's account.

The contractor must make the necessary allowances for the Health and Safety Representatives to carry out their duties as specified in the applicable legislation.

The contractor must ensure that the nominated and appointed SHE Rep is easily identifiable; this can be achieved through ensuring that the SHE Rep has a badge or sticker on his / her helmet (written) SHE Rep.

Without derogating from the aforementioned, the principal contractor / contractor shall ensure that the provisions of OHSACT 17-20 and General Administrative Regulations, 2003 (hereinafter GAR) 5 to 7 are implemented and adhered to.

5.1.3 Health and Safety Committee (Reg. No. 5 of GAR)

The Principal Contractor/Contractor shall convene a health and safety committee meeting monthly. All members required to be in attendance shall be notified of such meeting by means of a formal agenda

which must be made available to the Safety Agent / Project Manager upon request. Items on the agenda include but not limited to the following:

- Opening and welcome
- Members present, apologies and absent
- Minutes of previous meeting
- Matters arising from the previous meeting
- SHE rep deviation reports
- Outcomes of previous audit and behavioural based safety inspections
- Incident and / or accident reports and investigations
- Incident, accident and / or injury statistics
- Health and safety plan (revisions and new requirements)
- Training (awareness, competence and off-the-job)
- Emergency Preparedness Plan
- Non-conformances and notices
- Toolbox talks Program
- Close and next meeting

5.1.4 Reporting of Incidents and Occupational Diseases (Reg. No. 8 of GAR)

- (1) The contractor shall,
 - (a) Give notice to the Provincial director in the form of WCL 1 or WCL 2 within seven days of any incident referred to in section 24(1)(a) of the Act,
 - (b) Report to the provincial director by telephone, facsimile or similar communication where a person, in consequence of such an incident, dies, becomes unconscious, suffers the loss of a limb or part of a limb, or is otherwise injured or becomes ill to such a degree that he or she is likely either to die or to suffer a permanent physical defect, such incident, including any other incident contemplated in section 24(1)(b) and (c) of the Act.
- (2) The principal contractor shall furnish the provincial director with the following information whenever an incident arises to persons other than employees,
 - (a) name of the injured person;
 - (b) address of the injured person;
 - (c) name of the user, employer or self-employed person;
 - (d) address of the user, employer or self-employed person;
 - (e) telephone number of the user, employer or self-employed person;
 - (f) name of contact person;
 - (g) details of incident:
 - (i) what happened;
 - (ii) where it happened (place);
 - (iii) when it happened (date and time);
 - (iv) how it happened;
 - (v) why it happened; and
 - (h) names of witnesses.
- (3) The principal contractor shall make use of a registered medical practitioner for the examination or treatment of a person for a disease contemplated in section 25 of the Act, give notice thereof to the chief inspector and the employer in the form of WCL 22.
- (4) Any other person not contemplated in this regulation may in writing give notice of any disease contemplated in section 25 of the Act, to the employer and chief inspector.

5.1.5 Recording and Investigation of Incidents ((Reg. No. 9 of GAR)

The Principal Contractor shall report all incidents and accidents including near miss incidents, first aid, medical treatment, lost time incidents (disabling injuries & fatalities); OH&S Act Section 24 and 25 incidents; electrical contact; falls from height; major equipment damage; chemical spillage and other Environmental Incidents to the appointed Project Manager or Engineer within 24 hours of them occurring or, before the end of the work shift.

For any incident (near miss, first aid, medical) that has contravened any of the Statutory Requirements, the Contractor's Representative (Construction Health and Safety Officer) (including the Subcontractor's Representative, if applicable) may be required to present to the client, the incident and the mitigation measures that would be implemented to prevent a recurrence and the implementation of a deadline for all corrective actions to be implemented.

The Principal Contractor and all the other contractors shall ensure that immediate post incident drug and alcohol samples are taken for all parties who are involved in the accident. This may include machine operators, riggers, general labourers and supervisors as well as any witness and the injured. Testing may take place even if there is no property damage or injury, as in the event of a near miss.

If it is found that the Principal Contractor or their Subcontractors are not reporting incidents, actions (which may include disciplinary action) shall be taken against the contractor's or subcontractor's representatives.

A detailed investigation report, including supporting documents, proof of actions taken and proof of communication to other affected employees, shall be completed within 14 days of the incident and submitted to the Project Manager or Engineer formally for comment and review. Should the contractor require a greater period of time to conduct the investigation then permission should be sought from the client's representatives (Engineer or appointed Project Manager). Medical reports received by the contractor after the investigation submission should be forwarded immediately to the client's representative.

An Incident flash report shall be submitted by the Principal Contractor and all the Contractors upon knowledge of an incident; health and safety and occupational injury as soon as reasonably practicable.

Near misses shall be reported and investigated based on the severity of the near miss. The Principal Contractor and Contractors shall submit the completed investigation within seven days.

The Principal Contractor and all the other contractors shall ensure that all accidents / incidents are investigated by a competent person and are discussed at the relevant SHE meetings. The client reserves the right to participate in any accident / incident investigation if the accident / incident is directly linked to any activity related to the project. The Construction Health and Safety Agent (CHSA) must be part of the incident investigation team for all project related incidents.

The Principal Contractor shall keep at his Project Site Office a record of all accidents and incidents reported in the form of the OH&S Act Annexure 1 investigation form as referenced in the OH&S Act. (Incident Investigation Report).

The client or the client's appointed CHSA reserves the right to conduct an independent investigation of any accident and / or incident reported by the Principal Contractor or Subcontractors over and above their own investigations. The Principal Contractor and Subcontractors shall co-operate fully with the investigation and implement any additional improvement measures.

Investigations shall begin as soon as practicable after the incident / accident has occurred. Where applicable and with appropriate authorisation (when required), photographs shall be taken of the scene of the incident as well as any equipment involved. Interviews with witnesses shall be conducted as soon as possible after the incident occurred whilst it is still fresh in their memory and if necessary followed up later to determine if further information was recalled.

The Principal Contractor shall investigate all incidents immediately and supply to the Engineer a written report within five days, unless otherwise specified by Engineer, which shall include but not limited to:

- Date, time and place of incident;
- Description of incident;
- Root causes of incident/accident;
- Type of injury and/or (if any);
- Medical treatment provided (if any);
- Persons involved;
- Loss or damage sustained (if any);
- Names and contact details of witness/s;
- Description of corrective action to prevent a recurrence (with clear deadlines and persons identified for taking remedial action).
- All corrective actions shall be closed out within 14 days of the date of the incident, unless otherwise agreed by the Engineer.

5.1.6 Registration in terms of the COID Act

The Principal Contractor and all the other Contractors on site must be in good standing with the Compensation Commission for Occupational Injuries and Diseases or similar (Federated Employer's Mutual Assurance- FEMA) by registering in terms of the COID Act. A copy of a *valid letter of good standing* as issued by the Compensation Commission for Occupational Injuries and Diseases (Department of Employment and Labour) or similar (Federated Employer's Mutual Assurance- FEMA) must be retained in the safety file all the times.

5.1.7 Contents of the Health and Safety File (CR 7 (1) b)

The Principal Contractor shall open and retain on site a SHE file with the following minimum requirements:

- Notification of construction work to the Department of Employment and Labour
- Letter of good standing
- Safety, Health and Environmental (SHE) plan
- SHEQ policy, procedures and guidelines
- SHE Organogram
- Definitions
- Substance abuse, alcohol and Drug Policy
- Legal Appointments relevant to the project scope of work
- Risk Assessment relevant to the project scope of work
- Method statements relevant to the project scope of work
- Safe work procedures relevant to the high risk tasks and machinery
- Safety Induction derived from the risk assessment and aligned to the project scope of work.
- First aid arrangements
- Lifting and tackle equipment
- Excavation work
- Key Performance Indicators
- Working at heights (Fall Protection Plan)
- Access ladders
- Vehicle Safety policy for Construction vehicles and mobile plant
- Use and temporary storage of flammable liquids
- Incident Management
- Personal Protective Equipment
- Housekeeping
- Stacking and storage
- Fire precautions on site

- Emergency Evacuation plan
- Medical examination
- Toolbox talks
- Safety Audit
- Monthly SHE stats reporting and recording
- Traffic management plan
- SHE Communication
- Employee wellness program TB & HIV
- Waste Management
- Asset Register
- Inspection registers not limited to the following:
 - Accident and/or incident register;
 - Occupational health and safety representatives' inspection register;
 - Construction vehicles and mobile plan inspections;
 - Daily inspections of construction vehicles, plant and other equipment by the operator, driver and/or user;
 - Daily inspections of excavations by competent person;
 - Record of training;
 - Record of toolbox talks;
 - Designer's inspections record;
 - Inspection and maintenance of explosive powered tools;
 - Inspection of electrical installations (including inspection of portable electrical tools, electrical equipment and other electrical appliances);
 - Fall protection inspections;
 - First-aid box content;
 - Record of first-aid treatment;
 - Fire equipment inspection and maintenance;
 - Record of hazardous chemical substances kept and used on site;
 - Ladder inspection;
 - Machine safety inspections (including machine guards, lock-outs etcetera);
 - Inspection registers and logbooks for lifting machines and –tackle (including daily inspections by drivers/operators);
 - Inspection of excavation
 - Inspection of stacking and storage;
 - Inspection of use and temporary storage of flammable liquids on construction sites
 - Inspection of housekeeping and general safeguarding on construction site
 - Inspection of construction employees' facilities
 - Traffic accommodation signage inspection
 - Inspection of material hoists
 - Inspection of bulk mixing plant
 - Inspection of cranes
 - Inspection of construction vehicles and mobile plant
 - Inspections of vessels under pressure;
 - Inspection of electrical installations and machinery on construction sites; and
 - Records of issuing of Personal Protective Equipment;

The Principal Contractor must note that the contents mentioned herein must be used as a guideline, It is the responsibility of the Principal Contractor to ensure that the SHE file is comprehensive and entails all the procedures meant to mitigate the project's identified risk and endeavour to meet health and safety legal requirements. The Principal Contractor must ensure that all the Contractors (subcontractors) on site develop and submit a SHE file to the approval of the CHSO, contents thereof must be discussed between the Principal Contractor's CHSO and the Contractors SHE personnel.

5.2 GENERAL SAFETY REGULATIONS (GSR) REQUIREMENTS

5.2.1 Personal Protective Equipment (Safety PPE and Clothing)

All applicable legislation concerning Personal Protective Equipment (PPE) must be complied with at all times. As a minimum, the following PPE must be worn by all persons (including visitors) at all times whilst on the project site:

- Safety footwear with steel toe protection;
- Face mask;
- Safety glasses (individuals who wear prescription spectacles must be provided with either over-spec safety glasses or prescription safety glasses);
- Safety helmet (hard hat); and
- High visibility protective clothing with reflective taping (long trousers and long-sleeved shirts with collars and cuffs).
- Additional PPE requirements must be informed by hazard identification and risk assessment i.e. must be risk based. This hazard-specific PPE (such as hand protection, welding suit, hearing protection and respiratory protection) must be worn as required (e.g. when in a certain area, when performing a certain task, or when working with a certain substance);
- The correct PPE must always be worn:
- In accordance with site requirements (as indicated at the entrances to a project site and at the entrances to buildings and / or designated areas on the premises);
- In zoned areas (e.g. noise zones and respirator zones); or
- As required by a Safe Work Procedure, a risk assessment, safety information boards or a Material Safety Data Sheet (MSDS).

The Principal Contractor and all the Contractors must provide each of his employees with all required PPE (at no cost to the employee). Only in isolated circumstances such as proven act of negligence by the employee should a cost be attached to the replacement of the PPE. The specific PPE that is provided to a particular employee must be based on the nature of that employee's work and the location in which the work is performed (i.e. must be based on the hazards and risks which the employee is exposed to). PPE requirements for a particular job or for a particular area must be determined through a risk assessment for that task or area.

Any employee who does not have all of the PPE that is required for him to perform his duties safely will not be permitted to work. Each employee must care for his PPE, maintain it in good condition, and inspect it on a daily basis. If an item of PPE has worn out, has become damaged, or is found to be defective in any way, it must be replaced by the contractor.

PPE must be stored in accordance with the manufacturer's requirements and / or recommendations. All PPE issued must be SABS (or equivalent) approved.

Each employee must receive training in the use, maintenance and limitations of the PPE that is provided to him, and must be made aware of why the PPE is necessary as well as the consequences of not wearing it as instructed (i.e. the potential for injury and / or disciplinary action). Training records must be retained.

The Principal Contractor and all the Contractors must conduct a PPE survey so as to define the relevant PPE per project task this must be aligned to the risk profile of the task in question.

Any person who refuses to wear PPE as required must follow the necessary Principal Contractor's disciplinary procedures and must not be allowed to conduct any site tasks. Symbolic signs indicating mandatory PPE requirements must be prominently displayed at the entrances to a project site and at the entrances to buildings

and / or designated areas on the premises where additional PPE is required. These signs must comply with the applicable national standard (if one exists).

The Principal Contractor and any other Contractor must appoint an employee to:

- Control the issuing and replacement of PPE;
- Keep an up-to-date register as proof that items of PPE have been issued to individuals (an employee must sign for the items that he receives);
- Ensure that there is an adequate supply of all required PPE (i.e. maintain PPE stock levels on site); and
- Carry out regular inspections to ensure that PPE is being used correctly, is being maintained in a good, serviceable and hygienic state, and is not being shared between employees

5.2.2 Access Control/Admittance of Persons

All persons shall report to the Security Officer at the main site office before proceeding to site. Visitors shall sign a visitors' log book and read through the induction notes as detailed on the induction book. All visitors to be accompanied by an authorized person for inspections and other site related assignments.

5.2.3 Display of Notices, Symbolic SHE signs, Hazard Notices and danger areas

All symbolic safety signage that the Principal Contractor is to use/display shall conform to the requirements of SANS 1186.

The display of the following signs is mandatory:

- For Site Establishment: The Principal Contractor's Company Name Sign must be posted at their site offices to reflect the name and contact details of the: Construction Manager; CHSO; First Aider(s); Health and Safety Representative and Evacuation arrangements.
- The Principal Contractor must ensure that the name board is aligned to the employer's requirements in terms of contents thereof.
- "Radio-Active Material" symbolic signs for radioactive material storage areas.
- The location of every First Aid Box; Fire Extinguisher and Emergency Exit is to be clearly indicated by means of appropriate signage.
- When in use, an explosive Power Tool shall have signage warning of its operation.
- Other specific signage for high risk activities shall be displayed e.g. deep excavations and traffic accommodation signage.
- Contractor(s) shall post Company Name Sign on all fuel storage containers.
- Symbolic SHE signs must be displayed as per the risk profile of the task in the different project areas.

The Contractor shall provide the signage where work is carried out, where unauthorised entry is prohibited and/or where alerting and cautioning passers-by to be aware of potential dangers. Risk based signage shall be installed as the project progresses.

5.2.4 First Aid, Emergency Equipment & Procedures

The Principal Contractor must develop, implement, test and maintain an Emergency Preparedness Plan (incorporating emergency evacuation procedures with all the necessary emergency evacuation routes) that focuses specifically on the Principal Contractor's team and work activities and sequence. The plan must be risk-based and must detail the procedures that must be followed when responding to all potential emergency scenarios such as a medical emergency (including first aid response), a fire, an explosion, a hazardous substance spill, flooding, rescue from height, rescue from a confined space, mob violence, hostage situation etc.

Consideration must be given also to potential off-site emergency scenarios must be included (e.g. emergency

scenarios related to the transport of personnel, strikes, the transport of hazardous materials, and personnel performing work in remote locations and lone working).

The Emergency Preparedness Plan must satisfy and comply with all applicable legal requirements. The plan must be adequately resourced to ensure effective implementation. These resources must include appropriate personnel, external emergency response service providers, emergency response equipment, and warning devices. All equipment and warning devices must be identified, maintained and tested to ensure availability at all times.

Accountability for the Emergency Preparedness Plan must be clearly defined. An Emergency Response Team (ERT) responsible for the implementation, management and execution of the Emergency Preparedness Plan must be established. The roles and responsibilities of each team member must be clearly defined in the plan. Each team member must receive appropriate training to ensure that each role is performed competently.

The process for managing incident communication, notification, and reporting must be incorporated into the Emergency Preparedness Plan. The responsible person(s) must be clearly identified, and the protocols for communicating with internal and external stakeholders must be defined.

Emergency evacuation procedures must be developed and included in the Emergency Preparedness Plan. A copy of the plan must be submitted to the CHSA or the Resident Engineer or his representative for approval prior to site establishment. The Emergency Preparedness Plan must be formally reviewed (and amended if necessary) when project needs require, and following any emergency situation, to ensure that it remains appropriate and effective.

At each project work site, as a minimum:

- A suitable evacuation alarm (whistle or siren) must be provided. All persons working in an area where an evacuation alarm is sounded must respond to it immediately.
- Suitable fire-fighting equipment must be provided and maintained, and personnel must be trained in fire-fighting procedures and the use of fire-fighting equipment.
- Suitable first aid equipment and supplies must be provided and maintained, and an adequate number of appropriately trained First Aiders must be in place.
- Emergency assembly points positioned in safe locations away from buildings, plant and equipment must be designated (and conspicuously signposted). In the event of an evacuation, all persons (i.e. personnel and visitors) must assemble and be accounted for at these emergency assembly points.
- All personnel must receive awareness training on the applicable Emergency response procedures, and all visitors entering the site must be properly instructed in these procedures.
- The Emergency response procedures must be displayed on each notice board.
- A diagram (site plan) indicating evacuation routes, emergency assembly point locations, and the positioning of emergency equipment (fire extinguishers, first aid boxes, etc.) must be prominently displayed in all buildings and plants, in all offices, on all notice boards, and in other locations on the site as may be required.
- An up-to-date list of emergency telephone numbers must be compiled and maintained. A copy of this list must be posted at each site entrance, in each office, near each telephone, and on every notice board.
- Emergency response drills must be conducted to test the effectiveness of the emergency procedures and equipment, as well as the knowledge and proficiency of the response personnel consisting mainly site personnel. Where appropriate, drills must include liaison with and the involvement of external emergency response service providers. A range of emergency scenarios must be tested including, but not limited to, medical emergencies, fires, rescues, and hazardous substance spills. A drill must be carried out one month after site establishment and then again six months thereafter.

Each drill must be monitored, and the outcomes (highlights and shortcomings) must be documented.

Corrective actions must be identified and implemented to address the shortcomings, and the Emergency Preparedness Plan and associated procedures must be amended as required.

Fire Fighting

The contractor must ensure that Fire Fighting requirements are complied with. An appointed competent Fire Fighter must be appointed to ensure compliance to firefighting requirements. Applicable standards and codes of practice apply.

First Aid and First Aid Kits

The Principal Contractor must ensure that First Aiders are trained and appointed as described in the Site-Specific Health and Safety Specification and in accordance with relevant legislative requirements.

A suitable first aid kit (i.e. appropriate to the level of training) must be readily available to each First Aider. All kits must be provided and maintained by the contractor.

Taking into account the type of injuries that are likely to occur in the workplace, each first aid kit must contain suitable equipment and supplies. First aid equipment and supplies required by applicable legislation must be provided as a minimum.

The contents of each first aid kit must be kept clean and dry. Each kit must be contained in either a portable weather-proof case / bag or a steel box mounted to a fixed structure. Access to first aid equipment / supplies must be limited to train First Aiders only. Access to portable kit bags must be controlled and steel first aid boxes mounted in the workplace must be kept locked. Approved signage must be in place to indicate the locations of the first aid boxes / bags. A record of each treatment administered must be kept in a suitable register.

No tablets or medication to be stored in the first aid box. No tablets or medication to be administered by first aiders or other personnel to employees who are not feeling well or have been injured.

The first aid kits must, as a minimum, contain the following equipment and supplies:

Table1: Minimum Requirements to be included when equipping first aid boxes

Item 1:	Wound cleaner/ antiseptic – 100ml;
Item 2:	Swabs for cleaning wounds;
Item 3:	Cotton wool for padding – 100g;
Item 4:	Sterile gauze – minimum quantity 10;
Item 5:	1 x Pair of forceps – for splinters;
Item 6:	1 x Pair of scissors – minimum size 100mm
Item 7:	1 x Set of safety pins;
Item 8:	4 x Triangular bandages;
Item 9:	4 x Roller bandages – 75mm x 5m;
Item 10:	4 x Roller bandages – 100mm x 5m;
Item 11:	1 x Roll of elastic adhesive – 25mm x 3m;
Item 12:	1 x Non-allergenic adhesive strip – 25mm x 3m;
Item 13:	1 x Packet of adhesive dressing strips – minimum quantity 10 assorted sizes;
Item 14:	4 x First aid dressings – 75mm x 100mm;
Item 15:	4 x First aid dressings – 150mm x 200mm;
Item 16:	2 x Straight splints;
Item 17:	2 x Pairs large and 2 x pairs medium disposable latex gloves;

Item 18:	2 x CPR mouth pieces or similar devices.
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Additional items / supplies may need to be provided depending on the nature of the workplace (specific hazards) and the level of training of the first aider in position of the kit.

5.2.5 Work in Elevated Positions

There is no scope for working in elevated positions for this project. Where a contractor is appointed to install street lights and light fittings the requirements of Construction Regulations 10 shall be adhered to.

5.2.6 Use and storage of flammable liquids

Refer to Operational Control Section of the SSHSS

5.2.7 Stacking of articles

The Principal Contractor and all the other contractors must, in addition to compliance with the provisions for the stacking of articles in the General Safety Regulations, 2003, ensure that:

- A competent person is appointed in writing with the duty of supervising all stacking and storage on a construction site;
- Adequate storage areas are provided;
- There are demarcated storage areas; and
- Storage areas are kept neat and under control.

5.2.8 Ladders

Access step ladders shall be used for deep excavations, the following requirements shall be complied with regarding ladders and ladder work:

- The term "ladders" refers to both fixed and portable ladders.
- Ladders shall be clearly numbered, and inspected on the register provided.
- A competent person shall be identified and appointed as the ladder inspector.
- Where aluminium ladders cannot be used, then wooden ladders shall be straight grained, unpainted to allow for proper inspection of the grain for cracking.
- Ladders shall be secured at the top and chocked at the base to prevent slipping.
- Where chocking of the base is not possible, then the user shall ensure that the ladder is held in position by another employee when ascending the ladder.
- Ladders shall be inspected a minimum once per month by the person appointed as the ladder inspector.
- Proper storage shall be provided for all ladders when not in use.

5.3 APPLICATION OF CONSTRUCTION REGULATIONS (CR) (2014 REQUIREMENTS)

The intended construction work falls within the scope of “construction work” as defined in the Construction Regulations, 2014 made under the Occupational Health and Safety Act 1993 (OHS Act), as amended (“the Act”).

5.3.1 Construction Design Management (CR 6- Duties of Designer)

The Designers must ensure that all the designs for the project are in line with the requirements of Construction Regulation 6 and the requirements for construction material and substances as spelt out in the OHS Act Sect 10: General duties of manufacturers and others regarding articles and substances for use at work are met.

The Designers must demonstrate proof that health and safety by design prevails throughout all the construction stages of the project. As a minimum requirement a Design Health and Safety Report should be compiled at Design Stage and must consequently form part of the contract documentation to be accessible to contractors for construction documentation and management stage.

The minimum requirements of the Design Health and Safety Report should consist but not limited to the following:

- The purpose of the project as outlined by the client / client representative in the project brief.
- All the relevant parties consulted in undertaking the design.
- Design risk register.
- Product Technical statements and relevant material safety data sheets for construction.
- Relevant test results as outlined in the contract documents and relevant code of practice.
- The hazards and risks identified during the design process, and control measures incorporated into the design, specifically in relation to:
 - Any hazardous materials specified in the design.
 - Any unusual or atypical features requiring attention during construction stage.
 - Evidence of consideration of design ergonomics while undertaking the design.
 - Any features of the design which present specific risks.
 - The recommended control measures for any foreseeable activities (for instance operation, maintenance, repair and any disposal requirements).
- Manuals and procedures for safe operations and maintenance post project completion.

The Designers must provide evidence and supporting documentation throughout the Design Development such as:

- Design Development Planning
- Design and development inputs
- Design development controls and related reviews
- Design Development desired outputs and hold points to support design reviews conducted.
- Design and development changes.
- Final Design approval and provision for ongoing design reviews to manage health and safety risks.

5.3.2 Contractor Health and Safety Management System (HSMS)

Health and Safety Philosophy

Health and safety is a shared responsibility and teamwork effort. The client shall endeavour to provide a working environment that is free from health, safety and environmental hazards. To this end, the Principal Contractor and all the other Subcontractors in the project must execute their tasks in the safest possible manner. The Principal Contractor must ensure that a health and safety management system is developed, implemented, monitored and continually reviewed on site to ensure that the risk of harm to employees from construction hazards is reduced to as a low as reasonably practicable. The Health and Safety Management

System must clearly outline the following steps 'Plan, Do, Check, Act' and the risk-based approach to site tasks, this approach shall be explained in detail to the Principal Contractor upon contractor and subcontractor induction to be conducted by the Construction Health and Safety Agent.

5.3.2.1 Occupational Health and Safety (OHS) Structure and Responsibilities

(i) APPOINTMENTS

All appointment letters must be signed by the appointer and acknowledged by the appointee. Appointment letters must be retained in the SHE file and must be up to date with the duration of the appointment. The following legal appointments are relevant to this project:

Chief Executive Officer	[OHSAct Section 16.1]
Project Manager	[OHSAct Section 16.2]
Construction Manager	[Construction Regulation 8.1]
Construction Health and Safety Officer	[Construction Regulation 8(5)]
Construction Supervisor	[Construction Regulation 8(7)]
Construction Supervisor Assistant	[Construction Regulation 8(8)]
Temporary Electrical Installations Insp & Controller	[Construction Regulation 24 e]
Electrical Machinery Inspector	[Construction Regulation 24 d]
Drivers/Operators of Construction Vehicles/Plant	[Construction Regulation 23]
Crane Operator	[Construction Regulation 22 a]
Emergency/Security/Fire Coordinator	[Construction Regulation 29]
Excavation Supervisor	[Construction Regulation 13(1) a]
Excavation Inspector	[Construction Regulation 13 (2) h]
First Aider	[General Safety Regulation 3]
Fire Fighting Equipment Inspector	[Construction Regulation 29]
Hazardous Chemical Substances Supervisor	[HCS Regulations 10]
Incident Investigator	[General Admin Regulation 9]
OH&S Committee	[OHSAct Section 19]
OH&S Officer	[Construction Regulation 8(5)]
OH&S Representatives	[OHSAct Section 17]
Person Responsible for Machinery	[General Machinery Regulation 2]
Risk Assessor	[Construction Regulation 9(1)]
Stacking and Storage Supervisor	[Construction Regulation 28]
Construction Vehicles/Mobile Plant/Machinery Operator	[Construction Regulation 23 (1) d]
Construction Vehicles/Mobile Plant Inspector	[Construction Regulation 23]
Ladder Inspector	[General Safety Regulation 13 A]
Lifting Machine Inspector (5)]	[Driven Machinery Regulation 18
Lifting Machinery Operator (11)]	[Driven Machinery Regulation 18
Lifting Tackle Inspector (10) e]	[Driven Machinery Regulation 18
Goods Hoist Inspector (2)]	[Driven Machinery Regulation 17
Handtools Inspector	[OHS Act Sect 8]

Based on the HIGH degree of risk attached to the project, a Full-Time Construction Health and Safety Officer (CR 8.5) registered with SACPCMP as a Construction Health and Safety Officer must be appointed to oversee construction health and safety aspects of the project.

The above legal appointments are not exhaustive the Principal Contractor and all the other subcontractors must ensure that the Legal appointments register is updated in line with the changing scope of work and consequent risk register. **Change of Project Personnel must be done with the approval of the client's representative.**

(ii) ADDITIONAL DUTIES OF PRINCIPAL CONTRACTOR

- a) It is the responsibility of the principal contractor to notify the Department of Employment and Labour regarding the intended construction work. Notification of construction work with the Department of Employment and Labour is applicable to this project.
- b) Coordination, supervision and monitoring of other contractors on site remains the responsibility of the Principal Contractor.
It is the responsibility of the principal contractor to carry out duties as outlined in the Construction Regulations 7. All subcontractors are required to submit a complete health and safety file to Safety Agent. The later shall evaluate and approve the safety file. A minimum score of 95% must be achieved by any contractor before commencement with any tasks on site.
- c) The Principal contractor must provide proof of registration with the Compensation commission or any other registered insurer. The letter of good standing must be valid and available on site all the times.
- d) The Principal Contractor must engage with the CHSA with respect to subcontractor challenges when it comes to development and implementation of the safety management system on site which must be aligned to the SSHSS and also the baseline risk assessment for the project.

(iii) MANDATARIES

The Principal Contractor shall be appointed by the client to undertake construction work on site in terms of Construction Regulations 5 (1) k. An Agent (The Project Manager, Project Engineer) is appointed in writing to represent the client. The Construction Regulations places the responsibility on the client to oversee health and safety matters (who in turn appoints a Construction Health and Safety Agent to oversee health and safety aspects of the project. The Project Manager or Project Engineer must be competent to perform project management functions of the project.

(iv) SCHEDULE OF ALL CONTRACTORS

A sub-contractor list with key contact persons shall be maintained on site. All subcontractors shall be evaluated for competence and compliance to health, safety, environmental and other applicable legislation. Each subcontractor shall be legally appointed and shall be required to sign the Construction Regulation 7 1 C v appointment and the Occupational Health and Safety Act Section 37 (1) (2) Mandatary agreement.

(v) OCCUPATIONAL HEALTH AND SAFETY ACT SECTION 37(2) AGREEMENTS

The principal contractor shall sign the 37 (1) (2) agreement with the client. All other subcontractors on site shall also sign the Sect 37 (1) (2) upon appointment by the principal contractor.

5.3.2.2 GENERAL OHS PROVISIONS

5.3.2.2.1 Risk Assessment and Method Statement

(Project specific assessment requirements / Potential Sources of risks, RA Plan and Contractor Health and Safety Plan)

Detailed hazard identification and risk assessment processes must be followed for all work to be performed as well as for all associated equipment and facilities as required by the Construction Regulation of 2014, Regulation 9(1) – (7).

The Client through the appointed Construction Health and Safety Agent shall provide a baseline risk

assessment (BRA) informing the Principal Contractor on the hazards and risks relevant to the project. The Principal Contractor must also conduct a detailed suitable and sufficient risk assessment for the project. The Principal Contractor must ensure that effective procedures and risk assessment systems are in place to control hazards and to mitigate risks to levels that are as low as is reasonably practicable.

The risk assessment processes must be applied to:

- The full life cycle of the project, including any design changes within the project scope of work;
- Routine and non-routine activities;
- Planned or unplanned changes;
- All employees, sub-contractors, suppliers and visitors; and
- All infrastructure, equipment and materials.

The risk assessment processes and methodologies must be in context with the nature and scale of the risks, and must be compiled and implemented by competent persons. To this end, a competent risk assessor must be appointed in writing.

The process of analysing and managing risk must include the following:

- Establishing the context of the risk assessment;
- Identifying hazards and determining possible risk scenarios (unwanted events);
- Evaluating risks and assigning ratings (classification);
- Recording the risk analysis in a risk register;
- Managing risks according to their classification (prioritising for action);
- Identifying and implementing control measures (through the application of the Hierarchy of Controls) to ensure that risks are managed to levels that are as low as is reasonably practicable (ALARP);
- Developing action plans for reducing risk levels (where possible);
- Verifying the completion of actions;
- Re-evaluating the risks and classifications as appropriate; and
- Reviewing and updating the risk register.

Baseline Risk Assessments

Prior to site establishment, (the Client or appointed client representative, the CHSA in this instance) will conduct a detailed Baseline Risk Assessment identifying foreseeable hazards and risk scenarios associated with the contractor's scope of work on the project site(s) as required by Construction Regulations of 2014, regulation 5(1)(a). Details concerning proposed control measures shall be included. The Principal Contractor shall conduct a task based risk assessment for all the project tasks, ideally the project programme of works should be used to align the task based risk assessment and ensure that all high risk project tasks are adequately assessed. The risk assessment process must be facilitated by a competent person who has been appointed in writing and must involve the participation of the contractor's site management representatives, supervisory personnel and technical experts. An attendance register must be completed and retained for reference purpose. The Baseline Risk Assessment must be reviewed and approved by the Project CHSO and Project Construction Manager.

When carrying out a Baseline Risk Assessment or a Task-Based Risk Assessment, Hazard (Energy) Types must be specified. Risk scenarios must be described indicating the manner in which a person may come into contact with, or be exposed to, a specific hazard.

An initial risk rating must be assigned to each risk scenario without taking any control measures into consideration. Control measures for managing the risks to levels that are as low as is reasonably

practicable must then be identified for implementation on the project, and a residual risk rating must be assigned to each risk scenario taking the identified control measures into consideration.

A Risk Register comprising of all significant risks (i.e. Risks rated as major or catastrophic) identified for the project will be compiled using the information contained in the project Baseline Risk Assessment as well as the contractor's Baseline Risk Assessment. Key control measures for managing each of these risks will be specified in the register.

For the significant risks in particular, action plans will be developed for reducing the risk levels (where possible).

The project Risk Register will be reviewed and, if necessary, updated:

- On a quarterly basis during construction;
- When changes are made to a design and / or the construction scope, schedule, methods, etc. That result in a change to the risk profile; and
- Following an incident.
- Project risk monitoring and review plan must be retained by the contractor and any subcontractor on site.

The Principal Contractor must ensure that the hazards, risk scenarios and control measures identified in the contractor's Baseline and Task-Based Risk Assessments are taken into consideration when developing, implementing and maintaining the various elements of the contractor's health and safety management system for the project (e.g. Competence, training and awareness requirements).

All persons potentially affected must be made aware of the hazards, risk scenarios and control measures identified in the contractor's risk assessments. This must be done through training, Toolbox Talks, and Daily Safe Task Instructions.

Task-Based Risk Assessments

The Principal Contractor must carry out detailed project-specific Task-Based Risk Assessments which must be reviewed and approved by the Client's appointed CHSA and internally by the Principal Contractor's Project Construction Manager prior to the commencement of any work.

The risk assessment process must be facilitated by a competent person who has been appointed in writing in terms CR 9 sub regulation (1). The contractor's site management representatives, supervisory personnel, technical experts (as required) and workforce personnel directly involved with the task being examined must participate in the risk assessment process. An attendance register must be completed and retained.

Please Note: Under no circumstances may a Contractor's Health and Safety Officer perform a risk assessment in on his/ her own. The active participation of all persons referred to above is mandatory, a risk assessment team must conduct the risk assessment.

A Task-Based Risk Assessment must at least:

- Be accompanied by a Work Method Statement (describing in sufficient detail how the specific job or task is to be performed in a logical and sequential manner);
- Provide a breakdown of the job or task into specific steps;
- Identify the hazards and potential risk scenarios associated with each step;
- Include consideration of possible exposure to noise, heat, dust, fumes, vapours, gases, chemicals, radiation, vibration, ergonomic stressors, or any other occupational health hazard or stressor;
- Describe the control measures that will be implemented to ensure that the risks are managed to levels that are as low as is reasonably practicable; and
- Assign an initial risk rating (without taking any control measures into consideration) and a residual

risk rating (taking the identified control measures into consideration) to each risk scenario.

A Task-Based Risk Assessment must be reviewed and, if necessary, updated:

- On an annual basis (as a minimum);
- When changes are made to the associated Work Method Statement; and
- Where there are changes to the project scope.
- Where there are design changes.
- Introduction of new equipment.
- Introduction of new personnel.
- Introduction of new material.
- Following an incident.
- Whenever the need arise based on the progress of the project.

The Principal Contractor and all the other contractors are advised to align the Task Based Risk assessment to the tasks as outlined in the Project Programme of works for their specific project scope of work. The following is a guide in terms of tasks and equipment that require risk assessment:

- **Site establishment**
- **Setting out of works**
- **Accommodation of traffic**
- **Excavation of trenches**
- **Construction of bedding**
- **Installation of stormwater sewers including construction of inlet, outlet structures and junction boxes**
- **Backfilling**
- **Structures and appurtenant to stormwater systems (inlets, junction boxes and manholes)**
- **Quality control**
- **Maintenance of the work during the construction and subsequent liability periods**
- **Any other specific tasks as part of the project works.**

It remains the responsibility of the Principal Contractor and all the other contractors in the project to ensure that the risk assessment is aligned and relevant to their scope of work.

Pre-Task Hazard Assessments (Daily Safety Task Instruction- DSTI)

A pre-task hazard assessment (Daily Safety Task Instruction- DSTI) must be completed before conducting any task on site and whenever a change is identified while carrying out an activity. Any deviation from what was discussed during the Daily Safety Task Instruction (prior to the activity commencing), or anything that was not discussed, constitutes a change.

Before carrying out the particular task that involves the identified change, a few minutes must be spent identifying the hazards and risks associated with that task as well as suitable control measures.

5.3.2.3 CONTRACTOR HEALTH AND SAFETY PLANS

The Principal Contractor must prepare, implement and maintain a project-specific Health and Safety Management Plan. The plan must adhere to the requirements of the SHE specification, aligned to the project risk assessment and comply with relevant/applicable legislation. It must cover all activities that will be undertaken as part of the Project from project inception, site mobilisation, project implementation right up to decommissioning.

The plan must demonstrate the Principal Contractor 's commitment to health and safety and must, as a

minimum, include the following:

- A copy of the contractor's **Health and Safety Policy**; in terms of the OHS Act section 7
- Procedures concerning **Hazard Identification and Risk Assessment**, including both Baseline and Task-Based Risk Assessments;
- Arrangements concerning the identification of applicable Legal and Other Requirements, measures to ensure compliance with these requirements, and measures to ensure that this information is accessible to relevant personnel;
- Details concerning Health and Safety Objectives – a process must be in place for setting objectives (and developing associated action plans) to drive continual improvement;
- Details concerning Resources, Accountabilities and Responsibilities – this includes the assignment of specific health and safety responsibilities to individuals in accordance with legal or project requirements, including the appointment of a Project Manager, Health and Safety Officers, Supervisors, Health and Safety Representatives, and First Aiders;
- Details concerning Competence, Training and Awareness – a system must be in place to ensure that each employee is suitably trained and competent, and procedures must be in place for identifying training needs and providing the necessary training;
- Communication, Participation and Consultation arrangements concerning health and safety, including Safety Observations and Coaching, Toolbox Talks, Daily Safe Task Instructions, project health and safety meetings, and notice boards;
- Documentation and Document Control – project-specific documentation required for the effective management of health and safety on the project must be developed and maintained, and processes must be in place for the control of these documents;
- Processes and procedures for maintaining Operational Control, including rules and requirements (typically contained in Safe Work Procedures) for effectively managing health and safety risks, particularly critical risks associated with working at heights, confined spaces, mobile equipment and light vehicles, lifting operations, hazardous chemical substances, etc.;
- Emergency Preparedness and Response procedures;
- Fall protection planning
- Management of Change – a process must be in place to ensure that health and safety risks are considered before changes are implemented;
- Sub-contractor Alignment procedures – a process must be in place for the assessment of sub-contractors and suppliers with regard to health and safety requirements and performance (before any contract or purchase order is awarded);
- Measuring and Monitoring plans, including a plan for the measuring and monitoring of employee exposure to hazardous substances or agents (e.g. Noise, dust, etc.) In order to determine the effectiveness of control measures;
- Incident Reporting and Investigation procedures describing the protocols to be followed with regard to incident reporting, recording, investigation and analysis;
- Non-conformance and Action Management procedures concerning the management of corrective actions;
- Performance Assessment and Auditing procedures concerning health and safety performance reporting, monthly internal audits to assess compliance with the project health and safety requirements, and daily site health and safety inspections; and
- Details concerning the Management Review process followed to assess the effectiveness of health and safety management efforts.

Once the plan has been reviewed, the Principal Contractor must action and resolve any outstanding issues within 7 days from the start of work.

If the issues requiring corrective action are not resolved within this 7-day period, the Principal Contractor

shall submit an action plan with relevant commitment dates.

Any proposed amendments or revisions to the Principal Contractor 's Health and Safety Management Plan must be submitted and approved by the client's appointed CHSA.

Should it be identified that the contractor has overlooked a high risk activity, and as a result has omitted the activity and associated control measures from the Health and Safety Management Plan, the plan will not be approved. The Principal Contractor shall be advised to review the Health and Safety Management Plan incorporating the omissions as identified before approval by the CHSA.

5.3.2.4 H & S POLICY

The Principal Contractor must develop, display, communicate and implement a Health and Safety Policy that clearly states the Principal Contractor 's values and objectives for the effective management of health and safety as required by OHS Act of 1993, 7(3). These values and objectives must be endorsed by the contractor 's management representative (ideally the Chief Executive Officer) and must be consistent with those adopted for the project.

The policy must be signed and dated, and must be reviewed annually. The policy must commit to:

- Compliance with all applicable legal requirements;
- The effective management of health and safety risks;
- Risk based approach to project tasks
- The establishment of measurable objectives for improving performance, and the provision of the necessary resources to meet these objectives;
- The prevention of incidents; and
- Achieving continual improvement with regard to health and safety performance.

All employees of the Principal Contractor as well as the employees of any sub-contractors that may be appointed by the Principal Contractor must be made aware of the policy. This must be done through Health and Safety Induction Training and Toolbox Talks. A copy of the policy must be displayed in each meeting room and on each notice board. The copy of the health and safety (environmental policy) must be available for interested and affected parties.

5.3.2.5 LEGISLATIVE REQUIREMENTS AND SITE SPECIFIC REQUIREMENTS

The Principal Contractor must comply with the requirements of all applicable health, safety and environmental legislation as well as any other project-specific standards, relevant codes of practice and procedures as issued by the client.

The Principal Contractor must compile and maintain a register of all legal and other (standards, specifications, codes of practice and municipal by laws) requirements relevant to the project. This register must be updated regularly to ensure relevance.

Applicable laws and standards must be appropriately communicated to all employees of the contractor (as well as the employees of any sub-contractors that may be appointed by the contractor) through training, Toolbox Talks, and Daily Safety Task Instructions.

5.3.2.6 OHS GOALS AND OBJECTIVES & ARRANGEMENTS FOR MONITORING AND REVIEW OF OHS PERFORMANCE

The Principal Contractor and all the other contractors are required to maintain zero man-days lost. The contractor will report man-days lost to the client on a monthly basis.

$$\text{LTIR} = \frac{(\text{Number of Lost Time Injuries}) \times 200\,000}{\text{Total Man-Days Worked}}$$

Total Number of Man-hours Worked Over Period for the Construction Project

Lost-Time Injury (LTI): *A work related injury or illness resulting in unfitness or absence from normal work activities and the employee's absence is calculated from the time of the incident / accident. Lost-Time Injuries include injuries / accidents where an employee is placed on light-duty or any other duty for which he/she is not normally employed as a result of an accident / injury.*

The Principal Contractor shall establish health and safety objectives and targets and come up with ways of measuring performance with regards to achieving the set objectives. Progress towards the set objectives must be discussed during toolbox talks, safety meetings and ad hoc meetings. A system to report on SHE performance must be put in place by the Principal Contractor.

5.3.2.7 TRAINING, COMPETENCE AND INFORMATION

(i) General Induction Training

All Principal Contractor and sub-contractor employees shall receive induction training based on the entire safety management system for the project. All project employees inducted, must be in possession of proof of induction. No employee must commence with any site activities without receiving induction training and proof thereof. All subcontractor employees must be inducted before proceeding to site. A programme to induct visitors must also be put in place. No visitor shall proceed to site without being inducted.

(ii) Site/Job Specific Induction Training.

The Principal Contractor must compile a risk-based induction programme, this must be based on the hazards and risks identified on site. Site personnel must receive this induction as it is in context with project tasks. The principal contractor's employees and any other subcontractor employees must be in possession of proof of task specific induction training.

(iii) Other Training

The Principal Contractor must conduct training as stipulated by the Construction Regulations and other relevant regulations. Other training to be offered must be based on the Contractor's safety plan and as identified as a control in risk assessment. Other training shall include but not limited to the following:

- a) General induction training (Section 8 of the OHSACT- duty to inform).
- b) Site / task specific induction for employees and visitors (Section 8 & 9 OHSACT).
- c) OHS Representative Training (OHSACT Sect 18 (3)).
- d) Legal appointees training.
- e) Plant Operators, Light Driven Motor Vehicle drivers, Heavy Driven Vehicles drivers (Construction Regulation 23).
- f) Basic Fire Fighting (Environmental Regulations 9)
- g) Storekeeping methods and stacking storage (Construction Regulation 28).
- h) Emergency Coordination (Construction Regulation 29)
- i) Hazard identification and risk assessment (Construction Regulation 9).
- j) Use of power tools training
- k) Flagmen training

Any other training that is meant to mitigate an identified risk as an administrative control.

(iv) Proof of Training

Employees that are required to be trained according to the OHS Act, Construction Regulation and any other relevant legislation shall retain valid proof of training all the times.

(v) Awareness & Promotion

The Principal Contractor is required to create safety, health and environmental awareness for the duration of the project. This can be achieved through but not limited to the following:

- a) Use of SHE posters
- b) Use of SHE videos
- c) Toolbox talks
- d) SHE suggestion systems such as suggestion boxes
- e) Participating platforms such as SHE meetings.

(vi) Competence

The Principal Contractor shall ensure that all legally appointed personnel including subcontractor employees are competent to execute tasks assigned to them. Proof of competence shall be in the form of formal training and also on the job experience. Verification of proof of competence shall be through planned task observations and recommendations thereof.

Refresher training shall be conducted as and when required. Change in the risk profile of the tasks at hand may also necessitate refresher training for project personnel. Use of power tools such as the whacker, jack-hammer, grinding machines shall require formal training by a registered institution.

All training records shall be retained in the safety file for inspection.

5.3.2.8 CONSULTATION, COMMUNICATION AND LIAISON

The Principal Contractor shall maintain documented information detailing how to communicate, participate and consult with employees and external interested parties on issues of safety, health and environment.

Effective internal communication, participation and consultation is essential for the operation of the safety, health and environmental programme and the achievement of OH&S, Environment objectives. Methods of communication, participation and consultation with employees must be incorporated into all the Procedures and Work Instructions to promote interaction between all relevant levels. Individual and group responsibilities must be defined for recording, reporting and sharing of data and information. Monthly and Quarterly, Health & Safety and Environment Meetings must be held to maintain safety management system in place so as to reduce risk to health, safety and environment.

Effective communication and consultation with external interested parties is a vital component of maintaining a positive working relationship with legal regulators, customers, contractors, OH&S and Environmental interest groups.

A pro-active approach must be taken by communicating and consulting with staff in setting objectives and targets for SHE performance improvement.

The Principal Contractor must ensure that, SHE Procedures and method statements must describe the information and data to be recorded and communicated for effective operation of the SHE management System.

All personnel in the project or through a representative (Supervisor) must be:

- Involved (take part) with the development and review of Safe Work Procedures related to the hazards of their activities/area.
- Consulted with regard to changes that affect their health and safety, and the environment.
- Represented on OH&S matters by their Safety Representative.
- Informed who their Safety Representative and OH&S and or any other safety appointee are by means of notices on the notice boards.

The Principal Contractor must ensure that Procedures that have a specific role in the formal communication system include:

- **Responsibility, Authority and Resources** informing all personnel of the structure, responsibility and resources for OH&S, Environmental. This assists with the understanding of the sources of OH&S, Environmental information and who should be advised of OH&S and Environmental.
- **Document Control** ensuring the communication of correct instructions to all personnel by defining and controlling the distribution of documentation of the OHS and Environmental System.
- **Procurement** communicating OH&S and Environmental expectations to individuals and organizations that provide products and services. Suppliers and contractors are expected to comply with OH&S and Environmental rules relating to the contractor's and subcontractor's policy and procedures when on site. The contractor must ensure that major suppliers carry out suitable OH&S and Environmental controls depending on the actual or potential OH&S and Environmental impacts of their products and services. This control also applies to any subcontractor on site.
- **Corrective Action** The contractor must identify problems arising from non-conformance incidents, accidents, emergencies and internal audits and communicating the causes, responsibilities and remedial action.
- **Internal Audits** The contractor must monitor the effective implementation of the SHE policies and procedures and communicating the results to all salient stakeholders in the project.

The Principal Contractor and any other subcontractor in the project must ensure that other specific communication methods that are used to capture and share information on OH&S and Environmental issues including:

- **Team Briefings** must be conducted to advise project personnel on current issues and to seek ideas and opinions. All relevant topics must be discussed. Frequency of team briefings shall be determined by the contractor and all the other subcontractors in the project.
- **Notice Boards** must be conspicuously displayed on site to advise personnel of the SHEQ Policies, performance and initiatives for OH&S and Environmental improvement.
- **Safety & Wellness program and 5-minute Safety Talks** shall include general OH&S and Environmental information and must aim to maintain a constant awareness of OH&S and Environment by all employees. It must include OH&S and Environment incidents and monthly OH&S and Environmental statistics.
- **External Communication of Significant Aspects** The contractor shall evaluate the identified significant aspects; determine which of these will have an influence outside of company boundaries. Such aspects must be communicated to the relevant interested and affected parties, both internally and externally. External communication on significant aspects shall only take place provided the communication is related to a legal requirement.
- **After-Hours communications:**
The contractor shall ensure that after-hours communications are limited to emergencies and contact details for emergencies must be available on the notice board on the site's entrance gate.
- **A letter of notification** must be used to notify interested parties e.g.
 - Neighbouring companies
 - Department of Employment and Labour - Chief Inspector
 - Provincial Director
 - Emergency Services
 - Local Town Council.
 - The local community any other interested and affected parties

5.3.2.9 CHECKING AND REPORTING AND CORRECTIVE ACTION

Monthly Audit by Client (CR 5(1) o).

The client through the appointed CHSA shall monitor and ensure that contractor is implementing the safety plan in place by conducting monthly audits as per Construction Regulation 5 (1) o. The client reserves the right to appoint a competent person to conduct these audits, the CHSA in this case.

Other Audits and Inspections by Client

The client technical personnel including the appointed SHE personnel reserve the right to conduct scheduled site inspection. The Principal Contractor and any other subcontractor must ensure that a competent representative accompanies the team on any inspection conducted.

Conducting an Audit

The Principal Contractor must ensure that he has an appointed representative to accompany the auditor, it is the responsibility of the Principal Contractor or any subcontractor to ensure that findings raised are closed within a reasonably practicable timeframe. The turnaround time for closing the findings shall be agreed between the CHSA and the Principal Contractor, this shall be based on the degree of risk with regards to the finding raised.

An action plan with commitment dates and resources required to close SHE legal compliance audit finding must be sent to the CHSA within 3 days after notification of the finding. The Principal Contractor must commit to adhere to commitment dates as outlined in the action plan.

All the OHS legal compliance audit findings must be addressed through a Request for Improvement (RFI) system that aims to identify and conclusively address the root cause so as to mitigate the probability of recurrence. The RFI form, shall form part of the annexures to the SHE specification. The CHSA shall conduct formal month SHE legal audits without any prior arrangement or formal notice to the Principal Contractor or contractors on site. Ad hoc inspections shall be conducted ongoing as measure for health and safety monitoring and control.

Construction Regulations 5 (1) q Site works stoppages

The CHSA has the authority as vested upon him by the client in line with CR 5 (1) q... 'stop any contractor from executing a construction activity which poses a threat to the health and safety of persons which is not in accordance with the client's health and safety specifications and the principal contractor's health and safety plan for the site'

The CHSA shall conduct ad hoc OHS inspections and the outcomes shall also be incorporated to the monthly OHS legal compliance audit. The CHSA reserves the right to conduct OHS inspections and OHS legal compliance without any prior notification to the Principal Contractor. This is based on the premise that the project MUST be compliant all the time.

OHS legal compliance audit rating

0 to 50% Fail	51 to 79% Not acceptable	80 to 89% Acceptable- improvements required	90 to 100% Desired
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For any given period under review the Principal Contractor or any other contractor appointed on the project must aim to achieve the DESIRED OHS legal compliance audit score that is between the 90-100% range. Where the PC achieves an audit score in the ranges of 0-50% & 51- 79% this shall give strong motivation for suspension of site works pending rectification of the OHS deviations raised.

In any month where there was temporary work stoppages based on OHS deficiencies by the Principal Contractor or any other appointed contractor, the OHS audit score for the month shall be categorised as unacceptable by default.

Principal Contractor's Audits and Inspections

The Principal Contractor shall conduct SHE monthly audits to measure performance of the SHE management system in place. Records of such audits and inspections must be retained in the safety file for record keeping and inspection. The appointed CHSO must engage Supervisor(s), the Construction Manager and other relevant personnel in terms of addressing the findings raised during the internal audit.

Inspections by OH&S Representative's and other Appointees

The appointed SHE Rep shall conduct daily and weekly inspections to identify any situations that are a risk to health and safety within the project. Any deviations noted must be immediately reported to the Supervisor or the personnel responsible for the area.

Recording and Review of Inspection Results

Records of formal inspections and audits must be filed and reviewed during SHE committee meetings, SHE meetings and during progress and technical meetings as held by the client.

Reporting of Inspection Results

The principal contractor is required to formally present a monthly audit report to the client at the end of each respective month.

5.3.2.10 OPERATIONAL CONTROL

5.3.2.10.1 Notification of Construction Work (CR 4).

In the event that the contract meets the requirements of Construction Regulation 4, the contractor shall notify the Department of Labour 7 days before any construction works begins. The notification to the Department of Employment and Labour must be valid for the duration of the contract and retained in the safety file. The notification must be in the form of Annexure 2 of the Construction Regulations 4. The project triggers Notification of Construction Work with the Department of Employment and Labour.

5.3.2.10.2 Emergency Preparedness (EP), Contingency Plan and Response (See 5.2.4 of the specification).

5.3.2.11 First Aid (See 5.2.4 of the Specifications)

5.3.2.11.1 Security

All persons shall report to the Security Officer at the main site office before proceeding to site. Visitors shall sign a visitors' logbook and read through the induction notes as detailed on the induction book. All visitors to be accompanied by an authorized person for inspections and other site related assignments.

All Security Personnel to be in good standing in terms of PSIRA. A habitable guardhouse should be provided for all security personnel.

5.3.2.11.2 Provision for substance abuse on site

The contractor must ensure that all personnel under his authority do not at any time enter the site or perform any work whilst under the influence of alcohol, a drug, or any other intoxicating substance. To this end, the Principal Contractor shall put in place an adequate substance abuse, alcohol and drug policy in place.

Selling or possessing drugs, alcoholic beverages or any other intoxicating substance on the site is strictly prohibited. This constitutes a dismissible offence, and the SAPS shall be engaged whenever such behaviour is discovered on site.

A drugs and alcohol testing program will be implemented. Persons entering the site shall be daily/ randomly tested. Any person who tests positive for alcohol or drug consumption will be subject to disciplinary action and shall be permanently removed from the site.

Any person has the opportunity to rather report that he/she is under the influence before accessing the project site – in this case the employee may only be sent home for the day by the responsible Project Manager representative but will then be tested for the following five days (each day) on his return to the project site. If it is found that the same person is frequently reporting that he/she is under the influence before even accessing the project site, it shall be the responsibility of the nominated project management representative to take disciplinary action and remove such a person's from the project site.

Should the actions and / or demeanour of an employee suggest possible drunkenness, the employee must be removed from the site. This may be done without testing.

Note: All personnel involved in an incident / accident must immediately be subjected to an alcohol test and a drug test as part of the investigation.

5.3.2.11.3 Excavation Work (CR 13)

Prior to commencing work on any trench or excavation, the Contractor shall first submit a completed Excavation Method Statement and risk assessment to the Engineer or any appointed client's representative for approval. After reviewing the method statement, the Engineer or appointed client's representative shall sign and approve retain a copy and issue the signed original to the contractor. For all trenches or excavations over 7 meters deep, the contractor or any appointed subcontractor must have the sloping, shoring, or shielding method reviewed by a Licensed Professional Engineer (Excavation Technologist) of discipline. The design must be submitted to the Engineer as an attachment to the Excavation method statement.

The Principal Contractor shall ensure that a full sketch is provided as part of the method statement detailing the excavation and the location of underground services.

The Principal Contractor shall ensure that the requirements of the Employer's trenching and excavation procedure is complied with during activities. This will include the marking of the excavation boundaries, the location of all known services, performing a scan with a cable locator or Cable Avoidance Tool (CAT) by a trained individual, and also performing a physical evidence survey (ground trothing).

The Principal Contractor shall appoint a competent person to fill out the permit and monitor all trench and excavation work where required. Daily excavation inspections are also required to be performed and documented, an excavation Supervisor must be appointed to perform this function.

Adequate precautions shall be taken to prevent the collapse of excavations, as well as to prevent rocks and loose material falling onto workers. Sloping, shoring or shielding shall be provided for all excavations over 1.5 meters in depth. Angle of repose for project site shall not exceed 1:1 unless otherwise approved by a Licensed Professional Engineer of discipline and approved by the Engineer.

All excavations shall be clearly demarcated and securely barricaded to prevent unauthorised access. Only solid barricading will be used at areas where a fall hazard is present. Solid barricading such as fencing shall be provided by the Contractor around all holes or openings to prevent any person being injured as a result of a fall. Safety nets may only be used as a pre-warning to make the solid barricading more visible and to prevent persons from coming too close to the danger area.

If an excavation or trench endangers the stability of buildings or walls, shoring, bracing, or underpinning will be provided by the Contractor with prior approval from the Engineer. Excavations and trenches that are adjacent to backfilled excavations or trenches, or which are subject to vibrations from railroad traffic, road traffic, blasting or the operation of machinery (e.g., shovels, cranes, trucks), must be secured by a support system, shield system or other protective systems (i.e., sheet pile shoring, bracing).

No backfill material shall be allowed to be within 1 meter of the excavation edges. All excavations shall be on a register and inspected daily (documented) before work commences and after inclement weather (e.g. rainfall) by an appointed competent person. When declared safe work can recommence and the findings recorded in the register. If the excavation is not safe to use, remedial action shall be taken before the work site is re-opened.

Deep excavations (6 meters) shall have an escape ladder for access/egress and use in emergencies. The contractor shall ensure that all precautionary measures as stipulated for confined spaces are determined. No work shall commence in an excavation unless the excavation has been declared safe by the competent person.

The Contractor shall conduct a cable scan using a device that can detect cables and other services. The Contractor shall ensure that the operator of the scanner is adequately trained and competent to use the device to its full capabilities with and without the use of a signal generator.

5.3.2.11.4 Protection of Overhead & Underground Services

The contractor shall ensure that a three-meter buffer zone is adhered to whenever working with close proximity to live overhead cables or adhere to compliance condition as stipulated by the service owner. A cable detector shall be used to sensor and identify any underground services. This shall be done in conjunction with the use of way-leaves as issued by the client. All the areas with underground services shall be marked, excavation in such areas shall be done with supervision from an appointed competent Excavation Supervisor.

It is the responsibility of the Principal Contractor to ensure that the wayleaves issued by each respective local authority are up to date. A register of wayleaves and expiry dates thereof must be retained by the contractor, expired wayleaves must be updated before the date of expiration. It remains the responsibility of the Principal Contractor make further effort and identify any other existing services within the project boundaries.

A safer buffer zone must be maintained for overhead services. In specific circumstances the Principal Contractor must ensure that where the relevant authorities are notified before working closer to specific services such as gas pipes.

It remains the responsibility of the Principal Contractor to ensure that wayleaves in place remain valid up to the completion of the project. Wayleaves conditions must be adhered to all the times. Where work require special permits for instance excavating on the road, the CHSO must ensure that approvals are in place from the relevant local authorities.

5.3.2.11.5 Cranes and Lifting Equipment

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 of Driven Machinery Regulations promulgated in terms of the Occupational Health and Safety Act (Act no 85 of 1993):

The Driven Machinery Regulations requires that:

- Lifting equipment 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 a table showing the maximum mass load with respect to every variable condition shall be posted up by the user in a conspicuous, place easily visible to the operator and the table shall be used by the driver/operator;
- 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;
- Lifting equipment shall be fitted with a brake or other device capable of holding the MML. This brake or device shall automatically prevent the downward movement of the load when the lifting power is interrupted;
- Lifting equipment shall be 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;
- 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. Where no standard is available the factor of safety must be:
 - chains – 4 (four)
 - steel wire ropes - 5 (five)
 - fibre ropes- 10 (ten)
- Every hook or load attaching device must be designed to prevent the load from slipping off or disconnecting;
- 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 manufacturer's requirements 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 3 months (quarterly) by a competent person;
- 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
- No person may be lifted by a lifting machine not designed for lifting persons unless in a cradle approved by the inspector of the Department of Labour.

General requirements for cranes and lifting equipment

All documentation must be provided to the client's appointed CHSA or appointed Project Engineer prior to mobilisation. Failure to do so and the resulting cost of any delays and/or remedial activities will be for the Contractor's account.

All crane operators must be authorised by the relevant Engineer before they may operate a crane or lifting machine. The Load charts must be displayed in the cab of the crane.

Daily pre-use inspections of the cranes must be done and be kept on the file. The inspections must be logged in a logbook. The area in which a lift is performed must always be barricaded to prevent employees from entering.

A crane or lifting machine must not be left unattended and the keys may never be left in the ignition when the operator is not present. Properly constructed outrigger pads must be used when soil is uneven or unstable. (Only sleepers or appropriately designed steel plate pads may be used for this purpose).

Only a competent rigger may direct a lift of any kind unless the following requirements are met. Rigger assistants used for performing lifting operations shall be limited to lifts with all of the following requirements:

- Lifts lower than 5 tons
- Easy lifts that does not require the load to be lifted over structures, equipment or machinery
- Equipment that is not critical
- Rigging configuration that requires the attachment of several parts of lifting equipment such as chain blocks to adjust the angle of loads.

All safety devices on a crane or lifting machine must be functional.

All personnel responsible for lifting operations shall be appropriately identifiable.

Cranes and Lifting Machines

A contractor must in addition to compliance with the Driven Machinery regulation, 1988 ensure that tower cranes are used-

- They are designed and erected under supervision of a competent person;
- A relevant risk assessment and method statement are developed and applied
- The effects of wind forces on the crane are taken into consideration and that a wind speed device is fitted that provides the operator with an audible warning when the wind speed exceeds the design engineer's specification;
- the bases for the tower cranes and tracks for rail-mounted tower cranes are firm, level and secured;
- the tower cranes operators are competent to carry out the work safely and;
- the tower crane operators have a medical certificate of fitness to work in such an environment, issued by an Occupational Health Practitioner in the form of Annexure 3

Crane Test Certificate

The Contractor's CHSO and the Responsible Engineer must inspect all cranes and lifting machines before they are brought onto the construction site.

Certification will be required for record purpose, and shall cover the following:

- A Brake or other device capable of holding the maximum mass should the power fail, or which is such that it shall automatically prevent the uncontrolled downward movement of the load when the raising effort is interrupted; and
- A limiting device which shall automatically arrest the driving effort when:
- the Hook or Load attachment point of the Power Driven lifting machine reaches its highest safe position; and
- in the case of a Winch Operated lifting machine with a lifting capacity of 5000kg or more; the load is greater than the rated mass load of such machine.

No user shall use or permit any person to use a Jib-Crane with a lifting capacity of 5000kg or more at a minimum Jib radius, unless it is provided with:

A load indicator that shall indicate to the operator of the Jib-Crane the mass of the load being lifted, provided that such a device shall not require manual adjustment from the application of the load, to the Jib-Crane, until the release of the load.

A Limiting Device which shall automatically arrest the driving effort whenever the load being lifted is greater than the rated mass load of the Jib-Crane.

The user shall ensure that every lifting machine is operated by an Operator specifically trained for a particular type of lifting machine; the user shall not require or permit a person to operate such lifting machine unless the operator is in possession of a certificate of training, issued by an accredited person or organisation.

Acceptance of Cranes on Site

No Crane shall be used at arrival on site before copies of all documentation have been handed over to the Contractor's CHSO, or the CHSA or the appointed Resident Engineer and the Crane have been checked by a person dually authorised and signed off as acceptable. Copies of all documentation must be kept in the SHE File at all times.

No Crane shall be used without a pre-use check and findings entered on an approved checklist. Before any cranes are established on site the following must be inspected and approved:

- Operator's licences
- Training certificates
- Medical fitness certificate.
- The cranes load test certificate.
- Rope test certificates including Mill / Destructive test.
- The lifting gear load test certificates.
- The load limiting device calibration certificate.
- Proof that the hooks have been measured for spreading.
- The service inspection history.
- monthly comprehensive inspection certificate
- Operation and maintenance Manuals and crane condition.

Mobile Crane near Power Lines

No mobile cranes are to be used near overhead power lines until the client's Representative has been notified and provided safe access conditions and a valid permit to work is obtained. Mobile cranes shall be effectively earthed when working in the vicinity of electrical wires. Assume that all electrical equipment and wires are live and avoid them.

Skyjacks

- No Skyjack shall be used before the Jack has been inspected and passed by the Resident Engineer.
- The Test Certificate, no older than three (3) months shall be produced.
- The Safe Working Load shall be clearly displayed.
- The Operators shall make use of Safety belts / Harnesses at all times.
- Only trained, competent and appointed persons shall operate Skyjacks.
- Proof of Training and Training program shall be submitted.
- No person shall stand of the Handrails of a Skyjack.
- When a Skyjack is not operational, it shall be stopped, no lower than three (3) meters above ground level.
- The Operator shall make use of a ladder to get in and out of the Skyjack. The ladder shall be removed to safekeeping when stopped and not in use.
- The Power supply shall be disconnected when not in use thus preventing unauthorised

Lifting tackle

The following requirements will apply to lifting tackle:

- Manufactured of sound material, well-constructed and free from patent defects;
- Clearly and conspicuously marked with an identity number;
- MML 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)
- Steel wire ropes must be examined by a competent person every three months and the results recorded in a designated log book. The ropes must be discarded (not used any further for lifting purposes) when wear and corrosion is evident.

Machine operators

The following requirements will apply to machine operators:

- Every lifting machine operator must be trained specifically for the type of lifting machine that he

is operating.

- Operators of Jib cranes with a MML of 500 kg or more must be in possession of a certificate of training issued by a training provider accredited by The Department of Employment and Labour.

Material hoists

A contractor must ensure that every material hoist and its tower have been constructed in accordance with the generally accepted technical standards and are strong enough and free from defects. (2) A contractor must ensure that the tower of every material hoist is -:

- (a) Erected on firm foundations and secured to the structure or braced by steel wire guy ropes, and extends to a distance above the highest landing to allow a clear and unobstructed space of at least 900 millimetres for over travel;
- (b) Enclosed on all sides at the bottom, and at all floors where persons are at risk of being struck by moving parts of the hoist, except on the side or sides giving access to the material hoist, with walls or other effective means to a height of at least 2100 millimetres from the ground or floor level; and provided with a door or gate at least 2100 millimetres in height at each landing, and that door or gate must be kept closed except when the platform is at rest at such a landing.

A contractor must cause –

- (a) the platform of every material hoist to be designed in a manner that it safely contains the loads being conveyed and that the combined mass of the platform and the load does not exceed the designed lifting capacity of the hoist;
- (b) the hoisting rope of every material hoist which has a remote winch to be effectively protected from damage by any external cause to the portion of the hoisting rope between the winch and the tower of the hoist; and
- (c) every material hoist to be provided with an efficient brake capable of holding the platform with its maximum load in any position when power is not being supplied to the hoisting machinery.

No contractor may require or permit trucks, barrows or material to be conveyed on the platform of a material hoist and no person may so convey trucks, barrows or material unless those articles are secured or contained in a manner that displacement thereof cannot take place during movement.

A contractor must cause a notice, indicating the maximum mass load which may be carried at any one time and the prohibition of persons from riding on the platform of the material hoist, to be affixed around the base of the tower and at each landing.

A contractor of a material hoist may not require or permit any person to operate a hoist, unless the person is competent in the operation of that hoist.

No contractor may require or permit any person to ride on a material hoist

A contractor must ensure that every material hoist –

- (a) Inspected on daily basis by a competent person appointed in writing by the contractor and such competent person must have the experience pertaining to the erection and maintenance of material hoists or similar machinery;
- (b) Inspection contemplated in paragraph (a), includes the determination of the serviceability of the entire material hoist, including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices; (c) Inspection results are entered and signed in a record book by a competent person, which book must be kept on the premises for that purpose;
- (d) Properly maintained and the maintenance records in this regard are kept on site.

5.3.2.12 Construction Vehicles and Mobile Plant

All vehicles brought to site must meet safety requirements. Each vehicle to be used on site must be inspected and approved by the client's representative before a site access permit will be issued for the

vehicle / equipment. No vehicle shall be permitted to enter the site unless it is duly authorised. Access permits are vehicle-specific and may not be transferred between vehicles.

The contractor must allow any vehicle that is brought onto site (including privately owned vehicles) to be searched at any time while on the premises, or when entering or leaving the premises.

The Principal Contractor is solely responsible for the safety and security of all vehicles (including private vehicles) that is brought onto the site. All road-going vehicles used by the contractor on the site must be roadworthy and registered with the relevant traffic authority.

A vehicle will not be permitted to enter the site in an un-roadworthy condition. Access will be denied if, for example, but not limited to:

- The vehicle has a defective exhaust system;
- A serious oil or fuel leak is evident;
- The vehicle has unsafe bodywork or is carrying an unsafe load;
- The vehicle is fitted with extraneous or non-standard equipment;
- Passengers are not seated properly;
- The vehicle is not fitted with a seat belt for each occupant; or
- The vehicle has any obvious mechanical defect;
- Pre-inspection requirements are not met.

Overloaded vehicles will not be permitted to enter the site. The driver / operator of any vehicle / mobile equipment must carry a copy of his appointment with him at all times. Each driver / operator must:

- Comply with all site rules and regulations pertaining to traffic and the safe operation of vehicles / mobile equipment;
- Obey all road signs;
- Obey all instructions given by security or emergency services personnel;
- Remain within the boundaries of the site; and
- Ensure that the vehicle that he is operating is never overloaded, and that loads are always properly secured.

In the interest of safety, only the minimum number of vehicles required by the contractor to complete the work under the contract will be permitted to enter the site. When not in operation, the contractor's vehicles / mobile equipment must be parked within the boundaries of his lay- down area or yard.

Parking is only permitted in designated parking areas. All cars are parked on site at the owner's risk. In the event of a vehicle accident on site, the driver(s) must report the incident immediately and must remain at the scene until a nominated project management representative arrives, or until a nominated project management representative authorizes him to leave (unless, of course, the driver requires medical attention).

Construction Plant

- All plant must comply with the OHSWA and Regulations requirements in relation to operation and maintenance thereof.
- Records of service and maintenance of the vehicles must be of a high standard at all times.
- All plant shall subject to design be fitted with back-up alarms and audible indicating devices.
- The Principal Contractor/Contractor shall ensure that all construction plant's moving parts are adequately protected.
- Pre-start inspections shall be conducted on all motorised equipment daily, deviations of such

inspections shall be recorded.

- Construction plant identified for use shall be operated by a trained and authorised operator only.
- All construction plant shall be operated under the direct supervision of a person competent to identify potential hazards in the work he is conducting.
- Work involving the use of construction plant shall be conducted in accordance with an approved Risk Assessment.
- The Principal Contractor/Contractor shall ensure all operators are equipped with the necessary PPE namely; safety shoes, overall, safety glasses, and gloves.
- All Plant shall be fitted with an extinguisher where practicable.
- Washing shall be conducted in the designated washing areas.

The Principal Contractor/Contractor shall ensure the all equipment moving to and from site is adequately secured, and that all Principal Contractor/Contractor abide by this requirement.

The Principal Contractor/Contractor must provide proof of medical and psychological fitness including training of all operators engaged in the construction activity.

Transport of Personnel

- Should it be necessary for the Principal Contractor/subcontractor to transport their personnel to site, only safe vehicular transport must be provided. This shall include proper seating, side restraints and cover. Seats shall be firmly secured and adequate for the number of employees to be carried.
- No personnel shall be permitted to travel on any plant or equipment on the site works.

Road safety principles shall be adhered to on and off site, this includes adherence to the Road Traffic Management Act.

5.3.2.13 Electrical Installations (CR 24)

The installation of temporary electrical installations shall comply with Construction Regulation 24 and the Electrical Installations Regulations.

The Principal contractor must ensure that the following are in place for all electrical installations:

- a) Existing services are located and marked before construction works commences, markings must be clearly visible also during the construction work.
- b) Suitable protective work must be provided to employees working with equipment such as jackhammers. Suitable personal protective equipment includes but not limited to the following: rubber mats, insulated handles, non-electricity conductor wear.
- c) Electrical equipment must be suitable for intended site works.
- d) Temporary electrical installations must be inspected at least once a week by an appointed Temporary Electrical Installations Inspector (competent). Records of such inspections must be retained in the safety file.
- e) All electrical equipment in use on site must be inspected before use by a competent (operator), such inspection records must be retained in the safety file.
- f) A Certificate of Conformance (CoC) must be issued by a competent person for all temporary electrical installations.

5.3.2.14 Electrical and Mechanical Lockout

The Principal Contractor is mandated to develop a mechanical and electrical lock out procedure, which shall be submitted to the client for approval before any construction work commences. The Principal Contractor and any appointed subcontractor must adhere to the lock-out procedure in place.

5.3.2.15 Use and Storage of Flammables

Storage of fuel and other hazardous chemical substances on site shall be done upon prior approval in writing by the client or his nominated representative.

If the on-site storage of a fuel or a flammable liquid is approved, the contractor must ensure the following:

- The quantity of fuel / flammable liquid to be stored on site must be kept to the minimum that is required;
- Applicable by laws in terms of fuel storage on site are adhered to i.e. notification of relevant local authorities;
- The storage area must be located in a well-ventilated area at least 10 metres away from any building, drain, boundary or any combustible material;
- If more than 200 litres of fuel / flammable liquid is to be stored, the tank must be installed / the containers must be positioned within a bund;
- If the fuel / flammable liquid is to be stored in bulk tanks / vessels, then the minimum capacity of the bund must be 110% of the volume of the largest tank / vessel. If many small containers (e.g. 210 litre drums) are to be stored, the bund must be able to contain 25% of the total volume of the stored products;
- The bund must be impermeable. It must have a solid concrete floor and the walls must be constructed out of brick and must be plastered on the inside;
- The bund must be fitted with a lockable drain valve (for draining away rainwater), which must remain locked in the closed position. The valve may only be opened under supervision and in accordance with a written procedure;
- The fuel / flammable liquid storage area may not be used for the storage of any other materials / equipment, and must be kept completely free of all combustible materials (including rubbish, brush and long grass) at all times;
- Access to the storage area must be controlled (wire mesh fencing and gate);
- The contractor must ensure that appropriate warning signage (i.e. —Flammable Liquid, —No Smoking and —No Naked Flames) must be prominently displayed at the storage area. The contents and volume of each tank must be indicated;
- In order to contain spillages, the offloading / refuelling bay at the fuel / flammable liquid storage area must have a solid concrete base surrounded by bund walls, ramps or humps and / or spill trenches (covered with steel grating) that lead into a sump;
- Fuel dispensing pumps must be protected against impact damage;
- All fuel / flammable liquid storage tanks and dispensing equipment must be electrically bonded and properly earthed;
- All electrical installations and fittings must be of an approved intrinsically safe type;
- Two 9kg dry chemical powder fire extinguishers must be mounted in an easily accessible position near the entrance gate to the fuel / flammable liquid storage area. Depending on the size of the storage area, additional fire extinguishers may be required to ensure that an extinguisher is no further than 10 metres away from any point on the perimeter of the storage area;

- A fire extinguisher must be at hand wherever refuelling is carried out;
- Smoking or open flames within 5 metres of a fuel / flammable liquid storage / refuelling area is strictly prohibited;
- No petrol or diesel powered vehicle or equipment may be refuelled while the engine / motor is running;
- Cellular phones must be switched off in fuel / flammable liquid storage / refuelling areas;
- Spill clean-up kits (containing a suitable absorbent fibre product) must be provided;
- Any spillages must be cleaned up immediately and all contaminated cleaning materials must be disposed of in accordance with the applicable legislation;
- If a flammable liquid is spilt or is leaking from a container / vessel, the area must be cordoned off and appropriate warning signage must be displayed to keep unauthorized personnel away from the affected area. Every effort must be made to contain the spillage. All hot work in the vicinity must be stopped immediately. If the spilt product is volatile and the possibility exists that a vapour cloud may form, or if the leak or spillage cannot be contained or stopped, then appropriate emergency response procedures must be activated, including the evacuation of all persons in the vicinity. Suitable firefighting equipment must be positioned ready for use should the spilt product ignite;
- The manual decanting of fuel or a flammable liquid from a large container should only be done using a stirrup pump (or similar) or a purpose-made frame which allows the container / drum to tilt for decanting and then return to the upright position;
- Drip trays must be used wherever required;
- All tanks, drums, cans, etc. containing flammable liquids must be tightly closed and properly sealed except for when a container is being filled or when a product is being decanted;
- The transport or storage of corrosive or flammable liquids in open containers is strictly prohibited;
- Daily-use quantities of fuel (up to a maximum of 20 litres) must be handled in an approved safety can with a flash arresting screen, spring closing lid and spout cover that will safely relieve internal pressure if the can is exposed to fire;
- Where safety cans may be impracticable, only approved metal containers with screw caps may be used. Each container must be clearly labelled to indicate its contents;
- Only small quantities of flammable liquids (paints, solvents, etc.) may be stored within a building. Each product must be kept either in its original container or in an approved container which must be properly sealed. Each container must be clearly labelled to indicate its contents. When not in use, all such containers must be stored in a well-ventilated steel cabinet which must be kept locked to prevent unauthorized access;
- Not even small quantities of flammable liquids may be stored or dispensed in buildings or places of public assembly, in general warehouses, or in buildings containing sources of ignition such as space heaters, cooking devices, open electric motors, motor vehicles, or where welding, cutting, or grinding activities are being carried out;
- Safe Work Procedures must be compiled for the transportation (including delivery), offloading, storage, handling and use of any fuel / flammable liquid on site;
- All personnel that will be required to work with or may come into contact with a flammable liquid must be made aware of the hazards associated with the product and must be thoroughly trained in the safe transportation, use, handling and storage thereof.

5.3.2.16 Housekeeping (CR27)

The Principal Contractor must maintain a high degree of tiredness in all work areas free of debris and any other unwanted rubbish. Unless directed otherwise, the contractor must dispose of all debris, rubbish, spoil and hazardous waste off site in a designated and authorized area or facility. The

contractor must familiarize himself with the waste management plan for the site including collection and disposal arrangements, and must align his waste management activities accordingly. Proof of waste disposal must be retained by the contractor.

In cases where an inadequate standard of housekeeping has developed and compromised safety and cleanliness, a nominated project management representative may instruct the contractor to stop work until the area has been tidied up and made safe. Neither additional costs nor contract deadline extensions will be allowed as a result of such a stoppage. Failure to comply will result in a clean-up being arranged through another service provider at the cost of the non-complying contractor.

The Principal Contractor must carry out housekeeping inspections on a weekly basis to ensure maintenance of satisfactory standards. The contractor must document the results of each inspection. These records must be retained in the safety file.

The contractor must implement a housekeeping plan for the duration of the contract ensuring that the site housekeeping is maintained. Furthermore, at the end of every shift, the contractor must ensure that all work areas are cleaned, all tools and equipment are properly stored, and construction rubble is removed.

Where the contractor fails to maintain housekeeping standards, the client representative may instruct the contractor to appoint a dedicated housekeeping team for the duration of the project at the contractor's expense. Littering is prohibited.

5.3.2.17 Stacking and Storage (CR 28)

The Principal Contractor and any other subcontractor must ensure that all stacking is supervised by a competent person appointed in writing. Clearly defined and allocated storage areas are to be provided and identified. All materials being stored within these areas are to be stacked in accordance with the sound stacking principles of sort-by-sort. Storage areas are to be level and access through them is to be maintained. The height to which material is stacked shall not exceed three times the base width.

The PC and other contractor must avoid stacking of materials such as kerbs and other on the actual construction site where these introduce a secondary risk of injury to the public. Where materials are stored on site e.g. stormwater pipes adequate protection measures must be in place such as use of a physical barricade or fence to protect stacked material and stormwater pipes. Relevant signage and reflecting netting must be used to compliment the physical barricade. Public protection remains key in relation to the stacking and storage of material on site.

5.3.2.18 Storage of Hazardous Chemicals (including flammables) (See 5.3.1.3.13 above)

5.3.2.19 Fire Prevention and Protection (CR 29)

The Principal Contractor must compile a Fire Protection and Prevention Plan for the work that will be carried out on site where a fire hazard has been identified.

The Principal Contractor must assess his area of responsibility and identify locations where the risk of fire is high. It is noteworthy that certain locations may need to be designated as high risk due to the presence of large quantities of flammable or combustible materials / substances. For all high risk areas, the contractor must ensure that additional precautions are taken to prevent fires and strict control is exercised over any hot work (i.e. welding, cutting, grinding, etc.) that is carried out.

The contractor must supply and maintain all required fire-fighting equipment. The type, capacity, positioning, and number of fire-fighting appliances must be to the satisfaction of the appointed client's

representative and must meet the requirements of the applicable legislation. Fire mains, hydrants and hose reels will rarely be available on site, so use must primarily be made of portable fire extinguishers.

Fire-fighting equipment, fixed and portable, must be strategically located such that they are easy to use to bring potentially dangerous and destructive fires under control without causing significant damage.

All fire extinguishers (and any other fire-fighting equipment) placed on site must be:

- Conspicuously numbered;
- Recorded in a register;
- Visually inspected by a competent person on a monthly basis (the results of each inspection must be recorded in the register and the competent person must sign off on the entries made);
- Inspected and serviced by an accredited service provider every year (the appointed client representative may require that this frequency be increased depending on the environmental conditions (e.g. high dust levels, water, heat, etc.) to which the fire extinguishers are exposed).

Any fire extinguisher that has a broken seal, has depressurised, or shows any sign of damage must be sent to an accredited service provider for repair and / or recharging. Details must be recorded in the register. Fire-fighting equipment may not be used for any purpose other than fighting fires.

Access to fire-fighting equipment, fixed or portable, must be kept unobstructed at all times. Approved signage must be in place to clearly indicate the location of each permanently mounted fire extinguisher, fire hose reel, etc.

The contractor must ensure that all persons working in / entering his area of responsibility are made aware of where all fire-fighting appliances and alarm points are located. The contractor must ensure that his employees (and those of any appointed sub-contractors) are trained in fire-fighting procedures and the use of fire-fighting equipment.

The contractor must compile an emergency response procedure detailing the actions that must be taken in the event of a fire or a fire / evacuation alarm. All personnel working within the contractor's area of responsibility must be trained, and all visitors must be instructed, on this procedure. Copies of the procedure must be prominently displayed in the workplace in all languages commonly used on the site.

Used fire extinguishers must be replaced by the contractor without delay.

No hot work (i.e. welding, cutting, grinding, etc.) or any other activity that could give rise to a fire may be performed outside of a designated area without a Permit to Work having been issued.

At the end of every working period (i.e. before each tea / lunch break and at the end of every shift / day), the workplace must be thoroughly inspected to ensure that no material is left smouldering and no condition / situation exists that could give rise to a fire.

The Principal Contractor must ensure that all Supervisors and all employees carrying out or assisting with any hot work or any other activity that could give rise to a fire have been trained in fire-fighting procedures and the use of fire-fighting equipment. The training must be conducted by an accredited training provider.

When using electrical equipment, all cables must be in good condition and the nearest convenient socket must be used. No power socket may be loaded beyond its rated capacity through the use of adaptors, etc. Makeshift electrical connections are not permitted under any circumstances. Water-based fire-fighting equipment must not be used on electrical equipment or burning liquids.

Each vehicle used on site for work purposes and each item of mobile equipment with a diesel or petrol engine must be fitted with a permanently mounted fire extinguisher. Smoking is only permitted in

designated smoking areas. Cigarette ends / butts must be properly stubbed out in the ashtrays provided and never thrown into waste bins.

The contractor must ensure that good housekeeping practices are enforced, as this is crucial to the prevention of fires.

All combustible waste materials must be removed from the workplace on a daily basis (at the end of each shift) and placed in waste receptacles located at least 5 metres away from any structure. The accumulation of waste materials in out-of-the-way places is prohibited. Offices, desks, cabinets, etc. must always be kept tidy and uncluttered. Waste paper bins must be emptied regularly.

The storage of combustible materials under stairways or in attics is prohibited. The storage of any materials against the exterior of a building or any other structure is prohibited. All walkways, passages and stairways must be kept clear (i.e. must be unobstructed) at all times, as they may need to be used as a means of escape.

The areas around and the routes to all exits, fire escape doors, fire hydrants, fire hose reels and fire extinguishers must be kept clear (i.e. must be unobstructed) at all times. "No Smoking" signs must be conspicuously displayed in and around all storage areas / rooms. Waste may not be burned under any circumstances.

No flammable liquid (such as petrol, acetone, alcohol, benzene, etc.) may be used for starting fires or as a solvent for cleaning clothes, tools, equipment, etc. Only solvents approved by the nominated project management representative may be used for cleaning purposes.

Whenever any work is carried out involving the use of a flammable substance / material, the area must be cordoned off and appropriate warning signage (i.e. —No Unauthorized Entry, —No Smoking and —No Naked Flames) must be displayed.

5.3.2.20 Eating, Changing, Washing and Toilet Facilities (CR 30)

As a minimum requirement the following will apply:

- a) Toilets
The National Building Regulations and Construction Regulations 30 stipulates that a contractor must provide toilets to his staff. The contractor must provide chemical toilets to a ratio of 1:30 on site. The contractor must commit with the toilet supplier a service schedule that must adhere to all the times between the toilet supplier and the contractor. Records of service must be retained in the SHE file for inspection.
- b) Showers
If permissible, cold showers must be provided to employees at a ratio of 1 shower per 15 workers.
- c) Change rooms
Changing rooms must be provided for personnel in the project. Male and female changing rooms must be provided and must be kept tidy at all times.
- d) Eating Facility
A decent eating facility must be provided. Excessive heat, wind, cold and any inclement weather must be considered when establishing an eating facility for employees. The facility must be located away from workplace activities that might introduce risk to health.
- e) Living accommodation
There is no living or accommodation on site.

5.3.2.21 PPE (See 5.2.1 of the specifications)

5.3.2.21.1 Portable Electrical Tools and Equipment

Machinery, Tools and Equipment

The Principal Contractor shall ensure that all machinery, tools and equipment are identified, safe to be used and maintained in a safe condition. All tools and equipment must be allocated a unique identifier.

Power tools like the compactor will be selected with the ergonomics of the operator taken into account. The machine will be fitted with an automatic stop device should the operator lose control.

All machines driven by means of belts, gear wheels, chains and couplings shall be adequately guarded. A machine is guarded when persons cannot gain access to the moving parts. The Contractor shall maintain an inventory list for all machinery, tools and equipment on site.

All machinery, tools and equipment shall be regularly inspected at least monthly or as required by legislation and risk assessments. A registers of tools shall be kept on the health and safety file.

All machinery, tools and equipment must have the necessary approved test or calibration documentation where applicable prior to being brought onto the premises.

The client's representative (CHSA) reserves the right to inspect equipment and plant brought to the project site (and at other places, if any, as may be specified under the contract as forming part of the Site) by the Contractor for use on the project. Should any item be found to be inadequate, faulty, unsafe or in any other way unsuitable for the safe or satisfactory execution of the work for which it is intended, the contractor or subcontractor shall be advised in writing and shall remove the item from the site and replace it with a safe and adequate substitute. In such cases, the contractor or subcontractor shall not be entitled to extra payments or extensions of time in respect of delay caused by these instructions.

All Principal Contractor's and subcontractor personnel must receive formal training and be declared competent for use of power tools and potable electrical equipment. No employee shall use portable electrical equipment and power tools in the absence of formal training by an accredited institution.

Portable Lights

- a) Must be fitted with a robust non-hygroscopic non electricity conducting handle.
- b) Live metal parts which may become live must be protected against contact.
- c) The lamp must be protected by a strong guard.
- d) The cable lead in must withstand rough handling.
- e) A register for each light must be retained and inspection thereof.
- f) When used in wet/damp/metal container conditions, it must be protected the same manner as portable electrical tools as stated above.

5.3.2.22 Public Health and Safety

It is the duty of the Principal Contractor and all the other contractors to ensure that non employees are equally protected from the project hazards and concomitant risks. This includes non-employees that are located further away from the project site, this is said considering the trans-boundary nature of other occupational stressors such as construction dust. Typical vulnerable population group include the following:

- Non- employees entering the site for whatever reason;
- The surrounding community.
- School children within the project footprint.
- Businesses that are within the project footprint.
- Residents that are within the project footprint.

- Passers-by the site.
- Any other persons that maybe affected by the project works.

Appropriate signage must be posted to this effect and all employees on site must be instructed to ensure that non-employees are protected at all times. All non-employees entering the site must receive induction into the hazards and risks of the project and the control measures to be observed. The Principal Contractor should make efforts to identify the project site boundaries areas such as borrow pits and ensure that adequate measures are in place to protect the public especially in the absence of the Principal Contractor after working hours.

Access to residents' houses should be considered during excavation works, temporary access ramps should be put in place to ensure safe access. A suitable and sufficient risk assessment should accompany the installation of temporary access ramps such as load bearing aspects are considered.

Spectator value should be factored where heavy plant and equipment are at work. Children and some adults are fascinated by the various construction works and other equipment such as crane works, Excavator, the Grader, tipper trucks and many. It is a common occurrence that people watch such heavy plant and machinery executing project tasks. The PC must ensure that there is a safe buffer zone for anyone watching such construction works. The objective is to use a physical barricade with dust proof netting to protect t the project works especially where there are deep excavations. A designated person must be appointed to ensure that any persons watching construction works is further away from the construction activities such that the risk of harm as a result of the execution of project tasks is reduced to as low as reasonably practicable. All Plant Operators shall be given induction such that there are aware of the movement of public within the construction footprint. Appropriate NO TRESSPASSING signage shall also be used to restrict the public from trespassing into the project high risk areas. Designated personnel must be appointed to ensure public health and safety in relation to the various construction works.

Airborne dust is a significant occupational stressor that is transboundary and may easily affect the adjacent community resulting in short-term and chronic respiratory illness. The PC must put in place dust control programme (wet method) such that it is consistently implemented for the duration of the project. Excavation works, movement of plant, backfilling and compaction works are bound to generate clouds of airborne dust. The dust suppression programme should be spearheaded by an appointed person. The PC should ensure that water used for dust suppression does not introduce secondary health risk to the community.

The laying of stormwater pipes is characterised by deep excavations to various depths. The PC must develop and submit an excavation and laying of stormwater pipes method statement to the approval of the client's representative. Ideally the method statement should consider the length and duration of open excavations. The PC must ensure that excavations are done where pipes are set to be lain and backfilling must ensue such that the area is 'closed' at the end of the work shift. The PC should avoid instances whereby lengthy trenches are opened without laying the pipes and consequent backfilling. The method statement should consider the following: open, lay backfill material, lay the pipes after the necessary tests and backfill. Only small areas of trenches should be left open, where these are left open a physical barricade (speed fence or equivalent) including reflective barricade netting should be used.

The PC shall ensure that safe pedestrian walkways are in place for use by the public. The construction works are likely to temper or affect the original pedestrian walkways within the construction footprint. Pedestrian walkways should be clutter free and consider motor vehicle movement. The risk of harm in relation to the use of the designated pedestrian walkways should be reduced to as low as reasonably practicable

Awareness creation in relation to project works

The PC shall put measures in place meant to create awareness within the community in respect of the project construction works and the inherent construction hazards and risks and mitigation thereof. The PC must consider using public platforms such as community forums held from time to time to formally introduce the project and the anticipated inconveniences as a result of project works. Flyers should also be used to disseminate information with regards to the project mainly focusing on business and residents where project disturbances are expected to be significant. The CLO is strategically positioned to formally introduce the project to the community also detailing the basic health and safety aspects that the community should be cognisance of. The appointed CHSO and the CLO should target schools such that information regarding the common project risks and mitigation measures is communicated to school children.

5.3.2.23 Protecting the Environment

It is a legal and moral obligation to ensure that the environment is protected from degradation as a result of project activities. The project must be executed within the realms of environmental sustainability and the project's ecological footprint must be reduced at all costs. It is the responsibility of the contractor to create environmental awareness through various initiatives such as environmental monthly workshops, environmental toolbox talks, and other environmental campaigns.

The project has various workplace hazards that includes but not limited to the following:

- a) Chemical (dust and vapours)
- b) Physical (heat, light, noise and radiation)
- c) Posture and motion (vibration and ergonomics)
- d) Biological (bacteria and viruses etc)
- e) Psychosocial (stress, bullying, and violence)

Effective management of workplace health risks will assist the Employer to:

- a) Maximize the productivity per employee as a result of improved well-being.
- b) Avoid illness as result of workplace exposures.
- c) Employee retention and consequently improved productivity.
- d) Good and positive company image, increased prospects of getting more work.
- e) Improved turnover and no income lost as result of standing time while investigating incidents.
- f) Improved personal relations amongst employees.
- g) Avoid prosecution and penalties.

5.3.2.25 Transportation of employees

Employees must not be transported with tools and equipment. Any bakkie or motor vehicle to be used on site for employee transport must be fitted with adequate seating facilities and restraint covers and must be approved by the client representative prior to be used on site. No persons shall be transported on construction plant and equipment. The contractor must develop a vehicle policy that must also incorporate the transporting of employees on site, to and from work.

5.3.2.26 Sub-Contractors

A detailed subcontractor list shall be retained on site by the principal contractor. Each subcontractor to be appointed formally and legally appointed using the CR 7 1 c v contractor and appointment and the Mandatary OHSACT Sect 37 (1) (2) agreement.

Each subcontractor shall be given that SHE specification and in turn must compile a safety plan that shall be approved by the Principal contractor. Each subcontractor to submit a detailed safety plan with

all the necessary SHE procedures as identified by the respective risk assessment. The principal contractor to formally approve the Safety file.

All subcontractor employees to undergo induction before commencing with any site works. Each subcontractor must conduct his own induction (based on his scope of work) records of such to be retained in the safety file. It remains the responsibility of the Principal contractor to prescribe as to whether a full-time safety officer must be appointed by the subcontractor. This shall be based on the risk profile of the task at hand.

The Principal Contractor Safety Officer must audit the subcontractor on a monthly basis to ensure that the contractor is adhering to the safety management system in place.

5.3.2.27 Traffic Management

Traffic Management Plan should be developed and approved by the client's representative Resident Engineer. No open manhole in streets, lanes or any place where the public or other persons have access shall be left unguarded. The necessary road signs and speed limitation boards must also be in place. Any construction area must have all barricading requirements, and a person assigned as flagman in every entrance to the site.

Appointed trained flag persons should be available all the times. The placement of traffic accommodation equipment shall be in line with the traffic accommodation drawings as issued by the client's representative where applicable. It remains the prerogative of the Resident Engineer to request for a competent Traffic Safety Officer for the traffic accommodation aspects of the project.

5.3.2.28 Handtools

The contractor must inspect all hand tools before it is brought onto the site.

- As far as possible all hand tools must be numbered and placed on register to be inspected monthly by a person designated to do so.
- Any tools found to be in an unsafe condition must immediately be removed from service and either discarded or rectified.
- No chisels with "mushroomed" heads must be used.
- No hammer shall be used with a cracked or damaged handle.
- All files must be fitted with handles.
- All trolleys, pushcarts, etc. used on site must be identifiable, placed on register and inspected at least once every month.
- Non-sparking tools must be used in areas where the risk of fire or explosion is present.
- No home-made hand tools are allowed on the project.

5.3.2.29 Barricading

Barricading method statements are to be presented by the Principal Contractor for any major operations involving site works for approval by the client's appointed CHSA or Project Manager. Where areas are unsafe, they should be enclosed with barricading. Examples are Man at work, Narrow, Arrow etc. Where there is a risk of injury, the area should be barricaded off with secure solid barricades. The barricade must be constructed a minimum of 1,5m away from the hazard.

Barricading for the prevention of access into areas with a potential risk of injury shall as a minimum be constructed of a hand-rail, knee-rail and appropriately supported as to prevent any person from falling into the restricted/risk area.

All physical barricades shall be covered with netting ensuring visibility by personnel and operators of machinery.

Appropriate signage shall be affixed to the barricade indicating the hazard and risk associated (i.e. deep excavation, lifting operations etc.) and the responsible Supervisor and contact details shall be displayed. All barricading shall have a "No Entry" signs on all sides and at each change of direction. Signage shall be placed at 20 m intervals where lengths exceed. All signage shall be a minimum size of 290 mm x 290 mm.

Danger tape shall not be utilised to prevent personnel from entering into areas. Where no risk exists of injury to personnel such as stacking and storage areas, the use of wire shall be acceptable to demarcate the area.

All barricades will have a dedicated entrance where it is required that personnel enter the areas. Appropriate signage shall be placed at the entrance indicating which Contractor has right of entry.

It is the Contractor's responsibility to remove all redundant barricades directly after use. The Contractor's CHSO will maintain a marked-up site plan indicating where barricades are erected.

It will be a requirement that the contractor protects employees against contact with exposed rebar and poles by the installation of rebar-caps on all exposed areas where there is a potential that an employee could be injured.

5.3.4 CRITICAL (SAFE) OPERATING CONTROL PROCEDURES (SWPS)

Procedures (but not limited) to the following activities shall be developed and implemented.

- a) Site clearance;*
- b) Pipe trenches*
- c) Stormwater drainage and excavation*
- d) Earthworks (Roads and subgrade)*
- e) Subbase*
- f) Asphalt base and surfacing*
- g) Segmented paving*
- h) Kerbing and channelling*
- i) Ancillary roadworks*
- j) Street furniture*
- k) Metal works*
- l) Minor concrete works*
- m) Plumbing and drainage*
- n) Minor Electrical works*
- o) And other related civil works*
- p) Existing underground water, electricity and other Services*
- q) Use of ladders*
- r) Dust*
- s) Any other specific items or tasks relating to the construction work to be undertaken*

PART C4: SITE INFORMATION

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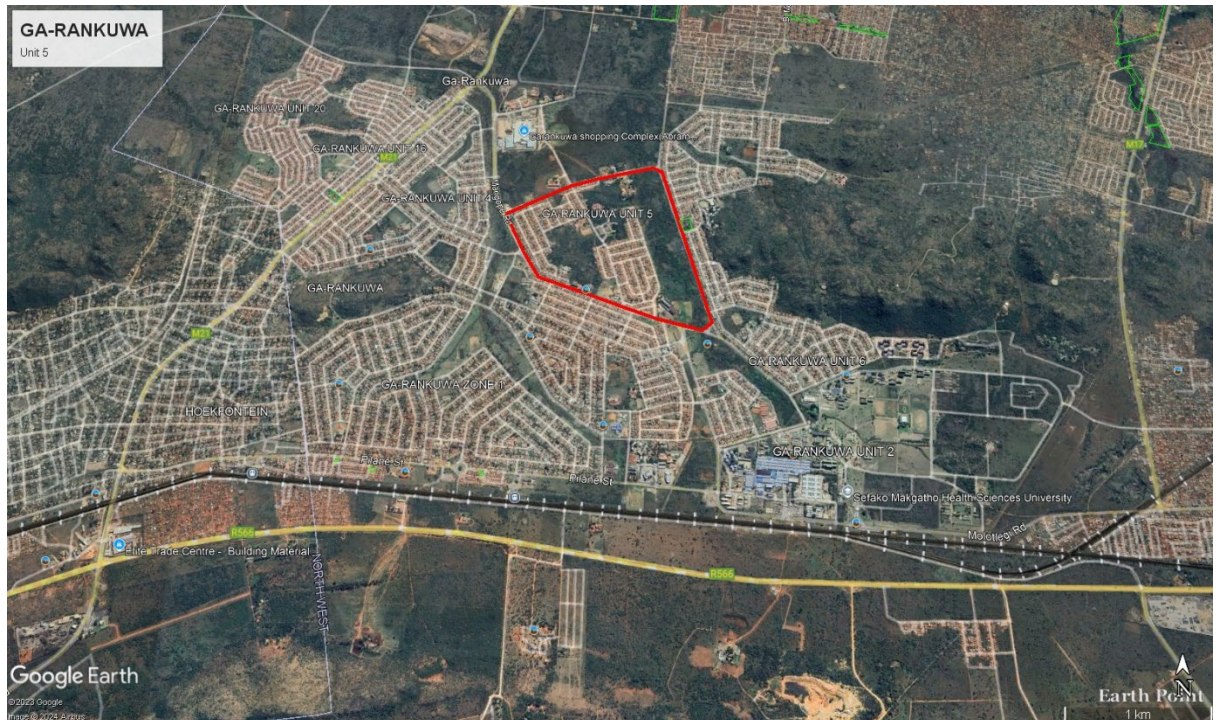
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C4.1.1 Locality

below is the locality map of the site:

The project is located approximately 37 km north-west of Pretoria, the proposed Upgrading of Roads and Stormwater Systems is situated in Ga-Rankuwa Zone 5- Phase 1, City of Tshwane Metropolitan Municipality, Gauteng. The area can be accessed via Lucas Mangophe Road (M31); development areas accessible through Molatlhoa Street.



Locality Map

C4.1.2 General Description of the Site

The site is located to the North of Pretoria, City of Tshwane Municipality, Gauteng Province of the Republic of South Africa. The site mainly comprises the existing formal settlement that is well-developed with formal housing structures. Some of the roads have been developed with black top surfaces.

Drainage is in the form of sheet flow and a combination of stormwater drainage pipes which drains and discharges in two key points, one along the site's south-western boundary and the other along the site's north-eastern boundary. There is a water course that runs approximately 150m from the north-eastern boundary of the site.

C4.1.3 Site Conditions

C4.1.3.1 Topography

The Topography of the Site is fairly flat with steep slopes, clay soil profiles encountered.

C4.1.3.2 Site Geology

The Geotechnical investigation suggests that the in-situ conditions are favourable for the upgrading of roads in Garankuwa Zone 5. The bulk of the in-situ material will be used for the subgrade and the subbase layers. Where there are shortages, material will be imported from the borrow pits.

The DCP tests conducted along the existing surfaced SJ Lefakane also suggests good in-situ founding conditions with favourable CBR's in most of the DCP's conducted. The Investigation report is summarised below:

C4.1.3.3 Ground water

There was no ground water seepage encountered during the Geotechnical Investigation. All trial pits remained dry until they were eventually closed.

C4.1.3.4 Hydrology

The site is not be affected by any flood lines. The 1:50 and 1:100 flood lines traverse the site along its north-eastern boundary and only affect an area that will not be developed.