



TENDER REFERENCE: HHS 02-2023/24

TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF WATER AND SEWER RETICULATION SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36 MONTHS.

VOLUME 1

A Tender for category 8CE or higher CIDB registered contractors

ISSUED BY:	PREPARED BY:
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Registered Name of Tenderer:	
Trading Name of Tenderer:	
Registration No. of Entity:	
Postal address of Tenderer:	
Contact Person:	CoT Vendor No:
Tel. No.:	E-mail Address:
Cell No.:	Fax No:
CIDB CRS Number(s) :	

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PORTION 1: TENDER

PART T1: TENDER PROCEDURES

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T1.1 TENDER NOTICE AND INVITATION TO TENDER

HHS 02-2023/24

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF WATER AND SEWER RETICULATION SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36 MONTHS.

Tenders are hereby invited for the above services.

Tenderers should have a CIDB contractor grading designation of **8CE** or higher.

Tenders will be received until **27 on March 2024**. Tenders will be received on the closing dates and times shown, must be enclosed in sealed envelopes, bearing the applicable tender heading and reference number, as well as the closing time and due date, and must be addressed to:- **The Chief Financial Officer, Tshwane House, 320 Madiba Street, Pretoria, 0002**

Tenders are hereby invited for the above work.

Tenders will be evaluated on the basis of awarding points for B-BBEE Status of Contributor for the Construction Charter Scorecard and quality of the tenderer. The **90/10** Preference Point System will be applied to this tender.

A COMPULSORY CLARIFICATION MEETING with a representative of the Employer will take place in **_Coner Beverley Street and Renet Avenue_** on **_28 February_ 2024 at 10h00.**

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

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of **90 days** after the closing date for the submission of tenders, during which period a tender may not be amended or withdrawn and may be accepted at any time by the Municipality.

The closing time for receipt of tenders is **10h00 on the 27 Mach 2024**. Tenders will be received on the closing date and time shown, must be enclosed in sealed envelopes bearing the applicable tender heading and reference number, as well as the closing time and due date, and must be addressed to the Executive Director, SUPPLY CHAIN MANAGEMENT, PRETORIA, 0001 and must be submitted in the tender box situated at **Tshwane House, 320 Madiba Street, Pretoria, 0002**. Tenders will be opened at the latter address at the time indicated.

ENQUIRIES: Ms Semakaleng Dlavani
Tel (Office): 012 358 5775
Fax: NA
E-Mail: semakalengd@tshwane.gov.za

Part T1: Tender Procedures

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in **Annexure C of Standard for Uniformity in Engineering and Construction Works Contracts (Board Act 38 of 2000 read with Regulation 24 of the Construction Industry Development Regulations, (as amended) issued in terms of section 33.**

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

CLAUSE NUMBER	TENDER DATA
C.1.1 Actions	The Employer is City of Tshwane Metropolitan Municipality
C.1.2 Tender Documents	<p><u>Volume 1: Tender Document</u></p> <p>THE TENDER</p> <p>Part T1: Tendering Procedures</p> <p>T1.1 – Tender Notice and Invitation to Tender</p> <p>T1.2 – Tender data</p> <p>T1.2 – Standard Conditions of Tender</p> <p>Part T2: Returnable documents</p> <p>T2.1 – List of returnable documents</p> <p>T2.2 – Returnable schedules</p> <p>THE CONTRACT</p> <p>Part C1: Agreements and contract data</p> <p>C1.1 – Form of offer and acceptance</p> <p>C1.2 – Contract data</p> <p>Part C3: Scope of work</p> <p>C3 – Scope of work</p> <p>Part C4: Site information</p> <p><u>Volume 2: Tender Drawings</u></p>
C.1.3 Interpretation C.1.3.4	<p>Add the following new clause:</p> <p><i>The tender documents have been drafted in English. The contract arising from the invitation to tender shall be interpreted and construed in English</i></p>
C.1.4 Communication (Employer's Agent(s))	<p>Agent: Imbawula Civil Projects</p> <p>Address: Plot 70, 1463 Tienie Street, Andeon Ah, Zandfontein, Pretoria West, 0183</p> <p>Tel: 012 372 3708</p> <p>Contact person: Mr. Tamsanqa Tom</p> <p>E-mail address: admin@imbawulacp.co.za</p>
C.2.1 Eligibility	<p>Only those Tenderers who satisfy the following eligibility criteria are eligible to submit tenders:</p> <p>Only those tenderers who are registered with the CIDB or are capable of being so prior to the evaluation of submissions, in a contract grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for an 8CE or higher class of construction work, are eligible to submit tenders.</p>

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CLAUSE NUMBER	TENDER DATA
	<p>Joint Ventures are eligible to submit tenders provided that:</p> <ol style="list-style-type: none"> 1. every member of a joint venture is registered with the CIDB within 10 days of the closing date of tenderers; 2. the lead partner has a contractor grading designation in the <u>7CE or higher class of construction work</u>; and <p>The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor designation in accordance with the sum tendered for an <u>8CE or higher class of construction work</u> or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations.</p> <p>C.2.1.1 Only tenderers who meet the mandatory requirements as follows:</p> <p>The company experience must indicate that at least one water and sewer project has been completed successfully.</p> <p>Project Contract Manager Qualification: BSc or B-Tech in civil engineering and</p> <ul style="list-style-type: none"> • Professional registration with ECSA as Engineer or Technologist; or • Professional registration with SACPCMP as Construction Project Manager or Construction Manager <p>(attach certified copy of qualifications and proof of professional registration)</p> <p>Project Site Agent/Construction Manager Qualifications: Minimum National Diploma in civil engineering or higher qualification in civil engineering (attach certified copy of qualifications)</p> <p>Foreman Artisan qualification/certification NQF Level 3 or higher qualification in civil engineering works or equivalent (attach certified copy of qualifications)</p> <p>Safety Officer Professional registration with SACPCMP as Safety Officer or Safety Manager (attach certified copy of professional registration)</p>
C.2.2 Cost of Tendering	<p>Add the following to the sub-clause C2.2.1: “The employer will not compensate the tenderer for any costs incurred in attending interviews or making any submissions in the office of the employer.</p>
C.2.5 Reference Documents	<p>Add the following:</p> <p>Unless specified otherwise in this document, the following standards and conditions of contract will be applicable under this Contract:</p> <ul style="list-style-type: none"> • The document “<i>City of Tshwane: Guidelines for the Design and Construction of Water and Sanitation Systems (Revised November 2016).</i>”

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA
	<p>This document is obtainable free of charge on the website www.tshwane.gov.za.</p> <ul style="list-style-type: none"> The latest print version as current at 30 days before close of tenders of the document “General Conditions of Contract for Construction Works 3rd Edition, 2015” including corrections thereto as current at 30 days before close of tenders, as published by the <i>South African Institution of Civil Engineering</i>. <p>The document may be purchased in hard copy from the <i>South African Institution of Civil Engineering</i> or may be purchased online as an electronic reference document in PDF format by following the relevant links on www.saice.org.za. The corrections may be downloaded from the SAICE website www.saice.org.za.</p>
C.2.7 Clarification meeting	<p>The arrangements for a compulsory clarification meeting are as stated in the tender notice and invitation to tender.</p> <p>Confirmation of attendance will be recorded on site in the attendance register to be signed by all tenderers. Addenda will be issued to and tenders received from those tendering entities appearing on the attendance register.</p> <p>Tender documents will not be made available at the clarification meeting</p>
C.2.8 Seek clarification	<p>Replace the clause with the following:</p> <p><i>Request clarification of the tender documents, if necessary, by notifying the employer at least <u>7 (seven) working days</u> before the closing time stated in the tender data.</i></p> <p>The document is downloadable on the National Treasury website (www.etenders.gov.za) and City of Tshwane website (www.tshwane.gov.za)</p>
C.2.9 Insurance	<p>Add the following to the clause</p> <p>Be aware that the extent of insurance to be provided by the Employer (if any) might not be for the full cover required in terms of the conditions of contract identified in the contract data. The tenderer is advised to seek qualified advice regarding insurance.</p>
C.2.10 Pricing the tender offer	<p>Add the following sub-clause 2.10.5:</p> <p>“A digital copy of the Bill of Quantities can be obtained from the Employer’s Agent at the office of the Engineer upon sufficient notice.”</p>
C.2.11 Alterations to documents	<p>Add the following to the clause:</p> <p>“In the event of a mistake having been made, it shall be crossed out in black ink and the corrected entry made above in black ink and shall be accompanied by the full signatures of the authorised signatories next to every correction.</p> <p><u>No correction fluid may be used. If correction fluid has been used, the tender as a whole will not be considered.</u></p> <p>The Municipality will reject the bid if corrections are not made in accordance with the above.”</p>
C.2.12 Alternative offers	<p>No alternative tender offers will be considered.</p>
C.2.13 Submitting a tender offer	<ul style="list-style-type: none"> The tender offer shall be completed in non-erasable black ink Any entry made by the tenderer in the document which the tenderer desires to change, shall not be erased or painted out. A line shall be drawn through the incorrect entry and the correct entry shall be written above in non-erasable black ink and the full signature of the tenderer shall be placed next to the correction.

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CLAUSE NUMBER	TENDER DATA
<p>C.2.13. 2</p>	<p>Replace the contents of the clause with the following:</p> <p>“Return all volumes of the tender document to the Employer after completion of the relevant sections of each volume in their entirety, either electronically (if they were issued in electronic format) or by writing in black ink. All volumes are to be left intact in its original format and no pages shall be removed or re-arranged.</p> <p>Each Tenderer is required to return the complete set of returnable documents as listed in Part T2 with all the required information supplied and completed in all respects.”</p>
<p>C.2.13. 3</p>	<p>Add the following to the clause:</p> <p>“Submission of copies of the tender document is NOT required. Tenderer will be required to submit the completed ORIGINAL tender documents as listed above in C1.2 PLUS any required supporting documentation.”</p>
<p>C.2.13. 4</p>	<p>Add the following to the clause</p> <p><i>Only authorised signatories may sign the original and all copies of the tender offer where required.</i></p> <p><i>In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly stated.</i></p> <p><i>In the case of a COMPANY submitting a tender, include a copy of a resolution by its board of directors authorising a director or other official of the company to sign the documents on behalf of the company.</i></p> <p><i>In the case of a CLOSE CORPORATION submitting a tender, include a copy of a resolution by its members authorising a member or other official of the corporation to sign the documents on each member’s behalf.</i></p> <p><i>In the case of a PARTNERSHIP submitting a tender, all the partners shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case proof of such authorisation shall be included in the Tender.</i></p> <p><i>In the case of a JOINT VENTURE/CONSORTIUM submitting a tender, include a resolution of each company of the joint venture together with a resolution by its members authorising a member of the joint venture to sign the documents on behalf of the joint venture.</i></p> <p><u>Accept that failure to submit proof of authorisation to sign the tender shall result in the tender offer being regarded as non-responsive.</u></p>
<p>C.2.13. 5</p>	<p>The identification details are:</p> <p>Tender Reference: HHS 02-2023/24</p> <p>Tender Description: The appointment of a contractor for the construction of water and sewer reticulation services in Andeon Extension 37 for a period of 36 months</p>

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CLAUSE NUMBER	TENDER DATA
	<p>Each tender shall be enclosed in a sealed envelope, bearing the correct identification details and shall be submitted (HAND DELIVERED) at:</p> <p style="text-align: center;">Supply Chain Management Tshwane House 320 Madiba Street Pretoria CBD 0002</p> <p>Please note that the tender box is open 24 hours Please ensure that all required compliance documents are included upon submission as no additional documents will be requested from bidders after closing.</p>
C.2.13.6	<p>Bidders are required to submit electronic copies of the bid either by memory stick/USB flash drive together with the hard copy of the Bid/Proposals</p> <p>A two-envelope procedure will not be followed.</p>
C.2.13.7	<p>Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.</p>
C.2.13.8	<p>Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated</p>
C.2.13.9	<p>Telephonic, telegraphic, telex, facsimile or e-mailed offers will <u>not</u> be accepted.</p>
C.2.13.10	<p>Add the following sub- clause C.2.13.10:</p> <p><i>Accept that all conditions, which are printed or written upon any stationery used by the Tenderer for the purpose of or in connection with the submission of a tender offer for this Contract, which are in conflict with the conditions laid down in this document shall be waived, renounced and abandoned.</i></p>
C.2.14 Information and data to be completed in all respects	<p>Add the following to the clause:</p> <p><i>The Tenderer is required to enter information in the following sections of the document:</i></p> <p><i>Section T2.2 : Returnable Schedules</i> <i>Section T2.3 : Technical Schedules</i> <i>Section C1.1 : Form of Offer and Acceptance</i> <i>Section C1.2 : Contract Data (Part 2)</i> <i>Section C2.2 : Bill of Quantities</i></p> <p><i>The above sections shall be signed by the Tenderer (and witnesses where required). Individual pages should only be initialled by the successful Tenderer and by the witnesses after acceptance by the Employer of the Tender Offer.</i></p> <p><i>The Tenderer shall complete and sign the Form of Offer prior to the submission of a Tender Offer.</i></p> <p><i>The Schedule of Deviations (if applicable) shall be signed by the successful Tenderer after acceptance by the Employer of the Tender Offer.</i></p>

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CLAUSE NUMBER	TENDER DATA
	<p><i>Accept that failure on the part of the Tenderer to submit any one of the Returnable Documents listed in Part T2 – Returnable Documents within the period stipulated, shall be just cause for the Employer to consider the tender offer as being regarded as non-responsive.</i></p> <p><i>Accept that the Employer shall in the evaluation of tender offers take due account of the Tenderer’s past performance in the execution of similar engineering works of comparable magnitude, and the degree to which he possesses the necessary technical, financial and other resources to enable him to complete the Works successfully within the contract period. Satisfy the Employer and the Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, and furnish details in Part T2 – Returnable Documents.</i></p> <p><i>Accept that the Employer is restricted in accordance with clause 5 (1) of the Construction Regulations, 2014, to only appoint a contractor whom he is satisfied has the necessary competencies and resources to carry out the work safely. Accept that submitting inferior and inadequate information relating to health and safety (as required in clause 2.23) shall be regarded as justifiable and compelling reasons not to accept the Tender Offer of the Tenderer scoring the highest number of tender evaluation points.</i></p>
<p>C.2.15 Closing time</p> <p>C.2.15.1</p>	<p>The closing time for submission of tender offers is stated in the tender notice and invitation to tender. (Section T.1.1 of the document).</p>
<p>C.2.16 Tender offer validity</p> <p>C.2.16.5</p>	<p>The tender offer validity period is 90 days.</p> <p>Add the following new clause</p> <p><i>If the tender validity period expires on a Saturday, Sunday or public holiday, the tender offer shall remain valid and open for acceptance until closure of business on the following working day.</i></p>
<p>C.2.16.6</p>	<p>Add the following new clause:</p> <p><i>Accept that should the Tenderer unilaterally withdraw his tender during the tender validity period, the Employer shall, without prejudice to any other rights he may have, be entitled to accept any less favourable tender for the Works from those received, or to call for fresh tenders, or to otherwise arrange for execution of the Works, and the Tenderer shall pay on demand any additional expense incurred by the Employer on account of the adoption of the said courses, as well as either the difference in cost between the tender withdrawn (as corrected in terms of clause 3.9 of the Conditions of Tender) and any less favourable tender accepted by the Employer, or the difference between the tender withdrawn (as corrected) and the cost of execution of the Works by the Employer as well as any other amounts the Employer may have to pay to have the Works completed</i></p>
<p>C.2.18 Provide other material</p> <p>C2.18.1</p>	<p>The tenderer shall, when requested by the employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.</p> <p>Add the following to the clause:</p> <p>“Accept that if requested, the Tenderer shall within 7 days of the date upon which he is requested to do so, submit a full report from his banker as to his financial standing. The Employer may, in its discretion, and subject to the provisions of Section 4(1)(d) of the State Tender Board Act 86 of 1968, condone any failure to comply with the foregoing condition.</p> <p>Accept that the Employer or his agent reserves the right to approach the Tenderer’s banker or guarantor(s) as indicated in the tender document, or the bankers of each of the individual members</p>

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CLAUSE NUMBER	TENDER DATA
	of any joint venture that is constituted for purposes of this Contract, with a view to ascertaining whether the required guarantee will be furnished, and for purposes of ascertaining the financial strength of the Tenderer or of the individual member of such venture.”
C.2.19 Inspections, tests and analysis	Add the following at the end of the clause: <i>....or upon written request.</i>
C.2.20 Submit securities, bonds, policies, etc.	The tenderer is required to submit with his tender proof of his Professional Indemnity Insurance.
C.2.22 Return of other tender documents	Return all retained tender documents prior to the closing time for the submission of Tender Offers.
C.2.23 Certificates	Refer to Part T2 of this procurement document for a list of the documents that are to be returned with the tender.
C.2.24 <i>Canvassing and obtaining of additional information by tenderers</i>	<i>The Tenderer shall not make any attempt either directly or indirectly to canvass any of the Employer’s officials or the Project Coordinator or Deputy Directors (Regional Project Managers)/ Employer’s Agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon.</i> <i>The Tenderer shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders</i>
C.2.25 <i>Prohibitions on awards to persons in service of the state</i>	Add the following new clause <i>The Employer is prohibited to award a tender to a person -</i> <ol style="list-style-type: none"> <i>a) who is in the service of the state; or</i> <i>b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or</i> <i>c) a person who is an advisor or consultant contracted with the municipality or municipal entity.</i> <i>In the service of the state means to be -</i> <ol style="list-style-type: none"> <i>a) a member of: -</i> <ul style="list-style-type: none"> <i>• any municipal council;</i> <i>• any provincial legislature; or</i> <i>• the National Assembly or the National Council of Provinces;</i> <i>b) a member of the board of directors of any municipal entity;</i> <i>c) an official of any municipality or municipal entity;</i> <i>d) an employee of any national or provincial department;</i> <i>e) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);</i> <i>f) a member of the accounting authority of any national or provincial public entity; or</i> <i>g) an employee of Parliament or a provincial legislature.</i> In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed
C.2.26 <i>Awards to close family members of persons in</i>	Add the following new clause <i>Accept that the notes to the Employer’s annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child or parent of a person in the service of</i>

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CLAUSE NUMBER	TENDER DATA
<p><i>the service of the state</i></p>	<p><i>the state (defined in clause C.2.25), or has been in the service of the state in the previous twelve months, including -</i></p> <ul style="list-style-type: none"> <i>a) the name of that person;</i> <i>b) the capacity in which that person is in the service of the state; and</i> <i>c) the amount of the award.</i> <p>In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.</p>
<p>C.2.27 Vendor registration</p>	<p>Add the following new clause</p> <p><i>The contractor will be required to register as a supplier/ service provider on the City of Tshwane’s vendor register before any payment can be done.</i></p> <p><i>If the tenderer is already registered as a vendor, it is required to record the vendor number in space provided on the cover page of this Tender document.</i></p> <p><i>Vendor registration documents are available from the Procurement Advice Centre or can be downloaded from: https://www.tshwane.gov.za/sites/business/RegistrationofSuppliers/pages/registration-of-suppliers.aspx</i></p> <p><i>All parties of a joint venture or consortium submitting a tender shall comply with the requirements of this clause.</i></p>
<p>C.2.28 Tax</p>	<p>Add the following new clause</p> <p>National Treasury SCM Instruction no. 7 of 2017/18 clause 4 application during SCM Processes state that:</p> <p><i>The designated official(s) must verify the tenderer’s tax compliance status prior to the finalisation of the award of the tender or price quotation.</i></p> <p><i>Where the recommended tenderer is not tax compliant, the tenderer should be notified of their non-compliant status and the tenderer must be requested to submit to the municipality or municipal entity, within 7 working days, written proof from South African Revenue Services of their tax compliance status or proof from SARS that they have made an arrangement to meet their outstanding tax obligations. The proof of tax compliance status submitted by the tenderer to the municipality or municipal entity must be verified via the Central Supplier Database or eFiling</i></p> <p><i>Accept that the tenderer will be rejected if such tenderer fails to provide proof of tax compliance status in terms of clause 4.2 of National Treasury SCM Instruction no. 7 of 2017/18</i></p>
<p>C.3.1 Respond to requests from the tenderer</p> <p>C.3.1.1</p>	<p>The employer will respond to requests for clarification up to 7 (seven) working days before the tender closing time.</p>
<p>C.3.4 Opening of tender submissions</p>	<p>Tenders will be opened immediately after the closing time for tenders. Bidders are requested to refer to the City’s website where the closing register will be published.</p>

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CLAUSE NUMBER	TENDER DATA
<p>C.3.8 Test for responsiveness</p> <p>C.3.8.1</p>	<p>Add the following to the sub-clause:</p> <p>Failure on the part of the Tenderer to submit a tender offer as stipulated in clause C2.13 prior to the closing time as stipulated in clause C2.15 shall be just cause for the Employer to consider the tender offer as being non-responsive</p> <p>Failure on the part of the Tenderer to submit any one of the returnable documents or certificates listed in clause C2.23 within the period stipulated shall be just cause for the Employer to consider the tender offer as being non-responsive.</p>
<p>C.3.9</p> <p>Arithmetical errors, omissions and discrepancies</p>	<p>Replace the contents of the clause with the following:</p> <p>Check responsive tender offers for arithmetical errors, correcting them in the following manner:</p> <p>a) If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is an error in the line item total resulting from the product of the unit rate and the quantity, the unit rate shall govern and the line item total shall be corrected.</p> <p>b) Where there is an error in the total of the prices, either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the corrected total of the prices shall govern.</p> <p>c) Where there is a discrepancy between the amount indicated in the Tenderer's tender offer and the corrected amount obtained after completing the above steps, the corrected amount shall govern.</p> <p>Notify a tenderer upon written request received after the closing date of tenders of all arithmetical errors made by that particular tenderer.</p>
<p>C.3.11</p> <p>Evaluation of tender offers</p>	<p>Add the following to the sub-clause:</p> <p>Method 2 as described in Clause 3.11.3 will be used to evaluate all responsive tender offers.</p>
<p>C.3.11.3</p> <p>Functionality will be evaluated based on the tender's ability to prove with supporting documentation experience and capacity to implement water and sewer projects</p>	<p>Method 2: Functionality</p> <p>In the case of functionality:</p> <p>1) Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality as stated in the Tender Data.</p> <p>2) No tender must be regarded as an acceptable tender if it fails to achieve the minimum qualifying score for functionality as indicated in the tender invitation.</p> <p>Tenders that have achieved the minimum qualification score for functionality must be evaluated further in terms of the preference points system prescribed in clauses C3.11.4.</p>
<p>C.3.11.4</p>	<p>The preferential point system used will be the 90/10 points system in terms of the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) Regulations 2022</p> <ul style="list-style-type: none"> • 90 points for price • 10 points for specific goals <p>A maximum of 90 points is allocated for price on the following basis:</p>

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA						
	$P_s = 90 \left(1 - \frac{P_t - P_{min}}{P_{min}} \right)$ <p>Where Ps = Points scored for price of tender under consideration; Pt = Price of tender under consideration; and Pmin = Price of lowest acceptable tender.</p> <ul style="list-style-type: none"> • A maximum of 10 points may be awarded to a tenderer for the specific goal specified for the tender. • The points scored for the specific goal must be added to the points scored for price and the total must be rounded off to the nearest two decimal places. • Subject to section 2(1)(f) of the Act, the contract must be awarded to the tenderer scoring the highest points. 						
C 3.11.6 Scoring Functionality and Quality	A minimum of 70 points out of 100 must be scored to move to the next evaluation level Points allocation Company experience – 60 points Key personnel experience – 40 points						
	<p>1. STAGES OF EVALUATION</p> <p>This bid will be evaluated in four evaluation stages namely:</p> <ul style="list-style-type: none"> • Stage 1: Administrative compliance • Stage 2: Mandatory requirements • Stage 3: Functionality Criteria • Stage 4: Preference Points System <p>1.1 ADMINISTRATIVE COMPLIANCE</p> <p>All the bids will be evaluated against the administrative responsiveness requirements as set out in the list of returnable documents.</p> <p>A compulsory site meeting and Compulsory briefing session to be held.</p> <table border="1" data-bbox="376 1615 1449 2004"> <thead> <tr> <th data-bbox="376 1615 743 1742">Compulsory Returnable Documentation (Submission of these are compulsory)</th> <th data-bbox="743 1615 1086 1742">Submitted (YES or NO)</th> <th data-bbox="1086 1615 1449 1742">Checklist (Guide for Bidder and the Bid Evaluation Committee)</th> </tr> </thead> <tbody> <tr> <td data-bbox="376 1742 743 2004"> a) To enable The City to verify the bidder’s tax compliance status, the bidder must provide; <input type="checkbox"/> A copy of their Tax Clearance Certificate (TCS); or <input checked="" type="checkbox"/> Indicate their tax compliance status PIN. </td> <td data-bbox="743 1742 1086 2004"></td> <td data-bbox="1086 1742 1449 2004"> TCS must be in the same business name as the bidding company? TCS must be valid? Tax status must be compliant? </td> </tr> </tbody> </table>	Compulsory Returnable Documentation (Submission of these are compulsory)	Submitted (YES or NO)	Checklist (Guide for Bidder and the Bid Evaluation Committee)	a) To enable The City to verify the bidder’s tax compliance status, the bidder must provide; <input type="checkbox"/> A copy of their Tax Clearance Certificate (TCS); or <input checked="" type="checkbox"/> Indicate their tax compliance status PIN.		TCS must be in the same business name as the bidding company? TCS must be valid? Tax status must be compliant?
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Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA		
	<p>b) a copy of their Central Supplier Database (CSD) registration; or indicate their Master Registration Number / CSD Number;</p>		<p>CSD must be valid? Tax status must be compliant?</p>
	<p>c) Confirmation that the bidding company's rates and taxes are up to date: • Original or copy of Municipal Account Statement of the Bidder (bidding company) not older than 3 months and account must not be in arrears for more than ninety (90) days; or • Letter or Statement or Affidavit from landlord confirming that the Bidder (bidding company) has no disputed account(s) and the account is not in arrears for more than ninety (90) days. Where possible, the landlord letter, landlord statement or landlord affidavit should be accompanied with a signed lease agreement.</p>		<p>Was a Municipal Account Statement or landlord letter provided for the bidding company? The name and / or addresses of the bidder's statement correspond with CIPC document? Are correspondence recent (not older than 3 months)? Are all payment(s) up to date (i.e. not in arrears for more than 90 days)?</p>
	<p>d) In addition to the above, confirmation that all the bidding company's owners / members / directors / major shareholders rates and taxes are up to date: • Original or copy of Municipal Account Statement of all the South African based owners / members / directors / major shareholders not older than 3 months and the account/s may not be in arrears for more than ninety (90) days; or • Letter or Statement or Affidavit (correspondence should be dated and not older than 3 months) for all the South African based owners / members / directors / major shareholders from their respective landlord/s confirming that the owners / members / directors / major shareholders of the bidding company has no disputed account(s) and the account is</p>		<p>Was a Municipal Account Statement(s) or landlord letter(s) provided for ALL the bidding company's (SA based) directors? The names and/or addresses of all directors on statement correspond with CIPC document? Are correspondence recent (not older than 3 months)? Are all payments up to date (i.e. not in arrears for more than 90 days)?</p>

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA	
	<p>not in arrears for more than ninety (90) days. Where possible, the landlord letter, landlord statement or landlord affidavit should be accompanied with a signed lease agreement.</p>	
	<p>e) Duly Signed and completed MBD forms (MBD 1, 4, 5, 8 and 9) The person signing the bid documentation must be authorised to sign on behalf of the bidder. Where the signatory is not a Director / Member / Owner / Shareholder of the company, an official letter of authorization or delegation of authority should be submitted with the bid document.</p> <p>NB: Bidders must ensure that the directors, trustees, managers, principle shareholders, or stakeholders of this company</p> <p>declare any interest in any other related companies or business whether or not they are bidding for this contract. <u>See Question 3.14 of MBD 4. Failure to declare interest will result in a disqualification</u></p>	<p>All documents fully completed (i.e. no blank spaces)? All documents fully signed? Signature authorised (any director / member / trustee as indicated on the CIPC document, alternatively a delegation of authority would be required? Documents completed in black ink (i.e. no "Tippex" corrections, no pencil, no other colour ink, or none submission of the above, will be considered)?</p>
	<p>Financial Statements for the most recent three (3) years or financial statements from date of existence for companies less than three years. NB: The bidder must submit signed audited annual financial statements for the most recent 3 years, or if established for a shorter period, submit audited annual financial statements from date of establishment.</p> <p>If the bidder is not required by law to prepare signed annual</p>	<p>Applicable for tenders above R10m in conjunction with MBD 5)</p> <p>Are Audited financial statements provided (Audited financials must be signed by auditor)? Or</p>

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA		
	financial statements for auditing purposes, then the bidder must submit Proof that the bidder is not required by law to prepare Audited financial statements.		
	<p>f) Joint Ventures (JV) – (Only applicable when the bidder tender as a joint venture) • Where the bidder bid as a Joint Ventures (JV), the required or relevant documents as per (a) to l above must be provided for all JV parties. • In addition to the above the bidder must submit a Joint Venture (JV) agreement signed by the relevant parties.</p> <p>• Note: It is a condition of this bid that the successful bidder will continue with same Joint Venture (JV) for the duration of the contract, unless prior approval is obtained from The City.</p>		<p>If applicable. JV agreement provided? JV agreement complete and relevant? Agreement signed by all parties? All required documents as per (i.e. a to e) must be provided for all partners of the JV.</p>
	Bidder attended a compulsory briefing session where applicable		<p>A compulsory briefing register must be signed by the bidder.</p> <p>Bidders will be disqualified should they fail to attend compulsory briefing session</p>
	Pricing schedule (All items must be quoted for in pricing schedule and if not all items are quoted the bidder will be disqualified). Unless the tender is awarded per item or per section where the bidder only quoted the items or sections they are interested in.		<p>Incomplete pricing schedule results in totals being incomparable. Bidder must be disqualified.</p> <p>Bidder will be disqualified should they make corrections on the price schedule without attaching a signature thereto.</p> <p>Bidder will be disqualified should they use tippex/ correction ink, on the price schedule.</p>
<p>1.2 MANDATORY REQUIREMENTS</p> <p>It is expected that the bidder will deploy experienced key personnel that have in the past tenant installation/fit-out works, and this team should possess the relevant skills adequate for performing the tasks set out in this specification document.</p>			

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA																				
	<p>The following information must be provided:</p> <ul style="list-style-type: none"> • Active CIDB grading level of 8CE or Higher. • Valid Letter of Good Standing (i.e., COIDA, Department of Labour or any other accredited Institutions) • Qualifications of key personnel <ul style="list-style-type: none"> ○ Project Contract Manager Qualification: BSc or B-Tech in civil engineering and <ul style="list-style-type: none"> • Professional registration with ECSA as Engineer or Technologist; or • Professional registration with SACPCMP as Construction Project Manager or Construction Manager (attach certified copy of qualifications and proof of professional registration) ○ Project Site Agent/Construction Manager Qualifications: Minimum National Diploma in civil engineering or higher qualification in civil engineering (attach certified copy of qualifications) ○ Foreman Artisan qualification/certification NQF Level 3 or higher qualification in civil engineering works or equivalent (attach certified copy of qualifications) ○ Safety Officer Qualification: Professional registration with SACPCMP as Safety Officer or Safety Manager (attach certified copy of professional registration) <p>1.3 FUNCTIONALITY CRITERIA</p> <p>Only tenderers who obtain a minimum of 70 points in respect of the following criteria will be considered for the next stage of evaluation. Bidders that do not achieve a minimum 70 points out of 100 points will not be evaluated further.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" rowspan="2">Functionality and Quality Criteria – Tender Rating Matrix</th> <th>A</th> <th>B</th> <th>C</th> <th>C</th> </tr> <tr> <th>Tenderer rating (Score 0-5)</th> <th>Weighting</th> <th>Maximum score to be achieved</th> <th>Tenderer Score =(A x B)</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="writing-mode: vertical-rl; transform: rotate(180deg);">Company work experience as per FORM RDD.3 Water reticulation</td> <td>Tendering Firm's experience of successfully completing a water reticulation project, with a minimum value of R30 million, over the past 10 years. (attach appointment letters and completion certificates as proof). Failure to submit, will result in zero score allocated</td> <td></td> <td rowspan="3" style="text-align: center;">6</td> <td rowspan="3" style="text-align: center;">30</td> <td rowspan="3"></td> </tr> <tr> <td>Successfully completed more than 5 similar projects in excess of R30 million value for each completed</td> <td style="text-align: center;">5</td> </tr> <tr> <td>Successfully completed more than 4 similar projects in excess of R30 million value for each project</td> <td style="text-align: center;">4</td> </tr> </tbody> </table>	Functionality and Quality Criteria – Tender Rating Matrix		A	B	C	C	Tenderer rating (Score 0-5)	Weighting	Maximum score to be achieved	Tenderer Score =(A x B)	Company work experience as per FORM RDD.3 Water reticulation	Tendering Firm's experience of successfully completing a water reticulation project, with a minimum value of R30 million, over the past 10 years. (attach appointment letters and completion certificates as proof). Failure to submit, will result in zero score allocated		6	30		Successfully completed more than 5 similar projects in excess of R30 million value for each completed	5	Successfully completed more than 4 similar projects in excess of R30 million value for each project	4
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Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA				
	Key Project Personnel as per Form RD.D.8 Site Agent	Site Agent Minimum 5 years relevant experience Specific Experience: Attach a CV detailing experience in the position of Site Agent on water and sewer projects		2	10
		More than 9 Years experience	5		
		8 – 9 Years experience	4		
		6 - 7 Years experience	3		
		5 Years experience	2		
	Key Project Personnel as per Form RD.D.8 Foreman	Foreman Minimum 3 years relevant experience Specific Experience: Attach a CV detailing experience in the position of Foreman on water and sewer projects		2	8
		More than 7 Years experience	4		
		6 – 7 Years experience	3		
		4 - 5 Years experience	2		
		3 Years experience	1		
	Form RD.D.8 Key Project Personnel as per Health and Safety Officer	Construction Health & Safety Officer (CHS) Minimum 2 years relevant experience post registration as CHS Officer Specific Experience: Attach a CV detailing experience in the position of Construction Health & Safety Officer on water and sewer projects		2	10
		More than 8 Years experience post registration	5		
		7 - 8 Years experience post registration	4		
		5 - 6 Years experience post registration	3		
		3 – 4 Years experience post registration	2		
		2 Years experience post registration	1		
		TOTAL SCORE FOR KEY PERSONNEL			40
	<p>1.4 PREFERENCE POINT SYSTEM</p>				
	<p>The preferential point system used will be the 90/10 points system in terms of the Preferential Procurement Policy Framework Act, 2000 (Act 5 of 2000) Regulations 2022</p>				

Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA																				
	<ul style="list-style-type: none"> • 90 points for price • 10 points for specific goals <p>10 points for Specific Goals (service provider to submit the certified copy of the specific goals). Refer to Table 1 below:</p>																				
	<table border="1"> <thead> <tr> <th data-bbox="376 555 730 689">Specific goals</th> <th data-bbox="730 555 938 689">90/10 preference point system</th> <th data-bbox="938 555 1447 689">Proof of specific goals to be submitted</th> </tr> </thead> <tbody> <tr> <td data-bbox="376 689 730 1093"> 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 </td> <td data-bbox="730 689 938 1093"> <ul style="list-style-type: none"> • 4 Points • 3.5 Points • 3 Points • 2.5 Points • 2 Points • 1.5 Points • 1 Point • 0.5 Points • 0 Points </td> <td data-bbox="938 689 1447 1093"> Valid Certified copy of BBBEE certificate. Sworn Affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate. </td> </tr> <tr> <td data-bbox="376 1093 730 1261"> EME and/ or QSE </td> <td data-bbox="730 1093 938 1261"> 1 Point </td> <td data-bbox="938 1093 1447 1261"> Valid Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate </td> </tr> <tr> <td data-bbox="376 1261 730 1491"> At least 51% of Women-owned companies </td> <td data-bbox="730 1261 938 1491"> 1 Point </td> <td data-bbox="938 1261 1447 1491"> Certified copy of Identity Document/s and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership) </td> </tr> <tr> <td data-bbox="376 1491 730 1816"> At least 51% owned companies by People with disability </td> <td data-bbox="730 1491 938 1816"> 1 Point </td> <td data-bbox="938 1491 1447 1816"> Medical Certificate with doctor's details (Practice Number, Physical Address, and contact numbers) and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership) </td> </tr> <tr> <td data-bbox="376 1816 730 2063"> At least 51% owned companies by Youth </td> <td data-bbox="730 1816 938 2063"> 1 Point </td> <td data-bbox="938 1816 1447 2063"> Certified copy of Identity Document/s and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, </td> </tr> </tbody> </table>			Specific goals	90/10 preference point system	Proof of specific goals to be submitted	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"> • 4 Points • 3.5 Points • 3 Points • 2.5 Points • 2 Points • 1.5 Points • 1 Point • 0.5 Points • 0 Points 	Valid Certified copy of BBBEE certificate. Sworn Affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate.	EME and/ or QSE	1 Point	Valid Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises or CIPC BBBEE certificate	At least 51% of Women-owned companies	1 Point	Certified copy of Identity Document/s and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)	At least 51% owned companies by People with disability	1 Point	Medical Certificate with doctor's details (Practice Number, Physical Address, and contact numbers) and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)	At least 51% owned companies by Youth	1 Point	Certified copy of Identity Document/s and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises,
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Part T1: Tender Procedures

CLAUSE NUMBER	TENDER DATA		
			CIPC registration or any other proof of ownership
	Local Economic Participation <ul style="list-style-type: none"> • City of Tshwane • Gauteng • National 	2 Points 1 Point 1 Point	Municipal Account statement/Lease agreement.
C.3.13 Acceptance of Tender Offer	Tender offers will only be accepted if: <ol style="list-style-type: none"> a.) the tenderer has complied in full with the all eligibility criteria; b.) the tenderer is able to provide proof of tax compliance status in terms of clause 4.2 of National Treasury SCM Instruction no. 7 of 2017/18; c.) the tenderer is not in arrears for more than 3 months with municipal rates and taxes and municipal service charges; d.) the tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; e.) the tenderer has not: <ol style="list-style-type: none"> i) abused the Employer’s Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect. f.) the tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer’s ability to perform the contract in the best interests of the employer or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract; g.) the tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer. h.) the employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2014, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely. 		
C 3.16 Registration of the award	Add the following to the clause: Notice of non-acceptance of the tender will not be sent to individual unsuccessful tenderers. Particulars of the accepted tender can be obtained from the Employer’ Agent.		
C 3.17 Provide Copies of Contract	One signed copy of the contract shall be provided by the Employer to the successful Tenderer.		

Part T1: Tender Procedures

T1.3 STANDARD CONDITIONS OF TENDER

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C.1 General

C.1.1 Actions

C.1.1.1 The employer and each tenderer submitting a tender offer shall comply with these conditions of tender. In their dealings with each other, they shall discharge their duties and obligations as set out in C.2 and C.3, timeously and with integrity, and behave equitably, honestly and transparently, comply with all legal obligations and not engage in anticompetitive practices.

C.1.1.2 The employer and the tenderer and all their agents and employees involved in the tender process shall avoid conflicts of interest and where a conflict of interest is perceived or known, declare any such conflict of interest, indicating the nature of such conflict. Tenderers shall declare any potential conflict of interest in their tender submissions. Employees, agents and advisors of the employer shall declare any conflict of interest to whoever is responsible for overseeing the procurement process at the start of any deliberations relating to the procurement process or as soon as they become aware of such conflict and abstain from any decisions where such conflict exists or recuse themselves from the procurement process, as appropriate.

Note: 1) A conflict of interest may arise due to a conflict of roles which might provide an incentive for improper acts in some circumstances. A conflict of interest can create an appearance of impropriety that can undermine confidence in the ability of that person to act properly in his or her position even if no improper acts result.

2) Conflicts of interest in respect of those engaged in the procurement process include direct, indirect or family interests in the tender or outcome of the procurement process and any personal bias, inclination, obligation, allegiance or loyalty which would in any way affect any decisions taken.

C1.1.3 The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

C1.2 Tender Documents

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

C.1.3 Interpretation

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

C.1.3.2 These conditions of tender, the tender data and tender schedules which are required for tender evaluation purposes, shall form part of any contract arising from the invitation to tender.

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C.1.3.3 For the purposes of these conditions of tender, the following definitions apply:

- a) conflict of interest means any situation in which:
 - i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
 - ii) an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
 - iii) incompatibility or contradictory interests exist between an employee and the tenderer who employs that employee.
- b) comparative offer means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
- c) corrupt practice means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;
- d) fraudulent practice means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;

C.1.4 Communication and employer's agent

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

C.1.5 Cancellation and Re-Invitation of Tenders

C.1.5.1 An employer may, prior to the award of the tender, cancel a tender if-

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

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

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

C.1.6 Procurement procedures

C.1.6.1 General

Unless otherwise stated in the tender data, a contract will, subject to C.3.13, be concluded with the tenderer who in terms of C.3.11 is the highest ranked or the tenderer scoring the highest number of tender evaluation points, as relevant, based on the tender submissions that are received at the closing time for tenders.

C.1.6.2 Competitive negotiation procedure

C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the employer shall announce only the names of the tenderers who make a submission.

The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

Part T1: Tender Procedures

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

C.1.6.2.3 At the conclusion of each round of negotiations, tenderers shall be invited by the employer to revise their tender offer based on the same evaluation criteria, with or without adjusted weightings. Tenderers shall be advised when they are to submit their best and final offer.

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

C.1.6.3 Proposal procedure using the two stage-system

C.1.6.3.1 Option 1

Tenderers shall in the first stage submit technical proposals and, if required, cost parameters around which a contract may be negotiated. The employer shall evaluate each responsive submission in terms of the method of evaluation stated in the tender data, and in the second stage negotiate a contract with the tenderer scoring the highest number of evaluation points and award the contract in terms of these conditions of tender.

C.1.6.3.2 Option 2

C.1.6.3.2.1 Tenderers shall submit in the first stage only technical proposals. The employer shall invite all responsive tenderers to submit tender offers in the second stage, following the issuing of procurement documents.

C.1.6.3.2.2 The employer shall evaluate tenders received during the second stage in terms of the method of evaluation stated in the tender data, and award the contract in terms of these conditions of tender.

C.2 Tenderer's obligations

C.2.1 Eligibility

C.2.1.1 Submit a tender offer only if the tenderer satisfies the criteria stated in the tender data and the tenderer, or any of his principals, is not under any restriction to do business with employer.

C.2.1.2 Notify the employer of any proposed material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used by the employer as the basis in a prior process to invite the tenderer to submit a tender offer and obtain the employer's written approval to do so prior to the closing time for tenders.

C.2.2 Cost of tendering

C.2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer comply with requirements.

C.2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

C.2.3 Check documents

Part T1: Tender Procedures

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

C.2.4 Confidentiality and copyright of documents

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

C.2.5 Reference documents

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

C.2.6 Acknowledge addenda

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

C.2.7 Clarification meeting

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

C.2.8 Seek clarification

Request clarification of the tender documents, if necessary, by notifying the employer at least five (5) working days before the closing time stated in the tender data.

C.2.9 Insurance

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

C.2.10 Pricing the tender offer

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

C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.

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

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

C.2.11 Alterations to documents

Part T1: Tender Procedures

Do not make any alterations or additions to the tender documents, except to comply with instructions issued by the employer, or necessary to correct errors made by the tenderer. All signatories to the tender offer shall initial all such alterations.

C.2.12 Alternative tender offers

C.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.

C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.

C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

C.2.13 Submitting a tender offer

C.2.13.1 Submit one tender offer only, either as a single tendering entity or as a member in a joint venture to provide the whole of the works identified in the contract data and described in the scope of works, unless stated otherwise in the tender data.

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

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

C.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data.

The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

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

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

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

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

C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

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

Part T1: Tender Procedures

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

C.2.15 Closing time

C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.

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

C.2.16 Tender offer validity

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

C.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.

C.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted.

If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).

C.2.16.4 Where a tender submission is to be substituted, a tenderer must submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".

C.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

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

C.2.18 Provide other material

C.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment.

Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

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

C.2.19 Inspections, tests and analysis

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

Part T1: Tender Procedures

C.2.20 Submit securities, bonds and policies

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

C.2.21 Check final draft

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

C.2.22 Return of other tender documents

If so, instructed by the employer, return all retained tender documents within twenty-eight (28) days after the expiry of the validity period stated in the tender data.

C.2.23 Certificates

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

C.3 The employer's undertakings

C.3.1 Respond to requests from the tenderer

C.3.1.1 Unless otherwise stated in the tender Data, respond to a request for clarification received up to five (5) working days before the tender closing time stated in the Tender Data and notify all tenderers who collected tender documents.

C.3.1.2 Consider any request to make a material change in the capabilities or formation of the tendering entity (or both) or any other criteria which formed part of the qualifying requirements used to prequalify a tenderer to submit a tender offer in terms of a previous procurement process and deny any such request if as a consequence:

- a) an individual firm, or a joint venture as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;
- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

C.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until three (3) working days before the tender closing time stated in the Tender Data. If, as a result a tenderer applies for an extension to the closing time stated in the Tender Data, the Employer may grant such extension and, shall then notify all tenderers who collected tender documents.

C.3.3 Return late tender offers

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

C.3.4 Opening of tender submissions

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

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C.3.4.2 Announce at the meeting held immediately after the opening of tender submissions, at a venue indicated in the tender data, the name of each tenderer whose tender offer is opened and, where applicable, the total of his prices, number of points claimed for its BBBEE status level and time for completion for the main tender offer only.

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

C.3.5 Two-envelope system

C.3.5.1 Where stated in the tender data that a two-envelope system is to be followed, open only the technical proposal of valid tenders in the presence of tenderers' agents who choose to attend at the time and place stated in the tender data and announce the name of each tenderer whose technical proposal is opened.

C.3.5.2 Evaluate functionality of the technical proposals offered by tenderers, then advise tenderers who remain in contention for the award of the contract of the time and place when the financial proposals will be opened. Open only the financial proposals of tenderers, who score in the functionality evaluation more than the minimum number of points for functionality stated in the tender data, and announce the score obtained for the technical proposals and the total price and any points claimed on BBBEE status level. Return unopened financial proposals to tenderers whose technical proposals failed to achieve the minimum number of points for functionality.

C.3.6 Non-disclosure

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

C.3.7 Grounds for rejection and disqualification

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

C.3.8 Test for responsiveness

C.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received:

- a) complies with the requirements of these Conditions of Tender,
- b) has been properly and fully completed and signed, and
- c) is responsive to the other requirements of the tender documents.

C.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

- a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or
- c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

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

C.3.9 Arithmetical errors, omissions and discrepancies

Part T1: Tender Procedures

C.3.9.1 Check responsive tenders for discrepancies between amounts in words and amounts in figures. Where there is a discrepancy between the amounts in figures and the amount in words, the amount in words shall govern.

C.3.9.2 Check the highest ranked tender or tenderer with the highest number of tender evaluation points after the evaluation of tender offers in accordance with C.3.11 for:

- a) the gross misplacement of the decimal point in any unit rate;
- b) omissions made in completing the pricing schedule or bills of quantities; or
- c) arithmetic errors in:
 - i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or
 - ii) the summation of the prices.

C.3.9.3 Notify the tenderer of all errors or omissions that are identified in the tender offer and either confirm the tender offer as tendered or accept the corrected total of prices.

C.3.9.4 Where the tenderer elects to confirm the tender offer as tendered, correct the errors as follows:

a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.

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

C.3.10 Clarification of tender offer

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

C.3.11 Evaluation of tender offers

The Standard Conditions of Tender standardize the procurement processes, methods and procedures from the time that tenders are invited to the time that a contract is awarded. They are generic in nature and are made project specific through choices that are made in developing the Tender Data associated with a specific project.

Conditions of tender are by definition the document that establishes a tenderer's obligations in submitting a tender and the employer's undertakings in soliciting and evaluating tender offers.

Such conditions establish the rules from the time a tender is advertised to the time that a contract is awarded and require employers to conduct the process of offer and acceptance in terms of a set of standard procedures.

The CIDB Standard Conditions of Tender are based on a procurement system that satisfies the following system requirements:

Requirement Qualitative interpretation of goal

Fair The process of offer and acceptance is conducted impartially without bias, providing simultaneous and timely access to participating parties to the same information.

Equitable Terms and conditions for performing the work do not unfairly prejudice the interests of the parties.

Transparent The only grounds for not awarding a contract to a tenderer who satisfies all requirements are restrictions from doing business with the employer, lack of capability or capacity, legal impediments and conflicts of interest.

Part T1: Tender Procedures

Competitive The system provides for appropriate levels of competition to ensure cost effective and best value outcomes.

Cost effective The processes, procedures and methods are standardized with sufficient flexibility to attain best value outcomes in respect of quality, timing and price, and least resources to effectively manage and control procurement processes.

The activities associated with evaluating tender offers are as follows:

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

C.3.11.1 General

The employer must appoint an evaluation panel of not less than three persons conversant with the proposed scope of works to evaluate each responsive tender offer using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

C.3.12 Insurance provided by the employer

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

C.3.13 Acceptance of tender offer

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

- a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement;
- b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract;
- c) has the legal capacity to enter into the contract;
- d) is not; insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act No. 2008, bankrupt or being wound up, has his/her affairs administered by a court or a judicial officer, has suspended his/her business activities or is subject to legal proceedings in respect of any of the foregoing;
- e) complies with the legal requirements, if any, stated in the tender data; and
- f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

C.3.14 Prepare contract documents

C.3.14.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

- a) addenda issued during the tender period,
- b) inclusion of some of the returnable documents and
- c) other revisions agreed between the employer and the successful tenderer.

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C.3.14.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

C.3.15 Complete adjudicator's contract

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

C.3.16 Registration of the award

An employer must, within twenty-one (21) working days from the date on which a contractor's offer to perform a construction works contract is accepted in writing by the employer, register and publish the award on the CIDB Register of Projects.

C.3.17 Provide copies of the contracts

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

C.3.18 Provide written reasons for actions taken

Provide upon request written reasons to tenderers for any action that is taken in applying these conditions of tender but withhold information which is not in the public interest to be divulged, which is considered to prejudice the legitimate commercial interests of tenderers or might prejudice fair competition between tenderers.



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	

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, signed and included in the tender)
MBD 6.1: Preference Points Claim Form in terms of the Preferential Procurement Regulations 2022	Form RD.B.1	
Valid B-BBEE Status Level of Contributor Certificate	Form RD.B.2	
B-BBEE Exempted Micro Enterprise – Sworn Affidavit	Form RD.B.3	
Promotion of local enterprises (Local Economic Participation)	Form RD.B.4	
Certified copy of Identity Document/s proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)	Form RD.B.5	
Medical Certificate with doctor's details (Practice Number, Physical Address and contact numbers) proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership)	Form RD.B.6	

RD.C ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: *Failure to submit, fully complete and sign the applicable documents and submit all required attachments will result in the Tenderer having to submit same upon request within 7 days and if not complied with, will result to the tender offer being disqualified from further consideration.*

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

RD.D RETURNABLE DOCUMENTS REQUIRED FOR FUNCTIONALITY EVALUATION PURPOSES

Note: *Failure to submit the applicable documents will result in the Tenderer receiving a 0 (zero) score for the applicable evaluation schedule.*

Document Name	Refer to Returnable Documents	Maximum Points	Confirmation of Document Included (Tenders may use this column to confirm documents have been completed and included in the tender) Yes / No
Schedule of Tenderer's experience	RD.D.3	60	
Key Personnel	RD.D.8	40	
Curriculum vitae of key personnel	RD.D.9		
Summary Of Tenderer's Experience Score	RD.D.15		



RD.E 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) Yes / No
Record of addenda to tender documents	RD.E.1	
Form of Offer	Section C1.1	
Contract Data (Data provided by the contractor)	Section C1.2	
Pricing schedule	Section C2.2	

T2.2 RETURNABLE SCHEDULES

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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	
<i>Enterprise Name:</i>			

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.

3.8 Are you presently in the service of the state?

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.

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, principle 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 _____

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 its 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 its 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 its directors listed on the Register for Tender Defaulters in terms of Section 29 of the Prevention and Combating of Corrupt Activities Act, 2004 (Act 12 of 2004)? (The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.)	YES	NO
If so, furnish particulars:			
4.3	Was the tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	YES	NO
If so, furnish particulars:			

Item	Question	Response	
4.4	Does the tenderer or any of its directors owe any municipal rates and taxes or municipal charges to the municipality/municipal entity, or to any other municipality/municipal entity, that is in arrears for more than three months?	YES	NO
If so, furnish particulars:			
4.5	Was any contract between the tenderer and the municipality/municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	YES	NO
If so, furnish particulars:			

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

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

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

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

1. This Municipal Bidding Document (MBD) must form part of all bids 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:

CONTRACT: HHS 02-2023/24 TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF WATER AND SEWER RETICULATION SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36 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"⁵ 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 of 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.



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.

<p>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.</p> <p><u>Person authorized to sign the tender:</u></p> <p>Full name (in BLOCK letters): _____</p> <p>Signature: _____</p> <p>Date: _____</p>
--



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:

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

Tender Number:	HHS 02-2023/24
Tender Description:	TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF WATER AND SEWER RETICULATION SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36 MONTHS

- *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

<p>Note:</p> <ol style="list-style-type: none"> *Delete which is not applicable. IMPORTANT: This resolution <u>must</u> be signed by all the directors/members/ partners of the tendering enterprise. Should the number of directors/members/partners exceed the space available above, additional names and signatures must be supplied on a separate page. 	Enterprise stamp
--	------------------



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:

- *Delete which is not applicable.
- 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.
- Should the number of directors/members/partners exceed the space available above, additional names and signatures must be supplied on a separate page.

RDB.1 MBD 6.1 PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for 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 90/10 preference point system.
 - b) The 90/10 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.
- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
 - (a) Price; and
 - (b) Specific Goals.

The maximum points for this tender are allocated as follows:

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

- 1.4 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.
 - 1.5 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 90/10 PREFERENCE POINT SYSTEMS

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

90/10

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

Where

P_s = Points scored for price of tender under consideration
 P_t = Price of tender under consideration
 P_{min} = Price of lowest 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.)



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

DECLARATION WITH REGARD TO COMPANY/FIRM

- 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.

NAME:
(in BLOCK letters)

CAPACITY:
(of authorized agent)

SIGNATURE:
(of authorized agent)

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1.

2.

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

I, the undersigned

Full Name & Surname

Identity Number - - -

Hereby declare under oath as follow:

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

Enterprise Name

Trading Name

Registration Number

Enterprise Address

3. I hereby declare under oath that:

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

100% Black owned Level One (135% B-BBEE procurement recognition)

More than 51% Blackowned Level Two (125% B-BBEE procurement recognition)

Less than 51% Black owned Level Four (100% B-BBEE procurement recognition)

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

Deponent Signature:

Date:

Commissioner of oaths
(Signature and stamp)



FORM RD.B.4 PROMOTION OF LOCAL ENTERPRISES

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

90/10 preference point system applies:

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

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

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

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

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

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 and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership
Good (score 1)	Certified copy of Identity Document/s that proof that company is 51% owned by youth and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership

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

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.	
<u>Person authorized to sign the tender:</u>	
Full name (in BLOCK letters):	_____
Signature:	_____
Date:	_____



FORM RD.B.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 and proof of ownership (Sworn affidavit for B-BBEE qualifying small enterprise or Exempt Micro Enterprises, CIPC registration or any other proof of ownership

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

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.	
<u>Person authorized to sign the tender:</u>	
Full name (in BLOCK letters):	_____
Signature:	_____
Date:	_____

FORM RD.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: _____



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

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.C.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, shares are held by another Closed Corporation or company with, or without, share capital.	Certified copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies
4	<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.
6	<u>Co-operative</u>	CIPRO CR2 - Certified copies of Company registration document.



If the Tendering Entity is a:		Documentation to be submitted with the tender
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.

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 mil	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.

The undersigned, who warrants that he / she is duly authorized to do so on behalf of the enterprise, confirms that the contents of this schedule are within my personal knowledge and are to the best of my belief both true and correct.	
<u>Person authorized to sign the tender:</u>	
Full name (in BLOCK letters):	_____
Signature:	_____
Date:	_____



FORM RD.D.3 SCHEDULE OF TENDERERS EXPERIENCE

The experience of the tenderer or joint venture partners in the case of an unincorporated joint venture consortium, in similar projects, within the past 10 years, shall be evaluated. Proof of experience (Appointment letters and Completion certificates) will influence the scoring on listed projects.

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

The scoring of the Tenderer’s experience shall be for a similar project (Water and sewer reticulation project) as follows:

Previous Project Description:

- **A maximum of 60 points will be allocated for similar projects over the value of R30 million within the last 10 years**
- **A similar project is a water and sewer reticulation project**
- **Tenderer to have successfully completed at least one water and sewer project.**

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

	Employer, contact person and telephone number (Project will be rejected without current accurate contact data)	Description of contract – water reticulation project in excess of R30 million over the past 10 years (points to be allocated for each project of similar nature, scope and value – ref C3.11)	Date completed	Points/ contract <i>To be completed by Evaluator</i>
1	Employer: _____ Contact Person: _____ Tel: _____			
2	Employer: _____ Contact Person: _____ Tel: _____			
3	Employer: _____ Contact Person: _____ Tel: _____			
4	Employer: _____ Contact Person: _____ Tel: _____			
5	Employer: _____ Contact Person: _____ Tel: _____			
MAXIMUM TOTAL POINTS TENDERERS TOTAL			(30)	



	Employer, contact person and telephone number (Project will be rejected without current accurate contact data)	Description of contract – sewer reticulation project in excess of R30 million over the past 10 years (points to be allocated for each project of similar nature, scope and value – ref C3.11)	Date completed	Points/ contract To be completed by Evaluator
1	Employer: <hr/> Contact Person: <hr/> Tel: <hr/>			
2	Employer: <hr/> Contact Person: <hr/> Tel: <hr/>			
3	Employer: <hr/> Contact Person: <hr/> Tel: <hr/>			
4	Employer: <hr/> Contact Person: <hr/> Tel: <hr/>			
5	Employer: <hr/> Contact Person: <hr/> Tel: <hr/>			
MAXIMUM TOTAL POINTS TENDERERS TOTAL			(30)	



FORM RD.D.8 KEY PERSONNEL

The Tenderer shall schedule the following Key Personnel who would be assigned to this Contract. The Contractor shall be contractually obliged to make these personnel available for the duration of the Contract, failing which alternative personnel of equal or higher qualification may be accepted by the employer.

POSITION	NAME	YEARS OF EXPERIENCE	NUMBER OF PROJECTS COMPLETED OF SIMILAR NATURE
Contract Manager			
Site Agent			
Foreman			
Occupational Health & Safety Officer			

The Tenderer shall complete a CV for each of the Key Personnel in Form RD.D.9 accompanied by the certified proof of Qualifications, Professional Registrations, and Proof of Identity for all personnel.



FORM RD.D.9.1 CURRICULUM VITAE FOR PROFESSIONALLY REGISTERED PERSONNEL

Note: This form should be completed for the Contract Manager, as listed in Form RD.D.8.

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership, registration or license:	
Name of employer (firm):	
Current position:	Years with firm:
Certification:	
I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.	
_____	_____
(Signature of person named in schedule)	Date:

D.9.1.1 EMPLOYMENT RECORD (from most recent)

EMPLOYER	POSITION HELD / ROLES	DATES		YEARS EXPERIENCE	POINTS
		FROM	TO		
TOTAL POINTS					

D.9.1.2 PARTICULAR & APPROPRIATE EXPERIENCE

(A project will be rejected without current & accurate contact details)

CLIENT & CONTACT	PROJECT DESCRIPTION (ref C3.1)	DATES		VALUE	POINTS
		FROM	TO		
TOTAL POINTS					
GRAND TOTAL POINTS (CARRIED OVER TO FORM RD.D.8)					



FORM RD.D.9.2 CURRICULUM VITAE OF KEY PERSONNEL

Note: This form should be completed for other personnel as listed in Form RD.D.8.

Name:	Date of birth:
Profession:	Nationality:
Qualifications:	
Professional membership:	
Name of employer (firm):	
Current position:	Years with firm:
Certification: I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.	
_____	_____
(Signature of person named in schedule)	Date:

D.9.2.1 EMPLOYMENT RECORD (from most recent)

EMPLOYER	POSITION HELD / ROLES	DATES		YEARS EXPERIENCE	POINTS
		FROM	TO		
TOTAL POINTS					

D.9.2.2 PARTICULAR & APPROPRIATE EXPERIENCE

(A project will be rejected without current & accurate contact details)

CLIENT & CONTACT	PROJECT DESCRIPTION (ref C3.1)	DATES		VALUE	POINTS
		FROM	TO		
TOTAL POINTS					
GRAND TOTAL POINTS (CARRIED OVER TO FORM RD.D.8)					



FORM RD.D.15 SUMMARY OF TENDERER'S EXPERIENCE SCORE

CRITERIA	REFERENCE	MAX POINTS	TENDERER'S SCORE
Tenderers Experience			
Schedule of Tenderer's Experience	RD.D.3	60	
Total		60	
Key Personnel			
Contract Manager	RD.D.8	12	
Site Agent	RD.D.8	10	
Foreman	RD.D.8	8	
Occupational Health and Safety Officer	RD.D.8	10	
Total		40	
GRAND TOTAL		100	
Min Points		70	

A minimum of **70 points** will be required to remain in the tender process.



FORM RD.E.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: _____

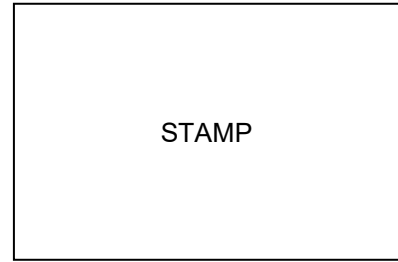
PORTION 2: CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

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C1.1 FORM OF OFFER AND ACCEPTANCE



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

CONTRACT HHS 02-2023/24 - TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF WATER AND SEWER RETICULATION SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36 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 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.

NAME(s): (BLOCK LETTERS)

CAPACITY of authorized agents:

SIGNATURE(s) of authorized agents:

SIGNED at on this day of

WITNESSES: (Full name – 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 T1	Tendering Procedures
Part T2	Returnable Documents
Part C1	Agreements and Contract Data, (which includes this Agreement)
Part C3	Scope of Work
Part C4	Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into Parts C1 to C4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of offer and acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The Tenderer shall within two weeks after receiving a letter of acceptance, contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of 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 parties¹.

¹ As an alternative, the following wording may be used:

Notwithstanding anything contained herein, this agreement comes into effect two days after the submission by the Employer of one fully completed original copy of this document including the schedule of deviations (if any), to a courier-to-counter delivery / counter-to-counter delivery /door-to-counter delivery / door-to-door delivery / courier service (delete that which is not applicable), provided that the Employer notifies the Tenderer of the tracking number within 24 hours of such submission. Unless the Tenderer (now Contractor) within seven 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.

NAME(s): (BLOCK LETTERS)	.....	.....	
CAPACITY of authorized agents:	.....	.....	
SIGNATURE(s) of authorized agents:	.....	.....	
SIGNED at	.....	on this	.....	day of	.....
WITNESSE(S): (Full name – 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(s): (in block letters)

CAPACITY of authorized agents:

SIGNATURE(s) of authorized agents:

SIGNED at on this day of

WITNESSES: (Full name – in block letters – and signature)

1.

2.

FOR AND ON BEHALF OF THE EMPLOYER:

NAME(s): (in block letters)

CAPACITY of authorized agents:

SIGNATURE(s) of authorized agents:

SIGNED at on this day of

WITNESSES: (Full name – in block letters – and signature)

1.

2.

C1.2 CONTRACT DATA

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C.1.2.1 GENERAL CONDITIONS OF CONTRACT

The conditions of contract applicable to this contract shall be the **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.

Should there be any contradicting conditions/statements between these Conditions of Contract and any other part of the tender documents/specifications, the Employer's Agent will give clarity on which version applies to this contract. For pricing purposes, the Contractor must take the least favourable meaning into consideration when tendering, no claims will be considered attributable to the contradicting conditions/statements.

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.

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	VARIATION / ADDITION
1.1	<p>Add the following definitions:</p> <p><i>1.1.1.13 The Defects Liability Period is 365 Days (12 months) from the date of the Completion Certificate</i></p> <p><i>1.1.1.14.1 The starting/ commencement date is the date which the contractor receives a signed copy of the contract document with a schedule of deviations, if any. The contractor is to submit documents listed under clause 5.3.1 herein prior to commencement.</i></p> <p><i>1.1.1.14.2 The time for achieving Practical Completion is 36 months from date of commencement.</i></p> <p><i>1.1.1.15 The name of the Employer is:</i></p> <p style="padding-left: 40px;"><i>City of Tshwane, represented by the Group Head Human Settlements Department, and / or any other person or persons duly authorised thereto by the Employer in writing.</i></p> <p><i>1.1.1.16 The name of the Employer’s Agent is:</i></p> <p style="padding-left: 40px;"><i>Imbawula Civil Projects (Pty) Ltd, acting through a principal or an official authorised thereto in writing. The principal representing the Employer’s Agent is Mr Tamsanqa Tom.</i></p> <p><i>1.1.1.26 The pricing strategy of a re-measurement Contract shall apply</i></p>
1.2.1	<p>Add the following to the clause:</p> <p><i>1.2.1.2 The address of the Employer is:</i></p> <p style="padding-left: 40px;"><i>Postal address: P O Box 440 PRETORIA 0001</i></p> <p style="padding-left: 40px;"><i>Details of the Project Manager:</i></p> <p style="padding-left: 40px;"><i>Physical address: Human Settlements Department 1st floor Tshwane House 320 Madiba Street Pretoria 0002</i></p> <p style="padding-left: 40px;"><i>Contact numbers: Telephone: 012 358 5775 Fax: NA e-mail address: semakalenqd@tshwane.gov.za</i></p>

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
1.2.2	<ul style="list-style-type: none"> • <i>The Employer has authorised the Group Head to act on his behalf in respect of this Contract, save for such duties or functions:</i> • <i>which other holders of office ex officio execute on behalf of the Employer; or</i> • <i>for which the Group Head has no authority and the Employer's approval is required before execution thereof.</i> • The Group Head is: Nonto Memela Human Settlements Department
3.2.3	<p><i>The Employer's Agent is required in terms of his appointment by the Employer to obtain the specific approval of the Employer for any variations to the Scope of Work which may increase the contract sum.</i></p>
4.3	<p>Add the following new sub-clause:</p> <p>1.3.3 <i>Wages and conditions of work:</i></p> <ul style="list-style-type: none"> 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 latest Sectoral Determination: Civil Engineering Sector published from time to time.</i> 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>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 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>
5.3.1	<p><i>The documentation required before commencement with Works execution are :</i></p>

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	<ul style="list-style-type: none"> • <i>A signed copy of the Form of Offer and Agreement between the Employer and the Contractor for the Works to be completed by the Contractor in terms of the contract.</i> • <i>A permit or notification of construction works in terms of Regulations 3(1) and (2) of the Construction Regulations 2014.</i> • <i>Health and Safety Plan (Refer to Clause 4.3) approved by Safety Agent, Safety File approved by Safety Agent and/or CoT OHS Department.</i> • <i>A signed Agreement between the Employer and the Contractor for the Works to be completed by the Contractor in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act No.85 of 1993) and the Construction Regulations promulgated thereunder (Refer to Clause 4.3) use latest 2014.</i> • <i>Proof of payment to the Employer, that the Contractor has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act, No. 130 of 1993 (Refer to Clause 4.3).</i> • <i>Initial programme (Refer to Clause 5.6)</i> • <i>Security (Refer to Clause 6.2)</i> • <i>Insurance (Refer to Clause 8.6)</i> • <i>Initial Cashflow Projections for the approval by Engineer</i> <p><i>Additional documentation required before commencement with Works execution are:</i></p> <ul style="list-style-type: none"> • <i>Quality Control Site Books, such as Site Diary, Compaction Control Tests, Levels, Concrete Tests, Site Instructions, Plant and Equipment, Labour for approval by Employer's Agent / Representative and acknowledgement to adhere to Engineer's QMS</i> • <i>Construction Method Statements</i> • <i>Staff CVs for approval by Employer and Employer's Agent as per contract specification (Part T1.2-Tender Data, Clause C2.1)</i> • <i>SMME Management and Monitoring plan for CoT approval. The SMME Management Plan shall entail breakdown of the scope of works to be executed by local SMMEs, SMME selection approach, management and skills transfer approach, number of local SMMEs to be engaged on the project</i>
5.3.2	<i>The time to submit the documentation required before commencement with Works execution is 21 days.</i>
5.4.2.1	<i>Section of the pipeline is in a private and business property therefore working areas needs to be barricaded and signs erected to limit access to the construction working areas.</i>
5.5.1	<i>The estimated construction period is 36 months from date of commencement based on the engineer's estimates.</i>
5.8.1	<p><i>The non-working days are Saturdays and Sundays</i></p> <p><i>The special non-working Days are:</i></p> <p style="padding-left: 40px;"><i>Statutory public holidays; and</i></p> <p style="padding-left: 40px;"><i>All annual year-end shutdown periods as recommended by the South African Federation of Civil Engineering Contractors, and which commence before the Completion Date.</i></p>
5.12	<p>Add the following new sub-clause</p> <p>5.12.5 <i>Critical path provision</i></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 Engineer</i></p>

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	<p><i>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 = <i>Extension of time in calendar days in respect of the calendar month under consideration</i></p> <p>N_w = <i>Actual number of days during the calendar month on which a rainfall of Y mm or more has been recorded.</i></p> <p>R_w = <i>Actual rainfall in mm for the calendar month under consideration.</i></p> <p>N_n = <i>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.</i></p> <p>R_n = <i>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.</i></p> <p>X = <i>20 unless otherwise provided in the Project Specifications</i></p> <p>Y = <i>10 unless otherwise provided in the Project Specifications</i></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</i></p>

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	<p><i>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 (42.5 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> <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 (42.5 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 (42.5 Critical Path Provision) hereof.</i></p>
5.13.1	<i>The penalty for failing to complete the Works is R 10 000.00 per day.</i>
5.16.3	<i>The latent defect period is 5 years, commencing on the day after the date of certification of Practical Completion</i>
6.1	<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>

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	6.1.3 <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>				
6.2.1	<i>The form of Security for this Contract will be a Performance Guarantee. This Performance Guarantee is to be 10% of the Contract Value.</i>				
6.5.1.2.3	<i>The percentage allowance to cover overhead charges is 10%.</i>				
6.8.2	<i>The values of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values: The values of the coefficients are: a = 0.20 b = 0.40 c = 0.25 d = 0.15 The site or largest part thereof shall be deemed to be located in the national province of Gauteng The applicable industry for the Producer Price index for materials is Building and Construction Civil Engineering. The area for the Producer Price Index for fuel is Witwatersrand. The base month is the month before the month in which the tenders close.</i>				
6.10.1.5	<i>The percentage advance on materials not yet built into the Permanent Works is 80%. Proof of ownership is required.</i>				
6.10.3	<i>The percentage retention money is 10 % of the Certificate Value.</i>				
6.10.3	<i>The limit of retention money is 5% of the Contract Sum.</i>				
8.6	<p>8.6.1 For contracts above R50 million, the contractor is to choose between the following options and submit proof of the documentation requested:</p> <table border="1"> <thead> <tr> <th>OPTION A</th> <th>OPTION B</th> </tr> </thead> <tbody> <tr> <td> <p><u>The Contractor's own Public Liability Insurance Policy and/or Contractors All Risk Policy only applicable for Service Contracts</u></p> <p>Contractor to insure the following:</p> <p>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.</p> <p>b) Motor Vehicle and Liability Insurance cover indicating the registration numbers of the vehicles owned, leased or hired by the Contractor that are used in the</p> </td> <td> <p><u>The City of Tshwane's Public Liability for Contractors Policy or Principal Controlled Contractors All Risk Policy for all contracts including Service Contracts</u></p> <p>The City of Tshwane to only insure the works by the Contractor.</p> <p>The Contractor/Sub-contractor must obtain for the duration of the contract until the issuing of the Defects Certificate or the end of the Maintenance Period, the following insurance policies in the name of the Contractor (including all Subcontractors whether nominated or otherwise) at an insurance company within 21 (twenty-one)</p> </td> </tr> </tbody> </table>	OPTION A	OPTION B	<p><u>The Contractor's own Public Liability Insurance Policy and/or Contractors All Risk Policy only applicable for Service Contracts</u></p> <p>Contractor to insure the following:</p> <p>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.</p> <p>b) Motor Vehicle and Liability Insurance cover indicating the registration numbers of the vehicles owned, leased or hired by the Contractor that are used in the</p>	<p><u>The City of Tshwane's Public Liability for Contractors Policy or Principal Controlled Contractors All Risk Policy for all contracts including Service Contracts</u></p> <p>The City of Tshwane to only insure the works by the Contractor.</p> <p>The Contractor/Sub-contractor must obtain for the duration of the contract until the issuing of the Defects Certificate or the end of the Maintenance Period, the following insurance policies in the name of the Contractor (including all Subcontractors whether nominated or otherwise) at an insurance company within 21 (twenty-one)</p>
OPTION A	OPTION B				
<p><u>The Contractor's own Public Liability Insurance Policy and/or Contractors All Risk Policy only applicable for Service Contracts</u></p> <p>Contractor to insure the following:</p> <p>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.</p> <p>b) Motor Vehicle and Liability Insurance cover indicating the registration numbers of the vehicles owned, leased or hired by the Contractor that are used in the</p>	<p><u>The City of Tshwane's Public Liability for Contractors Policy or Principal Controlled Contractors All Risk Policy for all contracts including Service Contracts</u></p> <p>The City of Tshwane to only insure the works by the Contractor.</p> <p>The Contractor/Sub-contractor must obtain for the duration of the contract until the issuing of the Defects Certificate or the end of the Maintenance Period, the following insurance policies in the name of the Contractor (including all Subcontractors whether nominated or otherwise) at an insurance company within 21 (twenty-one)</p>				

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	<p>execution of the contract to the amount of at least R5-million per claim with the number of claims unlimited.</p> <p>c) SASRIA cover for motor vehicles and Plant and Materials and Equipment owned, leased or hired by the Contractor that are used in the execution of the contract for the full replacement value thereof.</p> <p>d) In respect of Plant and Materials and Equipment and Motor Vehicles brought onto the Site by or on behalf of Sub-contractors, the Contractor shall be deemed to have complied with the provisions of this Sub-Clause by ensuring that such Sub-contractors have similarly insured such Plant and Materials and Equipment and Motor Vehicles.</p> <p>e) Proof must also be submitted that the Contractor complies with the conditions of the following legislation:</p> <ol style="list-style-type: none"> 1. Compensation for Occupational Injuries and diseases, 1993. 2. Unemployment Insurance Act, 1996. 3. The Contractor shall in respect of the Site of the contract works appoint in writing a competent person to meet the requirements of the Health and Safety Act, No 85 of 1993 as amended. <p>f) Public Liability insurance cover in the name of the contractor. The minimum limit of indemnity for any one event is R5- million and the number of claims will be unlimited.</p> <p>g) The insurance period must be specified in the Insurance Policy.</p> <p>h) The rights and interests of the City of Tshwane must be noted in the Insurance Policy in the form of an endorsement.</p> <p>days of the notification of acceptance of the tender and must pay all premiums and supply proof thereof to the relevant Project Manager 30 (thirty) days before the inception of the contract, that the policies have been taken out and that all premiums have been paid:</p> <p>Contractor to insure the following:</p> <p>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.</p> <p>b) Motor Vehicle and Passenger 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.</p> <p>c) SASRIA cover for motor vehicles and Plant and Materials and Equipment owned, leased or hired by the Contractor that are used in the execution of the contract for the full replacement value thereof.</p> <p>d) In respect of Plant and Materials and Equipment and Motor Vehicles brought onto the Site by or on behalf of Subcontractors, the Contractor shall be deemed to have 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.</p> <p>e) Without limiting the Contractor's obligation in terms of the Contract, the Contractor will effect and maintain for the duration of the contract period until the issuing of the Defects Certificate or the end of the Maintenance Period insurance against all accidents or misfortunes including accidental loss of or damage to tangible property (except the Works, Plant and Materials and Equipment) and liability for accidental death of or bodily injury to</p>

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	<p>or illness or disease contracted by any person (not an employee of the Contractor) 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 at any insurance company or under the policy effected by the Employer within 30 (thirty) days before the inception of the contract. The minimum limit of indemnity for any one event is R5-million and the number of claims will be unlimited.</p> <p>f) Proof must also be submitted that the Contractor complies with the conditions of the following legislation:</p> <ol style="list-style-type: none"> 1. Compensation for Occupational Injuries and diseases, 1993. 2. Unemployment Insurance Act, 1996. 3. The Contractor shall in respect of the Site of the contract works appoint in writing a competent person to meet the requirements of the Health and Safety Act, No 85 of 1993 as amended.
	<p>8.6.1.2 <i>The Employer's insurer will indemnify the Contractor against all sums for which the Contractor shall become legally liable towards third party claimants to pay for and in consequence of:</i></p> <ol style="list-style-type: none"> a) <i>Accidental death of or bodily injury to or illness or disease contracted by any person (excluding employees of the Contractor/Sub-contractor);</i> b) <i>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> <p>8.6.2 <i>Insurance Premium payable</i> <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 <i>Additional insurance by the Employer</i> <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 1 of this Clause.</i></p> <p>8.6.4 <i>Additional insurance by Contractor/Sub-contractor</i> <i>The Contractor and Sub-contractor shall be free to effect and maintain at their own cost any additional insurance which the Contractor/Sub-contractor deem</i></p>

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	<p><i>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/Sub-contractor.</i></p> <p>8.6.5 <i>Contractor satisfied with insurance</i> <i>The submission of a tender shall be construed as acknowledgement by the Contractor that he is satisfied with the insurance cover effected by the Employer.</i></p> <p>8.6.6 <i>Contractor to observe conditions</i> <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 <i>Contractor to Insure</i> <i>The Contractor must obtain for the duration of the contract until the issuing of the Defects Certificate or the end of the Maintenance Period, the following insurance policies at an insurance company within 21 (twenty-one) days of the notification of acceptance of the tender and must pay all premiums and supply proof thereof to the relevant Project Manager, 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> <ul style="list-style-type: none"> a) <i>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> 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> 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> 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> e) <i>Proof must also be submitted that the Contractor complies with the conditions of the following legislation:</i> <ul style="list-style-type: none"> i. <i>Compensation for Occupational Injuries and diseases, 1993.</i> ii. <i>Unemployment Insurance Act, 1996.</i> iii. <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> f) <i>The Project Manager involved must furnish the required insurance documentation 30 (thirty) days before the inception of the contract to the Section: Insurance and Risk Management.</i> g) <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 Project Manager of every occurrence within 48 (forty-eight) hours giving the circumstances, nature and an estimate of the loss or damage.</i> h) <i>The Project Manager will be responsible too 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 Project Manager 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, but the Project Manager must take note the Insurer</i>

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	<p><i>might repudiate the loss if it is found that the insurers rights have been compromised as a result of the late reporting.</i></p> <p>i) <i>The following documentation must be included with the claim documentation:</i></p> <p>a. <i>Photos of damages caused or suffered as proof or substantiation of the claims.</i></p> <p>j) <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>k) <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 Project Manager, the Employer’s insurers and/or representatives for the purpose of assessment of any loss or damage.</i></p> <p>8.6.8 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 Project Manager 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 Project Manager of every occurrence within 24 (twenty-four) hours giving the circumstances, nature and an estimate of the loss or damage.</i></p> <p>b) <i>The Project Manager must notify the Section: Insurance and Risk Management on the same day that the Contractor has notified the Project Manager of the incident.</i></p> <p>c) <i>The Section: Insurance and Risk Management will notify the Employer’s insurer of the incident. The Contractor shall afford all reasonable access to the Site to the Employer, the Project Manager, the Employer’s insurers and/or representatives for the purpose of assessment of any loss or damage</i></p> <p>d) <i>The Project Manager 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 Project Manager 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 Group Head 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></p> <p>8.6.9 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>8.6.10 Claim documentation</p>

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	<p><i>The Project Manager must obtain all relevant information from the 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 Project Manager 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, mis-description 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>8.6.11 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 Group 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>8.6.12 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>8.6.13 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 shall negotiate for the settlement of claims with the Employer or the Employer's insurer through the Section: Insurance and Risk Management. The Employer's Chief Financial Officer will authorize all settlements of claims. Should action for the settlement of any such claim to the satisfaction of the Project Manager not be taken by the Contractor within 30 (thirty) days after receipt of such claim by the 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.</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> <p>Add the following Clause:</p> <p>Pricing of Standing Time</p>

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
	<p><i>The Contractor shall price the standing time items included in the Pricing Data and set out all labour and equipment he proposes to use in the execution of the Contract and their respective daily rates in a Schedule attached to the Bill of Quantity of this tender.</i></p> <p><i>These rates shall only be subject to escalation if the Contract is subject to escalation, failing which they will be fixed for the duration of the Contract including any extension of time that may be granted in accordance with the provisions of the Contract.</i></p> <p><i>Contractor's Plant:</i></p> <p><i>The standing time rates shall be the total cost to the Employer in respect of any standing time incurred by the Contractor and shall include for all Contractor's profits, overheads, transport to site, establishment on site, removal from site, supervision, hire rates, fuel, oil, maintenance and servicing, associated items such as slings, jackets, etc. test certificates, operator costs (including overtime and Sunday time), accommodation, travelling, subsistence and other costs relative to the employment by the Contractor of the personnel.</i></p> <p><i>Contractor's Labour:</i></p> <p><i>The standing time rates shall be the total cost to the Employer in respect of standing time of labour and shall include for all Contractor's profits, overheads, establishments, supervision, wages, accommodation, travelling, subsistence and other costs relative to the employment by the Contractor of the categories of labour detailed, and for hand and small tools such as cutting and welding torches, angles grinders, drilling machines, etc. and consumables normal to the trade or labour category.</i></p>
11.2	<p><i>Where the Contractor has not inserted rates for specific labour or plant, that could have reasonably have been foreseen at tender stage, the Employer's Agent – in agreement with the employer shall have the sole discretion, in the event of such foreseeable labour and plant becoming necessary, to set a rate that is in his opinion the most appropriate for such labour or tradesmen.</i></p> <p><i>No additional Preliminary and General costs shall be paid for standing time as these costs shall be deemed to be covered for in the rates and prices for Preliminary and General items. If the contract duration is extended, then the Preliminary and General charges shall be adjusted accordingly as stated in the General Condition of Contract only if the motivation is recommended by the engineer and approved by the client.</i></p>
11.3	<p><i>The payment of any standing time by the Employer shall be subject to the Contractor demonstrating that it has a valid claim in terms of Clause 10.1 of the GCC.</i></p>

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 .1	Start/ commencement date	The starting/commencement date is the date which the contractor receives a signed copy of the contract document with a schedule of deviations, if any. The contractor is to submit documents listed under clause 5.3.1 herein prior to commencement.									
1.1.1.14 .2	The time for achieving Practical Completion is:	36 months from date of commencement as allocated by the Employer's Agent									
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:	Human Settlements Division 1st floor Tshwane House 320 Madiba Street Pretoria 0002								
		Postal Address:	P O Box 440 PRETORIA 0001								
		E-Mail Address:	semakalengd@tshwane.gov.za								
1.1.1.16	The name of the Employer's Agent is:	Mr. Tamsanqa Tom									
1.2.1.2	The address of the Employer's Agent is:	Physical Address:	Plot 70, 1463 Tienie Street Andeon Ah, Zandfontein, Pretoria West 0183								
		Postal Address:	Plot 70, 1463 Tienie Street Andeon Ah, Zandfontein, Pretoria West 0183								
		E-Mail Address:	thami@imbawulacp.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 border="1" style="width: 100%; margin-top: 10px;"> <thead> <tr> <th>CLAUSE</th> <th>DUTY/FUNCTION</th> </tr> </thead> <tbody> <tr> <td>3.2.4</td> <td>Authorization to Employer's Agent Representative or any other person</td> </tr> <tr> <td>3.3.1</td> <td>Nomination of person as Employer's Agent Representative</td> </tr> <tr> <td>4.10.1</td> <td>Approval to use the Site for any other purpose such as housing</td> </tr> </tbody> </table>		CLAUSE	DUTY/FUNCTION	3.2.4	Authorization to Employer's Agent Representative or any other person	3.3.1	Nomination of person as Employer's Agent Representative	4.10.1	Approval to use the Site for any other purpose such as housing
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5.16.3	The latent defect period is:	5 years, commencing on the day after the date of certification of Practical Completion																																
6.2.1	Type of security for due performance:	<ul style="list-style-type: none"> Guarantee from approved financial institution or cash deposit. The Form of Guarantee is to contain the wording of the pro forma document included as C1.3 contained herein. 																																
	Liability of performance guarantee	The liability of the guarantee shall be 10% of the contract value																																
6.2.2	Retention money guarantee	N/A																																
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: "L" is the "Labour Index" and shall be Gauteng, under CPI as published by Statistics South Africa. "P" is the "Plant Index" and shall be Plant and equipment, under Mining and construction plant and equipment price index as published by Statistics South Africa. "M" is the "Material Index" and shall be Civil Engineering – total, under Civil engineering material price indices as published by Statistics South Africa. "F" is the "Fuel Index" and shall be Diesel, under PPI as published by Statistics South Africa. 																																

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B	Civil Engineering Plant	0.25																		
C	Materials	0.40																		
D	Fuel	0.15																		
6.8.3	Price adjustment for variations in the cost of special materials	Not allowed																		
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is:	80% (Eighty percent)																		
6.10.3	Percentage retention is:	10% (ten percent) exclusive of VAT																		
	The limit of retention money is:	5% of the contract sum																		
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</p> <p>Ms. Morongwa Mokoena (Tel: 012 358 1126) (morongwam@tshwane.gov.za)</p> <p>Mrs Ronett Marlow-Reid (Tel: 012 358 1131) (ronetm@tshwane.gov.za)</p> <p>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 Adjudicator																		
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:	• Physical Address:		
		• Postal Address:		
		• Facsimile:		
		• E-Mail Address:		
6.2.1	The security to be provided by the Contractor shall be	Performance guarantee 10% of the contract value		
6.8.3	Price adjustments for variations in the cost of special materials (if applicable)	The variation in cost of special materials is:		
		Type of material	Unit	Base Rate or Price

***THE BELOW FORMS WILL BE COMPLETED ONCE THE TENDER IS AWARDED**

C1.3 FORM OF 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

List of some institutions from which contract /deposit guarantees can be accepted. The contractor can utilize other institutions as long as they are registered with the NCR.

ABSA Bank
Credit Agricole Indosuez (South Africa Branch)
Development Bank of South Africa
FirstRand Bank
ING Bank N.V. (South Africa Branch)
Investec Bank
Landbank
National Housing Finance Co.
Nedcor Bank
South African Reserve Bank
Standard Bank
AIG South Africa
Credit Guarantee Insurance Co
Emerald Insurance Company
Federated Employers Mutual Assurance Co
Global Insurance Company
Guardrisk Insurance Company
Hannover Re:
Home Loan Guarantee Company
Lion of Africa Insurance Company
Metropolitan Life
Metropolitan Odyssey Ltd
MUA Insurance
Mutual & Federal Insurance Company
Rand Mutual Assurance Company
Regent Insurance Company
SA Eagle Insurance Company
Lombard Insurance.

C1.4 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

TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF WATER AND SEWER RETICULATION SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36 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

Part C1.5: Agreements and Contract Data

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. _____

C1.5 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

Part C1.5: Agreements and Contract Data

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: _____ Date: _____	Witness: Name _____ Address: _____ Date: _____	Witness: Name: _____ Address: _____ 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 ³ 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.

³ Delete as necessary

Contract No: HHS 02-2023/24 Tender for the appointment of a contractor for the construction of water and sewer reticulation services in Andeon Extension 37 for a period of 36 months.

Part C2: Pricing Data

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR
FOR THE CONSTRUCTION OF WATER AND SEWER
RETICULATION SERVICES IN ANDEON EXTENSION 37
FOR A PERIOD OF 36 MONTHS**

PART C2: PRICING DATA

PRICING DATA

INDEX

Section	Description	Page No
C2.1	PRICING INSTRUCTIONS	C2.1
C2.2	BILL OF QUANTITIES	C2.2

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE
CONSTRUCTION OF WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS**

C2.1 PRICING INSTRUCTIONS

C2.1 PRICING INSTRUCTIONS

1. General

1.1 This section provides the tenderer with guidelines and requirements with regard to the completion of the Bill of Quantities. The Schedule **shall be completed in non-erasable black ink** and the tenderer is referred to the Tender Specifications in regard to the correction of errors.

1.2 The Bill of Quantities 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 Bill of Quantities, 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.

2. Pay Items

2.1 The method of measurement published by the City of Tshwane in section 001 clause 04 and the clauses titled "Measurement and Payment" in the various sections of the Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005, is applicable, subject to the variations and amendments contained in section C3.5.

2.2 Descriptions in the Bill of Quantities 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 Bill of Quantities, the requirements of the Standard Specification or Scope of Work, as applicable, shall prevail.

2.3 The item numbers appearing in the Bill of Quantities 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.

- 2.4 Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letter LI in a separate column filled in against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of work, is a variation to the contract. The items marked with the letters LI are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.
- 2.5 Payment for items which are designated to be constructed labour-intensive (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.
- 2.6 Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
- 2.7 The quantities set out in the Bill of Quantities 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.
- 2.8 The units of measurement described in the Bill of Quantities are metric units. Abbreviations used in the Bill of Quantities are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	ton (1000kg)
m ²	=	square metre	no.	=	number
m ² .pass	=	square meter pass	sum	=	lump sum
ha	=	hectare	MN	=	meganewton
m ³	=	cubic metre	MN.m	=	meganewton-metre
m ³ .km	=	cubic metre-kilometre	PC sum	=	Prime Cost sum
l	=	litre	P/sum	=	Provisional sum
kl	=	kilolitre	%	=	Per cent
MPa	=	megaspascal	kW	=	kilowatt
PS	=	Pipe Special number	V	=	Valve number

3. Rates

- 3.1 The prices and rates to be inserted in the Bill of Quantities 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 Bill of Quantities, 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 Bill of Quantities 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.
- 3.4 The Tenderer shall not group together a number of items and tender one rate for such group of items.
- 3.5 All rates and sums of money quoted in the Bill of Quantities shall be in rands and whole cents. Fractions of a cent shall be discarded.
- 3.6 All prices and rates entered in the Bill of Quantities must be excluding VAT. VAT will be added last on the summary page of the Bill of Quantities.
- 3.7 Should excessively high unit prices be tendered, such prices may be of sufficient importance to warrant rejection of a tender by the Employer.

CORRECTION OF ENTRIES MADE BY TENDERER

Any entry made by the Tenderer in the Bill of Quantities, 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 written above in black ink and the full signature of the Tenderer shall be placed next to the correction.

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR
FOR THE CONSTRUCTION OF WATER AND SEWER
RETICULATION SERVICES IN ANDEON EXTENSION 37
FOR A PERIOD OF 36 MONTHS**

C2.2 BILL OF QUANTITIES

SIGNATURE OF PERSON AUTHORISED TO SIGN TENDER:

DATE :

PARTICULARS OF PERSON AUTHORISED TO SIGN THE TENDER:

Name: _____

Tel no: _____

ID no: _____

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 0	GENERAL				
Section 001	General Requirements and Charges				
001.01	Preliminary and General Charges				
B001.01.01	Fixed charges	Lump Sum	1		
B001.01.02	Time-related charges	Months	36		
B001.02	Locating Existing Services	Km	4		
B001.02.01	Relocation, Removal, Re alignment and Replacement of existing services such a Fibre and Street Poles	Prov Sum	1	R 250 000,00	R 250 000,00
B001.02.02	(a) Handling cost in respect of item B001.02.01	%	R 250 000,00		
B001.03 LI	Excavate by hand to expose existing services and backfill (LI)	m ³	500		
B001.04	Compliance with the Occupational Health and Safety Act and applicable regulations including the NEMA Act				
B001.04.01	Provision and Implementation of a Health and Safety Plan	lump sum	1		
B001.04.02	Provision of a Health and Safety File	lump sum	1		
B001.04.04	Provision of a SACPCMP registered safety officer (Full-time)	Months	36		
B001.04.05	Health and safety training	Lump Sum	1		
B001.04.06	Provision of personal protective clothing and equipment	Lump Sum	1		
B001.04.07	Provision of safety fences, signs and barricades	Lump Sum	1		
B001.04.08.01	Implementation of Health and Safety Obligations	Lump Sum	1		
B001.04.08.02	Compliance with Environmental Management Obligations (See Section C3.9)	Lump Sum	1		
B001.04.09	Provision of Environmental Officer	Months	36		
B001.05.01	Community liaison officer appointed at Task Level 5	Prov Sum	1	R 750 000,00	R 750 000,00
B001.05.02	(a) Handling cost in respect of item B001.05.01	%	750 000		
B001.06	Provision of Construction Supervisors	Months	36		
B001.07	Appointment of Local Security Company (SC)	Months	36		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
B001.08	Print, supply, distributions and removal of water interruptions notice color printed Color printed on correx A5 flyers	<i>No</i>	100		
B001.09	Contract Notice Board	<i>No</i>	2		
B001.10	Cost of Survey in terms of the Land Survey Act				
B001.10.01	Trigonometrical Survey and Plot boundary pegs, Verify Benchmarks and Nodes Mark and Record Critical levels During Construction and As-Built	<i>Prov Sum</i>	1	R 320 000,00	R 320 000,00
B001.10.02	(a) Handling cost in respect of item B001.10.01	%	320 000		
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 and laboratories	Lump Sum	1		
002.01.02	Services for cooking and ablution facilities on Site for the Engineer's Site staff	Lump Sum	1		
002.02 LI	Treatment and maintenance of areas surrounding offices and laboratories	Lump Sum	1		
002.03	Office and laboratory accommodation	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 0	GENERAL				
Section B003	Training and Development				
B003.08.01	Provision of Accredited Training for Local SMMEs	Prov Sum	1	750 000,00	750 000,00
	(a) Handling cost in respect of item B003.08.01	%	750 000,00		
B003.08.02	Provision of Accredited Technical Skills Training for seconded and non-seconded labour	Prov Sum	1	750 000,00	750 000,00
	(a) Handling cost in respect of item B003.08.02	%	750 000,00		
B003.08.03	Provision of SMME Development Agent for Local SMMEs	Prov Sum	1	1 920 000,00	1 920 000,00
	(a) Handling cost in respect of item B003.08.03	%	1 920 000,00		
B003.08.04	Social Facilitator / Community Participation Consultant	Prov Sum	1	1 080 000,00	1 080 000,00
	(a) Handling cost in respect of item B003.08.04	%	1 080 000,00		
TOTAL CARRIED TO SUMMARY					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 1	ANCILLARY WORK				
Section 101	Site Clearing and Grubbing				
101.01	Clearing and grubbing				
101.01.01	Strips				
LI 101.01.01.01	3m Width	m	45 730		
101.01.01.02	4m Width	m	15 243		
LI 101.01.02	Areas not classified as strips	m ²	3 900		
101.02	Cutting and removing large trees with a girth -				
LI 101.02.01	exceeding 1m and up to and including 2m	no	300		
101.02.02	exceeding 2m and up to and including 3m	no	30		
101.02.03	exceeding 3m and up to and including 4m	no	15		
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	300		
101.03.02	exceeding 2m and up to and including 3m	no	30		
101.03.03	exceeding 3m and up to and including 4m	no	15		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
101.04	Re-clearing of areas (only on the written instructions of the Engineer)				
101.04.01	Strips				
LI 101.04.01.01	3m Width	m	2 286		
101.04.01.02	4m Width	m	762		
LI 101.04.02	Areas not classified as strips	m ²	195		
101.05	Removal and disposal of specific elements				
101.05.01	Concrete kerbing / kerbing combinations	m	30		
101.05.02	Concrete or brick elements (reinforced or unreinforced)				
LI 101.05.02.01	230mm brickwork	m ²	20		
LI 101.05.02.02	115mm brickwork	m ²	10		
101.05.02.04	Concrete elements (unreinforced)	m ³	5		
101.05.02.05	Concrete elements (reinforced)	m ³	5		
101.05.03	Asphalt surfacing	m ²	1 180		
LI B101.05.04	Interlocking / non-interlocking paving blocks	m ²	20		
TOTAL CARRIED TO SUMMARY					

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	1 000		
102.02	Earthworks for bypasses				
102.02.01	Shaping of bypasses	m	1 000		
102.02.02	Cut and borrow to fill	m ³	450		
102.02.03	Cut to spoil	m ³	450		
102.03	Gravel wearing courses for bypasses	m ³	250		
102.04	Watering of bypasses	kℓ	500		
102.05	Blading of bypasses by motor grader	km.pass	10		
102.07	Existing roads used as bypasses	prov sum	1	R 100 000,00	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	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	lump sum	1		
102.14.02	Portable Stop and Go signs	no	4		
102.14.03	Amber flashing lights	no	4		
102.14.04	Road signs, TR-series, 1200mm in diameter or 900mm x 675mm if rectangular	no	10		
102.14.05	Road signs, TW-series, 1524mm sides	no	10		
102.14.06	Road signs, TG-series	m ²	10		
102.14.07	Danger plates and delineators	no	40		
102.14.08	Moveable barricade / road sign combination	no	20		
102.14.09	Traffic cones	lump sum	1		
102.14.10	Plastic New Jersey barrier	no	40		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
102.15	Re-use or removal of traffic-control facilities				
102.15.01	Amber flicker lights	no	2		
102.15.02	Road signs, TR and TW series	no	5		
102.15.03	Road signs, TG-series	no	5		
102.15.04	Danger plates and delineators	no	30		
102.15.05	Plastic New Jersey barrier	no	20		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 1	ANCILLARY WORK				
Section 104	Landscaping and Trimming				
104.01	Trimming				
104.01.01	Machine trimming	m ²	600		
104.01.02	Hand trimming	m ²	900		
104.03	Preparing areas for grassing and ground covers				
104.03.02	Topsoiling on the Site with -				
104.03.02.01	Topsoil obtained from the Site or borrow areas provided by Employer	m ³	20		
104.03.02.02	Topsoil provided by the Contractor from other sources (including all haul)	m ³	20		
104.03.05	Stockpiling of topsoil	m ³	500		
104.08	Extra work for landscaping	Prov Sum	1	R 50 000,00	R 50 000,00
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 1	ANCILLARY WORK				
Section B107	Dayworks				
B107.01	Labour during normal working hours				
B107.01.01	Unskilled labour	h	25		
B107.01.02	Semi-skilled labour	h	25		
B107.01.03	Skilled labour	h	25		
B107.03	Construction Plant				
B107.03.01	Tipper trucks				
B107.03.01.01	6m ³ capacity	h	25		
B107.03.01.02	10m ³ capacity	h	25		
B107.03.02	Backhoe loaders (Mass 7 - 8 ton)	h	25		
B107.03.03	Bulldozer (Mass 20 - 25 ton, Power 135 - 165 kW)	h	25		
B107.03.04	Tracked Excavator (Mass 18 - 22 ton, Power 70 - 105 kW)	h	25		
B107.03.05	Generator (15kVA)	h	25		
B107.03.06	Grader (Mass 16 - 20 ton)	h	25		
B107.03.07	Wheel Loader (Mass 10 - 13 ton)	h	25		
B107.03.08	Milling machine (W350 or equivalent)	h	5		
B107.03.09	Rollers				
B107.03.09.01	Pneumatic Roller (14 - 21 ton)	h	10		
B107.03.09.02	Single drum vibratory padfoot roller (7 - 10 ton)	h	10		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
B107.03.09.03	Single drum vibratory padfoot roller (10 - 14 ton)	h	10		
B107.03.09.04	Single drum vibratory smooth roller (7 - 10 ton)	h	10		
B107.03.09.05	Single drum vibratory smooth roller (10 - 14 ton)	h	10		
B107.03.09.10	Pedestrian roller (500 - 550kg, width 390mm)	h	10		
B107.03.09.11	Pedestrian roller (1000 - 1500kg, width 900mm)	h	10		
B107.03.10	Compressor (185 cfm) including 2 drills and hoses	h	10		
B107.03.11	Concrete Mixer (250 litre)	h	10		
B107.03.13	Pumps				
B107.03.13.01	Electric submersible (50mm)	day	1		
B107.03.13.02	Diesel centrifugal (50mm)	day	1		
B107.03.13.03	Diesel centrifugal (100mm)	day	1		
B107.03.13.04	Petrol centrifugal (50mm)	day	1		
B107.03.13.04	Petrol centrifugal (100)	day	1		
B107.04	Transport of Construction Plant				
B107.04.01	Flatbed truck (2 - 4 ton)	km	1		
B107.04.02	Lowbed (30 - 40 ton)	km	1		
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 - Water				
202.01	Trench excavations				
202.01.01	Up to 1,0 m wide				
202.01.01.01	Up to 1,0 m deep	m ³	10 011		
202.01.01.02	Over 1,0 m and up to 1,5 m deep	m ³	21 200		
202.01.01.03	Over 1,5 m and up to 2,0 m deep	m ³	1 520		
202.01.01.04	Over 2,0 m and up to 2,5 m deep	m ³	1 200		
202.02	Extra over items 202.01, 202.03 and 202.04 for excavating inr:				
202.02.01	Intermediate material	m ³	21 770		
202.02.02	Hard material	m ³	14 513		
202.03	Excavations outside the normal trench profile	m ³	1 102		
202.05	Excavation in tunnels exceeding 4,5 m in length:				
202.05.01	Soft material	m ³	30		
202.05.02	Intermediate material	m ³	45		
202.05.03	Hard material	m ³	45		
202.06	The backfilling of trenches (excluding backfill around the pipe barrel) with material obtained from excavations	m ³	8 317		
202.07	Extra over items 202.06 and 202.13 for using backfill material obtained -				
202.07.01	From borrow areas	m ³	8 025		
202.07.02	From sources provided by the contractor	m ³	8 025		
202.07.03	G5 provided by Contractor	m ³	1 000		
202.07.04	Backfilling additional excavations in trench floor using:				
202.07.04.01	concrete aggregate, max size 38 mm	m ³	15		
TOTAL CARRIED TO SUMMARY					

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	15		
202.10.02	To dumping areas to be provided by Contractor	m ³	19 528		
B202.11	Timbering and shoring	m	1 000		
202.12	Extra over item 202.06 for additional compaction of backfill to 93% of modified AASHTO density in road reserves (Test results to be supplied for addition compaction)	m ³	3 644		
202.13	Backfilling trenches with soilcrete	m ³	600		
202.15	Reinstatement of bitumen surfaced roads	m ²	125		
B202.16	Cutting and removal of premix:				
B202.16.01	Premix thickness up to 100 mm	m ²	125		
B202.16.02	Premix thickness 101 mm up to 200 mm	m ²	60		
B202.16.03	Premix thickness 201 mm up to 300 mm	m ²	40		
B202.16.04	Premix thicker than 300 mm	m ²	40		
B202.17	Hand excavation for trenches inside erven, Trenches 500 mm wide and 600 mm deep. (Li)	m ³	1 250		
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 - Sewer				
202.01	Trench excavations				
202.01.01	Up to 1,0m wide				
202.01.01.01	Up to 1,0m deep	m ³	5590		
202.01.01.02	Over 1,0m and up to 1,5m deep	m ³	4734		
202.01.01.03	Over 1,5m and up to 2,0m deep	m ³	4363		
202.01.01.04	Over 2,0m and up to 2,5m deep	m ³	2792		
202.01.01.05	Over 2,5m and up to 3,0m deep	m ³	2792		
202.01.01.06	Over 3,0m and up to 3,5m deep	m ³	913		
202.01.01.07	Over 3,5m and up to 4,0m deep	m ³	479		
202.01.01.08	Over 4,0m and up to 4,5m deep	m ³	185		
202.01.01.09	Over 4,5m and up to 5,0m deep	m ³	25		
202.01.02	Over 1,0m and up to 2,0m wide				
202.01.03	Over 1,5m deep and up to 2,0m deep	m ³	2000		
202.01.04	Over 2,0m deep and up to 2,5m deep	m ³	2000		
202.01.05	Over 2,5m and up to 3,0m deep	m ³	2792		
202.01.06	Over 3,0m and up to 3,5m deep	m ³	913		
202.01.07	Over 3,5m and up to 4,0m deep	m ³	479		
202.01.08	Over 4,0m and up to 4,5m deep	m ³	174		
202.01.09	Over 4,5m and up to 5,0m deep	m ³	18		
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	11132		
202.02.02	Hard material	m ³	16698		
202.03	Excavations outside the normal trench profile	m ³	35		
202.04	Hand excavation (extra over item 202.01 (Li))	m ³	100		
202.06	The backfilling of trenches (excluding backfill around the pipe barrel) with material obtained from excavations	m ³	21751		
202.07	Extra over items 202.06 and 202.13 for using backfill material obtained -				
202.07.01	From borrow areas	m ³	6078		
202.07.02	From sources provided by the contractor	m ³	6078		
202.08	Backfilling additional excavations in trench floor using -				
202.08.01	Class 1 : 3 :6 / 19 concrete (Li)	m ³	35		
202.08.02	Concrete aggregate, max size 38 mm	m ³	35		
202.09	Subsurface drains in trench bottoms	m	1000		
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	3951		
202.10.02	To dumping areas to be provided by Contractor	m ³	3951		
B202.11	Timbering and shoring	m	2000		
202.12	Extra over item 202.06 for additional compaction of backfill to 93% of modified AASHTO density in road reserves	m ³	4200		
202.13	Backfilling trenches with soilcrete	m ³	420		
202.15	Reinstatement of bitumen surfaced roads	m ²	4200		
B202.16	Cutting and removal of premix:				
B202.16.01	Premix thickness up to 100 mm	m ²	210		
B202.16.02	Premix thickness 101 mm up to 200 mm	m ²	80		
B202.16.03	Premix thickness 201 mm up to 300 mm	m ²	60		
B202.16.04	Premix thicker than 300 mm	m ²	60		
B202.17	Service that adjoin the trench	No	50		
B202.18	Services that intersect a trench	No	150		
B202.19	Hand excavation for trenches inside erven. Trench 750mm wide and 1500mm deep	m ³	11813		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 3	SEWERS				
Section 302	Construction				
302.01	Supplying, laying and jointing of sewer pipes irrespective of depth or width of trench:				
302.01.01	Supplying, laying and jointing of sewer pipes (SANS 791) irrespective of depth or width of trench:				
302.01.01.01	110 mm uPVC Class 34 (LI)	m	28330		
302.01.01.02	160 mm uPVC Class 34 (LI)	m	11101		
302.01.01.03	200 mm uPVC Class 34 (LI)	m	2650		
302.01.01.04	250 mm uPVC Class 34 (LI)	m	384		
302.01.01.05	315 mm uPVC Class 34 (LI)	m	427		
302.02	Constructing of pipe beddings				
302.02.01	Class B bedding for flexible pipes				
302.02.01.01	110 mm uPVC Class 34 (LI)	m	28330		
302.02.01.02	160 mm uPVC Class 34 (LI)	m	11101		
302.02.01.03	200 mm uPVC Class 34 (LI)	m	2650		
302.02.01.04	250 mm uPVC Class 34 (LI)	m	384		
302.02.01.05	315 mm uPVC Class 34 (LI)	m	427		
302.03	Concrete encasing of pipes	m ³	10		
302.04	Extra over Item 302.01 for supplying, installing and jointing with an approved method of coupling the following pipe fittings in the main sewer lines (PVC-U)				
302.04.01	Branch junctions:				
302.04.01.01	110 mm dia off 160 mm dia	No.	667		
302.04.01.02	160 mm dia off 160 mm dia	No.	444		
302.04.01.03	160 mm dia off 200 mm dia	No.	11		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
302.06	Construction of vertical house connections (as per DWG 7515-S206)				
302.06.01	Type A house connections:				
302.06.01.01	Up to but not exceeding 1,5 m in depth (LI)	No.	262		
302.06.01.02	Exceeding 1,5 m in depth but not exceeding 2,0 m in depth (LI)	No.	61		
302.06.01.03	Exceeding 2,0m but not exceeding 2,5m in depth	No.	5		
302.06.01.04	Exceeding 2,5m but not exceeding 3,0m in depth	No.	1		
302.06.01.05	Exceeding 3m but not exceeding 3,5m in depth	No.	1		
302.06.01.06	Exceeding 3,5m but not exceeding 4,0m in depth	No.	1		
302.06.01.07	Exceeding 4m but not exceeding 4,5m in depth	No.	1		
302.06.02	Type B house connections:				
302.06.02.01	Up to but not exceeding 1,5 m in depth (LI)	No.	262		
302.06.02.02	Exceeding 1,5 m in depth but not exceeding 2,0 m in depth (LI)	No.	61		
302.06.02.03	Exceeding 2,0m but not exceeding 2,5m in depth	No.	5		
302.06.02.04	Exceeding 2,5m but not exceeding 3,0m in depth	No.	1		
302.06.02.05	Exceeding 3m but not exceeding 3,5m in depth	No.	1		
302.06.02.06	Exceeding 4m but not exceeding 4,5m in depth	No.	1		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
302.06.03	Type C house connections:				
302.06.03.01	Up to but not exceeding 1,5 m in depth (LI)	No.	262		
302.06.03.02	Exceeding 1,5 m in depth but not exceeding 2,0 m in depth (LI)	No.	61		
302.06.03.03	Exceeding 2,0m but not exceeding 2,5m in depth	No.	5		
302.06.03.04	Exceeding 2,5m but not exceeding 3,0m in depth	No.	1		
302.06.03.05	Exceeding 3m but not exceeding 3,5m in depth	No.	1		
302.06.03.06	Exceeding 3,5m but not exceeding 4,0m in depth	No.	1		
302.06.03.07	Exceeding 4m but not exceeding 4,5m in depth	No.	1		
302.06.04	Type D house connections:				
302.06.04.01	Up to but not exceeding 1,5m in depth	No.	91		
302.06.04.02	Exceeding 1,5m but not exceeding 2,0m in depth	No.	20		
302.06.04.03	Exceeding 2,0m but not exceeding 2,5m in depth	No.	1		
302.06.04.04	Exceeding 2,5m but not exceeding 3,0m in depth	No.	1		
302.06.04.05	Exceeding 3m but not exceeding 3,5m in depth	No.	1		
302.06.04.06	Exceeding 3,5m but not exceeding 4,0m in depth	No.	1		
302.06.04.07	Exceeding 4m but not exceeding 4,5m in depth	No.	1		
302.07	Construction of cleaning eyes (Lamp poles) (DWG 7515-S208)				
302.07.01	Up to but not exceeding 1,5 m in depth	No.	907		
302.07.02	Exceeding 1,5 m in depth but not exceeding 2,0 m in depth	No.	202		
302.07.04	Exceeding 2,0m but not exceeding 2,5m in depth	No.	13		
302.07.05	Exceeding 2,5m but not exceeding 3,0m in depth	No.	1		
302.07.06	Exceeding 3m but not exceeding 3,5m in depth	No.	3		
302.07.07	Exceeding 3,5m but not exceeding 4,0m in depth	No.	1		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
302.07.08	Exceeding 4m but not exceeding 4,5m in depth	No.	1		
B302.09	Supply, handle, store if necessary and construct pre-cast concrete manholes with ND of 1250mm				
B302.09.01	For sewers 315 mm in diameter and smaller				
B302.09.01.01	Up to but not exceeding 1,5m in depth	No.	5		
B302.09.01.02	Exceeding 1,5m but not exceeding 2,0m in depth	No.	74		
B302.09.01.03	Exceeding 2,0m but not exceeding 2,5m in depth	No.	88		
B302.09.01.04	Exceeding 2,5m but not exceeding 3m in depth	No.	33		
B302.09.01.05	Exceeding 3m but not exceeding 3,5m in depth	No.	20		
B302.09.01.06	Exceeding 3,5m but not exceeding 4m in depth	No.	14		
B302.09.01.07	Exceeding 4m but not exceeding 4,5m in depth	No.	6		
B302.09.01.08	Exceeding 4,5m but not exceeding 5m in depth	No.	6		
302.12	Supplying and installing manhole covers and frames				
302.12.01	SANS 558 Type 4 circular frame (LI)	No.	246		
302.12.04	Precast concrete cover with type 4 CI frame (LI)	No.	246		
302.13	Extra over item B302.09 for construction of house connections for manholes				
302.13.01	One-house connections	No.	10		
302.13.02	Two-house connections	No.	10		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
302.14	Supplying and placing selected backfill material around and up to 300 mm above pipe barrels using				
302.14.01	Excavated material (LI)	m ³	6078		
302.14.02	Imported material (LI)	m ³	6078		
302.15	Extra over subitem 302.14.01 for screening material	m ³	6078		
302.20	Preliminary work prior to the construction of a manhole on an existing pipeline				
302.20.01	400 mm RC	No.	2		
302.21	Extra over subitem 302.14.02 for using material obtained from sources provided by the Contractor	m ³	6078		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 3	SEWERS				
Section 303	Testing				
303.01	Testing of Manholes	No.	248		
303.02	Air testing of sewers				
303.02.01	110 mm uPVC Class 34 (LI)	m	28330		
303.02.02	160 mm uPVC Class 34 (LI)	m	11101		
303.02.03	200 mm uPVC Class 34 (LI)	m	2650		
303.02.04	250 mm uPVC Class 34 (LI)	m	384		
303.02.05	315 mm uPVC Class 34 (LI)	m	427		
303.03	CCTV Camera Inspection				
303.03.01	110 mm uPVC Class 34 (LI)	m	28330		
303.03.02	160 mm uPVC Class 34 (LI)	m	11101		
303.03.03	200 mm uPVC Class 34 (LI)	m	2650		
303.03.04	250 mm uPVC Class 34 (LI)	m	384		
303.03.05	315 mm uPVC Class 34 (LI)	m	427		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 4	WATER RETICULATION AND WATER MAINS				
Section 402	Construction				
402.01	Supplying, laying and jointing of water pipes irrespective of depth or width of trench:				
402.01.01	Class 12 uPVC pipes, SANS 966: 1998 Part 1				
402.01.01.01	110 mm dia (LI)	m	8 529		
402.01.01.02	160 mm dia (LI)	m	4 771		
402.01.01.03	200 mm dia (LI)	m	2 304		
402.01.01.04	250 mm dia	m	623		
402.01.01.05	315 mm dia	m	100		
402.01.01.06	355 mm dia	m	966		
402.01.01.07	400 mm dia	m	271		
402.01.01.08	450 mm dia	m	727		
402.01.01.09	500 mm dia	m	100		
	SANBS / ISO 4427 PE100 PN12.5 HDPE pipes (including all fittings and couplings)				
402.01.01.10	20 mm dia PN16 (LI)	m	22 220		
402.01.01.11	32 mm dia PN16 (LI)	m	200		
402.01.01.12	40 mm dia PN 16 (LI)	m	30		
402.01.01.13	50 mm dia PN16 (LI)	m	200		
402.01.01.14	63 mm dia PN 12.5 (LI)	m	150		
402.01.01.15	110 mm dia PN 12.5 (LI)	m	Rate Only		ro
402.01.01.16	160 mm dia PN 12.5 (LI)	m	Rate Only		ro
TOTAL CARRIED FORWARD					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
	Medium Galvanised mild steel, medium class pipes, including all fittings and couplings (wrapped with grease tape and then covered with PVC tape): (L)				
402.01.01.17	80 mm dia (L)	m	60		
402.01.01.18	100 mm dia (L)	m	45		
402.01.01.19	150 mm dia (L)	m	70		
402.01.01.20	200 mm dia (L)	m	90		
	SANBS / ISO 4427 PE100 PN20 HDPE pipes (including all fittings				
402.01.01.21	800 mm dia PN12.5 (L)	m	25		
402.02	Extra over item 402.01 for providing and installing fittings, valves and specials:				
402.02.01	uPVC 90° Bends (Class 16):				
402.02.01.01	110 mm dia	No.	18		
402.02.01.02	160 mm dia	No.	45		
402.02.01.03	200 mm dia	No.	6		
402.02.01.04	250 mm dia	No.	2		
402.02.01.05	315 mm dia	No.	1		
402.02.01.06	355 mm dia	No.	2		
402.02.01.07	400 mm dia	No.	1		
402.02.01.08	450 mm dia	No.	4		
TOTAL CARRIED FORWARD					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
402.02.02	uPVC 45° Bends (Class 16):				
402.02.02.01	110 mm dia	No.	19		
402.02.02.02	160 mm dia	No.	38		
402.02.02.03	200 mm dia	No.	20		
402.02.02.04	250 mm dia	No.	4		
402.02.02.05	315 mm dia	No.	1		
402.02.02.06	355 mm dia	No.	1		
402.02.02.07	400 mm dia	No.	2		
402.02.03	uPVC 22½° Bends (Class 16):				
402.02.03.01	110 mm dia	No.	5		
402.02.03.02	160 mm dia	No.	1		
402.02.03.03	200 mm dia	No.	1		
402.02.03.04	250 mm dia	No.	1		
402.02.03.05	315 mm dia	No.	1		
402.02.03.06	355 mm dia	No.	1		
402.02.03.07	400 mm dia	No.	1		
402.02.04	uPVC 11¼° Bends (Class 16):				
402.02.04.01	110 mm dia	No.	7		
402.02.04.02	160 mm dia	No.	1		
402.02.04.03	200 mm dia	No.	1		
402.02.04.04	250 mm dia	No.	1		
402.02.04.05	315 mm dia	No.	1		
402.02.04.06	355 mm dia	No.	1		
402.02.04.07	400 mm dia	No.	1		
402.02.14	Cast iron end caps for uPVC pipes:				
402.02.14.01	75 mm dia	No.	8		
402.02.14.02	110 mm dia	No.	12		
402.02.14.03	160 mm dia	No.	8		
402.02.14.04	200 mm dia	No.	12		
402.02.14.04	250 mm dia	No.	2		
TOTAL CARRIED FORWARD					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
402.02.15	Flanged steel end caps (including corrosion protection as specified) drilled in accordance with SABS 1123 Table 16 (epoxy powder coated - refer to Series 401.05):				
402.02.15.01	110 mm dia	No.	4		
402.02.15.02	160 mm dia	No.	4		
402.02.15.03	200 mm dia	No.	4		
402.02.15.04	250 mm dia	No.	4		
402.02.15.05	315 mm dia	No.	1		
402.02.15.06	355 mm dia	No.	1		
402.02.15.07	400 mm dia	No.	1		
TOTAL CARRIED FORWARD					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
402.02.16	Cast iron or steel flanged reducers: (epoxy powder coated - refer to Series 401.05):				
402.02.16.01	160 x 110 mm	No.	40		
402.02.16.02	200 x 110 mm	No.	1		
402.02.16.03	200 x 160 mm	No.	2		
402.02.16.04	250 x 110 mm	No.	2		
402.02.16.05	250 x 160 mm	No.	5		
402.02.16.06	250 x 200 mm	No.	1		
402.02.16.07	355 x 200 mm	No.	6		
402.02.16.08	315 x 250 mm	No.	5		
402.02.16.09	450 x 160 mm	No.	2		
402.02.16.10	450 x 200 mm	No.	2		
402.02.16.11	450 x 400 mm	No.	1		
402.02.17	Cast iron flange adaptor for uPVC pipes, drilled in accordance with SABS 1123 Table 16:				
402.02.17.01	110 mm dia	No.	100		
402.02.17.02	160 mm dia	No.	66		
402.02.17.03	200 mm dia	No.	20		
402.02.17.04	250 mm dia	No.	10		
402.02.18	Steel or cast iron flange adaptor for uPVC pipes, drilled in accordance with SABS 1123 Table 16: (epoxy powder coated - refer to Series 401.05):				
402.02.18.01	355 mm dia	No.	13		
402.02.18.02	400 mm dia	No.	2		
402.02.18.03	450 mm dia	No.	4		
402.02.19	Cast Iron / Plastic saddles				
402.02.19.01	110 x 40 mm	No.	667		
402.02.19.02	160 x 40 mm	No.	223		
402.02.19.03	200 x 40 mm	No.	167		
402.02.19.04	250 x 40 mm	No.	10		
402.02.19.05	200 x 40 mm	No.	40		
402.02.19.06	250 x 40 mm	No.	40		
TOTAL CARRIED FORWARD					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
402.02.19.06	250 x 40 mm	No.	40		
402.02.20	Mild steel saddles (epoxy powder coated - refer to Series 401.05):				
402.02.20.01	315 x 40 mm	No.	6		
402.02.20.02	355 x 40 mm	No.	6		
402.02.20.03	400 x 40 mm	No.	1		
402.02.21	Cast iron reducing Tees for uPVC pipes:				
402.02.21.01	160 x 110 mm	No.	23		
402.02.21.02	200 x 110 mm	No.	15		
402.02.21.03	200 x 160 mm	No.	24		
402.02.21.04	250 x 110 mm	No.	15		
402.02.21.05	250 x 160 mm	No.	18		
402.02.21.06	250 x 200 mm	No.	8		
402.02.22	Flanged Cast iron reducing Tees:				
402.02.22.01	160 x 110 mm	No.	2		
402.02.22.02	200 x 110 mm	No.	2		
402.02.22.03	200 x 160 mm	No.	1		
402.02.22.04	250 x 110 mm	No.	1		
402.02.22.05	250 x 160 mm	No.	3		
402.02.22.06	250 x 200 mm	No.	1		
402.02.23	Flanged steel reducing Tees, flange drilled to SABS 1123 SABS 1123 Table 1600/3 (epoxy powder coated - refer to Series 401.05):				
402.02.23.01	160 x 110 mm	No.	1		
402.02.23.02	200 x 110 mm	No.	1		
402.02.23.03	200 x 160 mm	No.	2		
402.02.23.04	250 x 110 mm	No.	2		
402.02.23.05	250 x 160 mm	No.	1		
402.02.23.06	250 x 200 mm	No.	1		
TOTAL CARRIED FORWARD					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
402.02.23.05	250 x 160 mm	No.	1		
402.02.23.06	250 x 200 mm	No.	1		
402.02.23.07	315 x 250mm	No.	3		
402.02.23.08	315 x 200 mm	No.	1		
402.02.23.09	355 x 315mm	No.	2		
402.02.23.10	355 x 250 mm	No.	1		
402.02.23.11	355 x 200 mm	No.	2		
402.02.23.12	400 x 200mm	No.	2		
402.02.23.13	400 x 315 mm	No.	3		
402.02.23.14	400 x 355 mm	No.	4		
402.02.24	Double flanged, anti clockwise closing "RSV"(Class 16) capped top valves drilled in accordance with SABS 1123 Table 16:				
402.02.24.01	110 mm dia	No.	48		
402.02.24.02	160 mm dia	No.	35		
402.02.24.03	200 mm dia	No.	13		
402.02.24.04	250 mm dia	No.	3		
402.02.24.05	355 mm dia	No.	3		
402.02.24.06	400 mm dia	No.	2		
402.02.24.07	450 mm dia	No.	2		
402.03	Encasing of Pipes with				
402.03.01	Class 15/19 concrete	m ³	5		
402.03.02	Soilcrete	m ³	5		
402.04	Providing thrust blocks using class 15/19 concrete As per drawing 7515-W108	m ³	30		
402.05	Supplying and placing unscreened selected backfill material under, alongside and up to 200 mm above pipe barrels using:				
402.05.01	Excavated Material (Li)	m ³	4 506		
402.05.02	Imported material from sources provided by the Contractor (Li)	m ³	4 506		
402.06	Extra over item 402.05 for screening excavated material for selected backfill (Li)	m ³	4 506		
402.07	Valve chambers complete for -				
402.07.01	Supply and installation of Cast Iron / PVC Valve box complete for "RSV" valves as shown drawing 7515-W203 (type A)	No.	96		
402.07.02	Supply and installation of Cast Iron / PVC Valve box complete for "RSV" valves as shown drawing 7515-W203 (type B)	No.	6		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
402.08	Installation of Marker Blocks (Li)	No.	2		
402.09	Installation of hydrants complete as per dwg 7515-W208	No.	62		
402.10	Sterilizing of pipelines				
402.10.01	110 mm dia	m	8 529		
402.10.02	160 mm dia	m	4 771		
402.10.03	200 mm dia	m	2 304		
402.10.04	250 mm dia	m	623		
402.10.05	315 mm dia	m	Rate Only		ro
402.10.06	355 mm dia	m	996		
402.10.07	400 mm dia	m	271		
402.10.08	450 mm dia	m	727		
402.11	Extra over subitem 42.03.02 for using material obtained from sources provided by the Contractor	m ³	5		
402.12	The provision and installation of connections to users complete (excluding supply of water meters) as per detail drawing 7515-W206 and W207:				
402.12.01	Short single erf connection				
402.12.01.01	15 mm dia watermeter, 40 mm pipe size	No			
402.12.01.02	20 mm dia watermeter, 40 mm pipe size	No			
402.12.01.03	25 mm dia watermeter, 40 mm pipe size	No	131		
402.12.01.04	40 mm dia watermeter, 50 mm pipe size	No	53		
402.12.01.05	50 mm dia watermeter, 80 mm pipe size	No			
402.12.01.06	80 mm dia watermeter, 100 mm pipe size	No			
402.12.01.07	100 mm dia watermeter, 150 mm pipe size	No			
402.12.02	Short double erf connections				
402.12.02.01	15 mm dia watermeter, 40 mm pipe size	No			
402.12.02.02	20 mm dia watermeter, 40 mm pipe size	No	25		
402.12.02.03	25 mm dia watermeter, 40 mm pipe size	No			
402.12.02.04	40 mm dia watermeter, 50 mm pipe size	No	63		
402.12.02.05	50 mm dia watermeter, 80 mm pipe size	No	45		
402.12.02.06	80 mm dia watermeter, 100 mm pipe size	No			
402.12.02.07	100 mm dia watermeter, 150 mm pipe size	No			
402.12.03	Long single erf connection				
402.12.03.01	15 mm dia watermeter, 40 mm pipe size	No			
402.12.03.02	20 mm dia watermeter, 40 mm pipe size	No			
402.12.03.03	25 mm dia watermeter, 40 mm pipe size	No	235		
402.12.03.04	40 mm dia watermeter, 50 mm pipe size	No	122		
402.12.03.05	50 mm dia watermeter, 80 mm pipe size	No	100		
402.12.03.06	80 mm dia watermeter, 100 mm pipe size	No			
402.12.03.07	100 mm dia watermeter, 150 mm pipe size	No			
402.12.04	Long double erf connections				
402.12.04.01	15 mm dia watermeter, 40 mm pipe size	No			
402.12.04.02	20 mm dia watermeter, 40 mm pipe size	No			
402.12.04.03	25 mm dia watermeter, 40 mm pipe size	No	220		
402.12.04.04	40 mm dia watermeter, 50 mm pipe size	No	105		
402.12.04.05	50 mm dia watermeter, 80 mm pipe size	No	12		
402.12.04.06	80 mm dia watermeter, 100 mm pipe size	No			
402.12.04.07	100 mm dia watermeter, 150 mm pipe size	No			

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
B402.14	Connection to existing PVC / AC / HDPE water reticulation pipes irrespective of depth (Li)	No	8		
B402.15	Launching and exit pits (Li)	No	6		
B402.16	Excavate and Disconnect Existing Services (Li)	No	9		
B402.20	Supply and installation of stub and flanged adapters by butt welding for the following HDPE pipes: (SABS 1123 Table 16)				
B402.20.01	315 mm dia	No	4		
B402.20.02	355 mm dia	No	6		
B402.20.03	400 mm dia	No	6		
B402.20.04	630 mm dia	No	6		
B402.21	Supply and installation of temporary HDPE pipes (to ensure permanent water supply to all users):				
B402.21.1	63mm (Sc/Li)	No	200		
B402.21.2	110mm (Sc/Li)	No	200		
B402.22	Custom made Steel special to be measured, manufactured and installed (epoxy powder coated - refer to Series 401.05):	Prov sum	1	100 000	R 100 000,00
	(a) Handling cost in respect of item B402.22	%	100 000		
TOTAL CARRIED TO SUMMARY					
Signature of person authorised to sign the tender:				Date	

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 4	WATER RETICULATION AND WATER MAINS				
Section 403	Testing				
403.01	Hydraulic field-testing of pipelines				
403.01.01	110 mm dia	m	8 529		
403.01.02	160 mm dia	m	4 771		
403.01.03	200 mm dia	m	2 304		
403.01.04	250 mm dia	m	623		
403.01.05	315 mm dia	m	100		
403.01.06	355 mm dia	m	996		
403.01.07	400 mm dia	m	271		
403.01.08	450 mm dia	m	727		
403.01.09	500 mm dia	m	100		
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 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	50		
601.01.02	93% of modified AASHTO density	m ³	50		
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	50		
601.02.01.02	G7 Compacted to 95% of modified AASHTO density	m ³	50		
601.02.02	Subbase				
601.02.02.01	G5 Compacted to 95% of modified AASHTO density	m ³	50		
601.02.02.02	Compacted to 97% of modified AASHTO density	m ³	50		
601.02.03	Base				
601.02.03.01	Compacted to 98% of modified AASHTO density	m ³	50		
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	50		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
601.03.01.03	Compacted to 95% of modified AASHTO density	m ³	50		
601.03.02	Subbase				
601.03.02.01	Compacted to 95% of modified AASHTO density	m ³	50		
601.03.02.02	Compacted to 97% of modified AASHTO density	m ³	50		
601.03.03	Base				
601.03.03.01	Compacted to 98% of modified AASHTO density	m ³	50		
601.04	Extra over item 601.03 for obtaining material from				
601.04.01	Intermediate excavations	m ³	50		
601.04.02	Hard excavations	m ³	50		
601.06	Extra over Item 601.02 for borrow material from sources to be supplied by the Contractor				
601.06.01	Subgrade				
601.06.01.01	Compacted to 93% of modified AASHTO density	m ³	50		
601.06.01.02	Compacted to 95% of modified AASHTO density	m ³	50		
TOTAL CARRIED FORWARD					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD					
601.06.02	Subbase				
601.06.02.01	G5 Compacted to 95% of modified AASHTO density	m ³	50		
601.06.02.02	Compacted to 97% of modified AASHTO density	m ³	50		
601.06.03	Base				
601.06.03.01	Compacted to 98% of modified AASHTO density	m ³	50		
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 602	Crushed-stone Pavement Layers				
602.01	Crushed-stone base constructed with material obtained from				
602.01.01	Commercial sources				
602.01.01.01	G1 material compacted to 86% of apparent density	m ³	50		
602.01.01.02	G2 material compacted to 100% of modified AASHTO density	m ³	50		
602.01.01.03	G3 material compacted to 98% of modified AASHTO density	m ³	50		
602.02	Crushed-stone subbase constructed with material obtained from				
602.02.01	Commercial sources				
602.02.01.01	G1 material compacted to 86% of apparent density	m ³	50		
602.02.01.02	G2 material compacted to 100% of modified AASHTO density	m ³	50		
602.02.01.03	G3 material compacted to 95% of modified AASHTO density	m ³	50		
602.04	Additional compaction				
602.04.01	Extra over sub items 602.01.01.01, 602.01.02.01, 602.02.01.01 and 602.02.02.01 for compaction to 88% of apparent density	m ³	25		
602.04.02	Extra over sub items 602.01.01.02, 602.01.02.02, 602.02.01.02 and 602.02.02.02 for compaction to 102% of modified AASHTO density	m ³	25		
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				
604.01.01	In situ subgrade	m ³	100		
604.01.02	Subgrade	m ³	100		
604.01.03	Subbase	m ³	100		
604.01.04	Base	m ³	100		
604.02	Chemical stabilizing agent				
604.02.01	Cement	t	10		
604.02.02	Blast-furnace cement (CEM III)	t	10		
604.02.03	Road lime	t	10		
604.02.04	Milled blast-furnace slag	t	10		
604.02.05	Polymer soil stabilizer (EcoBond or similar approved)	ℓ	10		
604.02.06	Ionic soil stabilizer (ISS or similar approved)	ℓ	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 605	Prime Coat				
605.01	Prime coat				
605.01.02	MC-30 cut-back bitumen	ℓ	223		
605.01.03	MC-70 cutback bitumen	ℓ	223		
605.01.04	Invert bitumen emulsion which complies with SANS 4001-BT5	ℓ	223		
605.01.05	<i>Etc. for other prime types</i>				
605.02	Aggregate for blinding	m ²	880		
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	30mm Continuously graded	m ²	880		
602.02.02	Continuously graded (coarse)	t	1		
602.02.03	Semi-gap-graded (19mm max)	t	1		
602.02.04	Semi-gap-graded	t	1		
606.03	Asphalt surfacing on bridge deck 30mm Continuously graded	t	1		
606.04	Rolled-in chips (<i>nominal size of 30mm</i>) in surfacing	t	1		
606.05	Tack coat of 30% stable grade emulsion	ℓ	1		
606.06	Binder variations				
606.06.01	Penetration grade bitumens	t	1		
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	1		
606.07.02	Lime	t	1		
606.07.03	Milled granulated blast furnace slag	t	1		
606.07.04	Fly-ash	t	1		
606.09	100mm cores in asphalt paving	no	16		
606.10	Saw-cutting of asphalt, asphalt base or paving (depth of 50mm)	m	880		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 8	SPECIFIC WORK				
Section 805	Building Work (Toilets)				
	<u>Note:</u> Items B805.13 to B805.20 below as per Drawing No 7515 - S207:				
B805.13	Platform Preparation - excavate to a minimum depth of 300mm and dispose material, import G5 and compact to 93% Mod ASSHTO density, Rate to include identification of material and transportation (SC)	No.	1 111		
B805.14	15Mpa Micro fibre Concrete Raft foundation	No.	1 111		
B805.15	Superstructure and roofing (including brickwork, door, door frame, ironmongery, bagging, backwash beam filling and roofing)	No.	1 111		
B805.16	Tiling and grouting including plastic end strip	No.	1 111		
B805.17	Plumbing (including concrete wash trough, sealed with epoxy, toilet,cistern, pipework - water and sewer, holders bats)	No.	1 111		
B805.18	Solar Light and Panel (10W Solar Lighting Kit)	No.	1 111		
B805.19	Cut and fit 20mm diameter pipe to existing water supply	No.	1 111		
B805.20	Supply and install 20mm equal T-piece with adaptor	No.	1 111		
B805.21	Supply and install 15mm brass hose bib-tap	No	1 111		
B805.22	Extraover for the disabled	No.	22		
B805.23	User Agreement and Happy Letters	No.	1 111		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
SERIES 9	QUALITY CONTROL				
B903.07	Laboratory Costs				
B903.07.01	Cost of the combined laboratory	Prov Sum	1	R 1 440 000,00	R 1 440 000,00
B903.07.02	Charge on Prime cost sum (B903.07.01)	%	R 1 440 000,00		
TOTAL CARRIED TO SUMMARY					

Signature of person authorised to sign the tender:	Date

SUMMARY OF PRICING SCHEDULE

SECTION	DESCRIPTION	AMOUNT
SERIES 0 001 002 B003	GENERAL General Requirements and Charges Engineers Accommodation Training and Development	
SERIES 1 101 102 B107	ANCILLARY WORK Site Clearing and Grubbing Accommodation of Traffic Dayworks	
SERIES 2 202 202	EARTHWORKS Trenching (Water) Trenching (Sewer)	
SERIES 3 302 303	SEWERS Construction Testing	
SERIES 4 402 403	WATER RETICULATION AND WATER MAINS Construction Testing	
SERIES 6 601 602 604 605 606	ROADS AND PARKING AREAS Gravel Pavement Layers Crushed-stone Pavement Layers Stabilization Prime Coat Asphalt Base and Surfacing	
SERIES 8 805	SPECIFIC WORK Building Work	
SERIES 9 903	QUALITY CONTROL Testing	
TOTAL CARRIED FORWARD		

Signature of person authorised to sign the tender:	

DESCRIPTION	AMOUNT
<p>TOTAL OF SCHEDULED PRICES</p> <p>ADD ESTIMATED CPA @ 10% BASED ON THE FORMULA TO BE APPLIED TO TOTAL SCHEDULED PRICES</p> <p>ADD CONTINGENCIES @ 10% of TOTAL SCHEDULED PRICES TO BE APPLIED TO TOTAL SCHEDULE PRICES</p> <p>SUBTOTAL</p> <p>ADD 15% VAT</p>	
<p>CONTRACT PRICE CARRIED FORWARD TO FORM OF OFFER</p>	

<p>Signature of person authorised to sign the tender:</p>	<p>Date</p>

Contract No: HHS 02-2023/24 Tender for the appointment of a contractor for the construction of water and sewer reticulation services in Andeon Extension 37 for a period of 36 months.
Part C3: Scope of Work

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE
CONSTRUCTION OF WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS**

PORTION 2: CONTRACT

PART C3: SCOPE OF WORK

SCOPE OF WORK

INDEX

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C3.4	CONSTRUCTION	C3.4
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C3.6	PARTICULAR SPECIFICATIONS AND VARIATIONS AND ADDITIONS TO THE STANDARD SPECIFICATIONS	C3.6
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NOTE: ALL DRAWINGS REFERED TO UNDER THIS SECTION OF THE TENDER DOCUMENT ARE INCLUDED UNDER VOLUME 2

Contract No: HHS 02-2023/24 Tender for the appointment of a contractor for the construction of water and sewer reticulation services in Andeon Extension 37 for a period of 36 months.

Part C: Scope of Work

Section C3.1: Description of the Works

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE
CONSTRUCTION OF WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS**

C3.1 DESCRIPTION OF THE WORKS

C3.1 DESCRIPTION OF THE WORKS

1.1 EMPLOYER'S OBJECTIVES

The objective of the project is to provide water and sewer reticulation services to the development precinct of Andeon Extension 37. The aim is to ensure that the standard of living is improved through the provision of basic water and sanitation services to the broader community. The project is also aimed at delivering public infrastructure to the community through construction by using conventional methods, and most importantly using labour intensive methods to empower the community according to the Expanded Public Works Programme (EPWP).

The development is a greenfield and will comprise of 1133 stands of different typologies. The total yield for the area is 3572 residential units. The development is aimed at alleviating the informal settlement crisis within the area of Andeon Agricultural holdings and will consist of the following:

- 1111 residential 1 stands;
- High density residential units;
- Clinic;
- Primary School;
- Secondary School;
- Sports and Recreational Facilities;
- Business Facilities;
- Public Open Spaces.

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

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

NOTE 1 *The employer's objective in requiring the appointment of a construction manager is to provide expertise and resources that selected sub-contractors might lack, capacitate these contractors to successfully complete their contracts and to minimize the risk of works not being constructed to stated requirements, within budget and on time.*

NOTE 2 *The employer's objective in appointing a materials manager is to ensure that supported contractors are*

supplied timeously with materials that comply with the requirements of the project. The Contractor may be required to procure materials on behalf of the sub-contractors and the materials manager will be required to facilitate and plan accordingly with the Contractor.

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

The Contractor will be appointed with a minimum Construction Industry Development Board (CIDB) 8CE.

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

1.2 OVERVIEW OF THE WORKS

The project requires the construction of water and sewer reticulation infrastructure in Andeon Extension 37.

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

The scope of works entails the following:

- Supplying, laying and jointing of sewer pipes (SANS 791) including associated features
 - 28330m of 110mm \varnothing uPVC Class 34 (LI)
 - 11101m of 160mm \varnothing uPVC Class 34 (LI)
 - 2650m of 200mm \varnothing uPVC Class 34 (LI)
 - 384m of 250mm \varnothing uPVC Class 34 (LI)
 - 427m of 315mm \varnothing uPVC Class 34 (LI)
 - 1111 Toilets Structures with Plumbing and Fittings
 - Erf Connections as follows:
 - 1111 x Residential 1
 - 2 x Residential 4 (814 High Density Residential Rental Walk Ups)
 - 4 x Residential 4 (1772 High-Density Low-Cost Walk Ups)
 - 2 x Clinic and community facility
 - 1 x Taxi Rank
 - 2 x Business Stands
 - 2 x Creche

- 2 x Primary School
 - 1 x Secondary School
 - 6 x Sports & Recreational Facility Stands
-
- Supplying, laying and jointing of water pipes SANBS 966: 1998 irrespective of depth or width of trench;
 - 8529m of 110mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - 4771m of 160mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - 2304m of 200mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - 623m of 250mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - 100m of 315mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - 966m of 355mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - 271m of 355mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - 727m of 400mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - 100m of 500mm \varnothing uPVC Class 12 uPVC pipes (LI)
 - Erf Connections as follows:
 - 1111 x Residential 1
 - 2 x Residential 4 (814 High Density Residential Rental Walk Ups)
 - 4 x Residential 4 (1772 High-Density Low-Cost Walk Ups)
 - 1 x Clinic and community facility
 - 1 x Taxi Rank
 - 2 x Business Stands
 - 2 x Creche
 - 2 x Primary School
 - 1 x Secondary School
 - 6 x Sports & Recreational Facility Stands

1.2.1 EXTENT OF THE WORKS

a) The extent of the Works consists of:

General

- i) Establishment of facilities on site;
- ii) Locate, expose and protect the existing services;
- iii) Clearing and grubbing of pipe routes and road reserves;
- iv) Setting out of the works;
- v) Finishing-off and site clearance.
- vi) Sewer lines comprising of uPVC Pipe
- vii) Water Lines comprising of uPVC Pipe
- viii) Connection of the new sanitation system to existing manholes at four locations.
- ix) Air testing and CCTV inspection of the new sewer system
- x) Pressure testing of the new water lines

b) Particular Works

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

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

1.2.2 PHASING OF THE WORKS

The works will not be phased but constructed over 3 financial years. The start and completion dates of the phased scope of works (if necessary) will be agreed with the contractor depending on available budget.

The Contractor will commence with the Works in the 2023/2024 Financial Year.

Financial Year	Portion
2023/2024, 2024/2025 & 2025/2026	All the works

The Employer reserves the right to:

1. Change the above descriptions of the portions of the Works and
2. To omit the implementation of any or a combination of the above portions and
3. To add additional portions to the Works.
4. Terminate the services of the contractor should it be deemed that the contractor's performance is not satisfactory.

1.3 NATURE OF THE WORKS

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

a) Conventional construction methods

- Removal of boulders or other obstructions too large to be hand removed
- Excavation of trenches deeper than 1,5m

b) Labour intensive construction methods (EPWP)

Items deemed suitable for construction using labour intensive construction

methods are prefixed “LI” in the schedule of quantities. The employer’s further objective is to optimise labour opportunities and the contractor shall be required to construct the works accordingly. The “LI” activities, inter alia, include but are not limited to:

- Clearing of the areas for the excavation of trenches, including the removal of any trees or other impediments to the installation of new reticulation pipelines.
- Excavation of trenches not exceeding 1,5m in depth, including for all shoring and other safety methods to ensure safe working conditions;
- Excavate by hand to expose existing services and backfill;
- Bedding and laying of new reticulation pipelines;
- Backfilling of all new reticulation pipelines as specified;
- Construction of manholes, excluding the lifting of precast concrete rings.
- Accredited training;
- The installation of fence where necessary;
- Fixing damaged fences and walls.

c) Local Emerging Contractors (LEC)

Items deemed suitable for construction using Local Emerging Contractors include but are not limited to:

- Construction of brickwork related work;
- Supply and erection of fence and gate;
- Construction of segmented block paving;
- Construction of concrete pavements;
- Construction of edge restraints;
- Construction of subsoil drains;
- Reinstatement of bitumen surfacing;
- Landscaping to facilitate good site drainage

d) Construction and Materials Manager

The Main Contractor will be required to appoint a Materials and Construction Manager to mentor, train and assist the appointed local emerging contractors and the daily activities are listed in C3.3.2 and C3.3.3. The minimum qualification for the construction manager will be a National Diploma in Civil Engineering or higher qualification in Civil Engineering.

In areas where required by the Engineer the contractor will be required to make use of local emerging contractors to execute dedicated portions of the work. Only approved tendered rates will apply for work executed and the contractor must ensure that the local emerging contractors are paid a market related price for work done. The contractor will be compensated for the additional site supervision, management of local emerging contractors, material management, training and

personal protective clothing that may be required for the local emerging contractors as a percentage value of the work done by the subcontractor.

The City of Tshwane (CoT) has a mandate and responsibility to fight poverty, build clean, healthy, safe and sustainable communities. To achieve this, the City adopted an Integrated Poverty Reduction and Community Development Strategy which requires all departments to cooperate and contribute towards poverty reduction through indigent exit programmes and projects.

Water and Sanitation is committed to utilize indigents that are registered on the CoT Indigent Register on all projects. The aim is to ensure commitment by each contractor on a project to utilize 50% of its personnel of the indigents list provided by the CoT in order to enhance poverty alleviation and the uplifting of indigents.

The successful contractor appointed will have to make use of the Indigent Register in each area that will be provided by the CoT. 50% of all personnel on a project to be appointed from the Indigent Register provided.

The idea is to place indigents 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 indigents required, qualifications, type of placement/occupation and gender before the project starts. The successful contractor appointed must accommodate students that need practical training or in-service training.

The Contractor will adopt the following structure for the selecting, training and appointing of local emerging contractor(s) for this project:

1. The Project Steering Committee (PSC) under the leadership of the ward councilor(s) will compile a list of all the local emerging contractors in the ward(s) where the project will be executed.
2. Immediately after the approval of the appointment of the principal contractor on the project, the PSC under the leadership of the ward councilor(s) will invite all the local emerging contractors in the ward(s) where the project will be executed as captured on the abovementioned list to apply for possible inclusion on the list of candidates to be appointed as local emerging contractor(s) by the principal contractor on the project.
3. The applicants will then be evaluated and a short list will be compiled by the PSC together with the appointed Construction and Materials Manager and the appointed principal contractor.
4. The successful candidates will then be trained by the appointed NQF accredited EPWP Training Provider on all the predetermined unit standards.
5. The successful candidate(s) will then enter into a written agreement/contract with the principal contractor.

6. The principal contractor should make provision for administration of local emerging contractors. The principal contractor must provide to the local emerging contractor(s) a construction and material manager to assist them with their construction work (C3.3.2 and C3.3.3). The principal contractor will be paid to provide a construction and material manager to the local emerging contractor(s) via the contract that will be awarded to the principal contractor. The principal contractor will price all items, except in the case of a nominated sub-contractor(s). These tariffs will be binding on the principal contractor if the work is executed by the principal contractor and should no local emerging contractor(s) be available.
7. The principal contractor can hold the local emerging contractor(s) responsible for the quality and quantity of work done by them through their agreement/contract, but will be ultimately responsible and liable for the work done being the principal contractor and mentor to the local emerging contractor(s).
8. The principal contractor and consultants responsible for the site supervision will submit a performance evaluation report to the Client, the CoT, and to the CIDB for their records should the local emerging contractor(s) being registered with the CIDB, in the process of registering or planning to register with the CIDB after the completion of the construction works on the project.
9. A register of all the trained, appointed local emerging contractor(s) and experienced emerging contractors per ward will be kept at the Water and Sanitation Department on the Management System.
10. Ensure that each local emerging contractor(s) Health and Safety Management Plan is implemented and maintained on their portion of the Works.
11. A monthly progress report including an annexure of the performance of local emerging contractors will be submitted on a monthly basis.

The above structure will ensure that local emerging contractors with potential to be trained and given the opportunity to be appointed as local emerging contractor(s) and to gain valuable experience under the mentorship of a construction and materials contractors manager.

1.4 TEMPORARY WORKS

No temporary works have been allowed for.

1.5 LOCAL ECONOMIC PARTICIPATION SPECIFICATION

A. PREAMBLE

The City of Tshwane has a long-term commitment to the protection and Participation of local business and industry, including the Participation and support of construction skills and – capacity. In addition, the municipality is committed to the provision of as many job opportunities as possible to its local communities and therefore to the consistent pursuance and achievement of the objectives of EPWP. Having regard for the specialized nature of this project, the municipality in its role as Employer requires the maximum possible level of Local Economic Participation, as defined in this contract, as well as the maximum possible level of employment of local skills and labour. This specification therefore forms a very important aspect of this contract, which will be enforced and will require the full attention of the Contractor for the duration of the contract.

B. DEFINITIONS

“**Local Sub-Contractor**” means a legal business entity with its registered office and/or physical address in the City of Tshwane municipal area, duly registered with the Construction Industry Participation Board (CIDB) and with the required CIDB grading and who has actively conducted business in the City of Tshwane municipal area for a period of more than 12 months.

“**Local Supplier**” means a legal business entity with its registered office and/or physical address in the City of Tshwane municipal area who has actively conducted business in the City of Tshwane municipal area for a period of more than 12 months and who supplies goods or materials directly to the end user.

C. SPECIFICATION

1. LOCAL ECONOMIC PARTICIPATION (LEP) shall comprise of:
 - a. The direct participation of Local Sub-contractors in the Contract.
 - b. The direct participation of Local Suppliers and Service Providers in the Contract.
 - c. The direct employment of local labor, - semi-skilled and - skilled staff by the Contactor and Local Sub-contractors.
2. Direct Participation shall mean the engagement of resources, listed in 1 above, by the Contractor without the involvement of any other intermediary parties or agents.
3. LOCAL ECONOMIC PARTICIPATION (LEP) shall be measured by value as follows:
 - a. Where activities, as measured under LI and SC of the Bill of Quantities, are performed entirely by Local Sub-contractors at the rate in the Bill of quantities, the value of the measured item shall be deemed to be the net value of LEP in respect of that activity.

- b. Where an activity, performed in terms of the above, is valued at a scheduled rate that includes a profit mark-up, supervision fee, administration fee or any other mark-up, the net value of the item payable to the Local Sub-contractor shall be deemed to be the net value of the LEP in respect of that activity.
 - c. Where any component of the Contract, measured in the Schedule of Quantities, being a material or plant item or service required for the completion of the Contract, is provided entirely by a Local Supplier or Service Provider, at the rate in the Schedule of Quantities, the value of the measured item shall be deemed to be the net value of LEP in respect of that component.
 - d. Where a component, supplied in terms of point 'c' above, is valued at a scheduled rate that includes a profit mark-up, supervision fee, administration fee or any other mark-up, the net value of the item payable to the Local Supplier shall be deemed to be the net value of the LEP in respect of that component.
 - e. The value of local labour shall be the net value of wages and/or salaries paid to individuals, recruited from communities in the City of Tshwane municipal area, for the purpose of the Contract, by the Contractor or any of the Local Sub-contractors, appointed in terms of this Contract.
4. Tenderers shall indicate in their tenders the value (as a percentage) of Local Economic Participation (LEP) that will be achieved should he be awarded the contract. This tendered value, split between the participation of Local Suppliers and Service Providers on the one hand and Local Sub-contractors on the other shall become the Contractor's Local Economic Participation target.
- The achievement of this target will be a contractual obligation, which will be enforced in terms of the provisions of this section.
5. The Contractor shall, within seven (7) days of the date of the Letter of Acceptance, submit to the Engineer a detailed plan for the achievement of his tendered Local Economic Participation (LEP) objectives and target, including a schedule of construction activities, construction components, materials, goods and services, local skills and labour etc, in which their valuation in terms of the principles of this specification is clearly indicated. This schedule shall indicate how targets will be met.
6. The Engineer shall approve this detailed plan in writing within seven (7) days of its submission by the Contractor.
7. The Contractor shall submit to the Engineer monthly progress reports, in a format approved by the Engineer, clearly indicating progress to date in respect of LEP. These reports will be in addition to monthly MIG reports required from the Contractor.
8. The Contractor shall, if requested by the Engineer at any stage of the Contact, submit within seven (7) days all necessary documentation required to confirm the accuracy of information provided in the monthly progress reports. Documentation shall include but not be limited to:
- a. Tax invoices,

- b. Wage sheets,
 - c. Salary Advices
 - d. Orders.
9. At the completion of the project and prior to the issue of the Performance Certificate, the Contractor shall submit audited (audited by a recognized third-party institution) figures to substantiate and confirm actual LED expenditure achieved during the implementation of the Contract. Failure to meet the tendered target will be result in a financial penalty as described under Sub-Clause 4.10.1 of the General Conditions of Contract (as amended).
10. Failure by the Contractor to comply with any of the requirements in 4, 5, and 6 above shall be dealt with in terms of Clause 9.2 of the General Conditions of Contract.
11. The Contractor shall during the course of the Contract have the opportunity to submit revised detailed plans for the achievement of Local Economic Participation (LEP) objectives and targets, considering practical constraints encountered during the construction process and including the necessary motivation for such revised detailed plans.
12. In the event that the Contractor is prevented to comply with his implementation plan by any circumstances outside his control, he shall within seven (7) days submit to the Engineer a notice outlining such circumstances in detail and stipulating the impact of such circumstances on the Local Economic Participation in the Contract and as defined above. The Engineer shall within seven (7) days of receiving such a notice inform the Employer accordingly and who shall be obliged to:
 - a. Rectify the circumstances preventing compliance and exempting the Contractor from his obligations, in terms of his implementation plan, for the duration of the period in which the circumstances prevailed, or
 - b. Exempting the Contractor entirely from his obligations in terms of its implementation plan in so far as these are affected by the specific circumstances.
13. Any dispute arising from this specification or the implementation thereof shall be resolved in accordance with the provisions of Clause 10 of the General Conditions of Contract.
14. A payment item has been included under schedule 1 (preliminary and general charges) for all costs related to the compilation and administration of all LED-related documentation as well as the auditing of the final figures by a recognized third-party institution.

D. NON-SPECIALIST WORK LOCAL SUB-CONTRACTORS

All work measured that have been identified for construction by local sub-contractors as a minimum requirement, which does not prevent the Contractor from employing sub-contractors for other portions of work in order to achieve the tendered LEP target.

1.6 LOCATION OF SITE

Andeon Ext 37 is located in Zandfontein, Pretoria West in Region 3, Ward 55 of City of Tshwane Metropolitan Municipality. Andeon Ext 37 is located approximately 11.5km west of Pretoria CBD.

Andeon Ext 37 coordinates are 25°41'50.66"S and 28°05'50.81"E latitude and longitude respectively. The area can mainly be accessed from the western side through Kenneth Street emanating from M17 (Hornsnek Road).

The site can also be accessed from the eastern side through Beverly Street emanating from Bremmer Street which connects to the R80 Mabopane Highway Interchange. The proposed development is approximately 116 hectares.



1.7 GEOTECHNICAL INFORMATION

Geotechnical Investigations

The site investigation which was conducted on the 29th of June until the 4th of July 2022 included total number of 64 test pits. These test pits were excavated adjacent to the proposed study area. Co-ordinates of the test pits were determined using a hand-held Garmin e-Trex 10 instruments on the South African grid, while excavations were done by using a TLB (tractor loader backhoe), following the safety procedures as set out in the SAICE Code of Practice (2003, updated 2007), as well as the Occupational Health and Safety Act No. 85 of 1993. Soil profiles were described by an engineering geologist based on the standard method proposed by Jennings et al. (1973).

The lab has completed laboratory tests on the samples for the tests listed below:

- Maximum Dry Density (MDD)
- California Bearing Ratio (CBR)
- Particle Size Analysis

- Atterberg Limits

Test Pit Profiles

Total of sixty-four (64) test pits was excavated and profiled by an engineering geologist, with detailed analysis carried out based on the field works and interpretation of laboratory results obtained from the representative soil sample collected during the ground investigation around the study area.

The site profiles show that This horizon consists of materials which are not naturally deposited, the fill is uncontrolled and have not been compacted. This is the top material and was encountered at only at TP 19, TP62 at a depth of 0.55 m. The fill material consists of sandy gravel and gravelly sand. The consistency of the materials is medium dense and firm while the structure of the materials is intact.

Below the fill material there was the colluvium material which was encountered at all test pits at a maximum depth of 2.4m across the study area. Pedogenic material was encountered at all the test pits below the colluvium material at maximum depth of 2.4 m.

Shale is the parent rock which is found on site. The rocks encountered on site are moderately weathered to completely weathered, fine to medium grained, soft to very soft rock. The bedrock was encountered at TP06, TP11, TP14, TP15, TP16, TP 17, TP25, TP27, TP28, TP29, TP31, TP34, TP37, TP38, TP40, TP42, TP43, TP44, TP45, TP46, TP61, TP62, and TP63 this layer extends down to the bottom of the test pit.

Test Results

In accordance to TRH14, material sampled from excavated test pits were tested for road indicators and CBR classified between G4 and G10 based on obtained CBR values and percentage swell of tested material while the plasticity index ranges were low.

Laboratory test results indicates that materials sampled at TP03, TP06(0.0-0.45m), TP31, TP46, TP48, TP51, TP53, TP58 are suitable to be used as bedding material while the rest of sampled material do not meet minimum requirements to be used as bedding material.

It is therefore recommended that bedding material should be imported from commercial sources and should be tested to ensure that the imported material meet minimum requirements for bedding material as per specification.

1.7 FEATURES REQUIRING SPECIAL ATTENTION

1.7.1 Existing Services

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

The wayleaves are also to be utilized to identify clashes of services with the Sewer and Water Reticulation design.

City of Tshwane Wayleaves Central was used to attain the wayleaves. Wayleaves attained to date are shown on below Table.

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

1.7.2 Surveying and Cadastral Beacons (including Stand pegs)

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

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

1.8 SUPPLYING OF MATERIALS

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

While care had been taken in calculating the quantities, the Contractor shall check the quantities before ordering. No claims for payment of excess or incorrect materials due to such shall be entertained.

1.9 QUALITY CONTROL

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

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

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

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

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

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HUMAN SETTLEMENTS DEPARTMENT

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**TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE
CONSTRUCTION OF WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS**

C3.2 ENGINEERING

C3.2 ENGINEERING

3.2.1 STANDARDS AND CODES OF PRACTICE

The following design standards for Civil Engineering Infrastructure will apply:

- i) City of Tshwane: Guidelines for the Design and Construction of Water and Sanitation Systems (Revised November 2016).
- ii) Standard Specification for Municipal Civil Engineering Works Series 4, Third Edition (2005)
- iii) Guidelines for the provision of engineering services and amenities in residential township development by the National Housing Board (Red Book).
- iv) The General Conditions of Contract for Works of Civil Engineering Construction, First Edition (2015) issued by the South African Institute of Civil Engineers
- v) City of Tshwane's Standard Drawings for Sewer, January 2017
- vi) EPWP Specifications

3.2.2 EMPLOYER'S DESIGN

The Contractor undertakes only construction on the basis of full designs issued by the Employer. The Contractor is to follow the specification, the design and construction drawings as laid out by the Employer. The design of the Works is detailed on the drawings and described in this document.

3.2.3 DRAWINGS

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

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

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

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works, and dimensions shall not be scaled from the Drawings, unless required by the

Engineer. The Engineer will, on the request of the Contractor in accordance with the provisions of the Conditions of Contract, provide such dimensions as may have been omitted from the Drawings.

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

The Drawings prepared by the Employer for the permanent Works are bound at the back of this volume. The Employer reserves the right to issue amended and/or additional drawings during the Contract

Note: All applicable Drawings are Included Under Volume 2.

C3.2.2 DESIGN & SPECIFICATIONS

DESCRIPTION OF DESIGN PARAMETERS		PROPOSED DESIGN STANDARD
ADWF	:	600 liters / stand / day (Low-cost housing erf up to 250 m ²)
Infiltration (I)	:	0.04 l/min/m length/ m dia of pipeline
Peak factor (PF)	:	2.5
PWWF	:	PF x ADWF x I
Sewer designed to flow	:	70% full
Minimum velocity	:	0.75 m/s – at 70% full flow
Minimum grade with depths of flow = 1/5D and v = 0,6 m/sec:		
375 mm diameter	:	1/250
525 mm diameter	:	1/360
Minimum grade with depths of flow = 1/2D and v = 0,82 m/sec:		
375 mm diameter	:	1/370
525 mm diameter	:	1/465
Manhole spacing	:	Maximum of 110m
Min. depth in road reserve	:	1.5m depending on the invert level of the existing sewer. *
Min. depth in midblock	:	1.2m depending on the invert level of the existing sewer. *
Sewer pipes and fittings	:	UPVC class 12 and HDPE type PE100, PN16, SDR11 to ISO 4427
Manholes	:	Pre-cast concrete rings and covers
EPWP Design	:	NQF7
EPWP Site Agent	:	NQF5**
EPWP Foreman	:	NQF4**
EPWP Team Leader	:	NQF2**

C3.2.3 PLANT AND MATERIALS

The following plant and materials for Civil Engineering Infrastructure will apply:

C3.2.3.1 WATER INFRASTRUCTURE

(a) uPVC Pipes

Class 12 uPVC pipes, SANS 966: 1998 Part 1 ranging from 110mmØ to 500mmØ

(b) HDPE Pipe

SANBS / ISO 4427 PE100 PN12.5 HDPE pipes (including all fittings and couplings) ranging from 20mmØ to 63mmØ

(c) Steel Pipes

Medium Galvanised mild steel, medium class pipes, including all fittings and couplings (wrapped with grease tape and then covered with PVC tape): (LI) ranging from 80mmØ to 200mmØ

(d) Fittings

- uPVC 90°, 45°, 22,5°, 11.25° Bends (Class 16) ranging from 110mmØ to 450mmØ
- Flanged steel end caps (including corrosion protection as specified) drilled in accordance with SABS 1123 Table 16 (epoxy powder coated) ranging from 110mmØ to 400mmØ
- Cast iron or steel flanged reducers (epoxy powder coated) ranging from 110mmØ to 450mmØ
- Cast iron flange adaptor for uPVC pipes, drilled in accordance with SABS 1123 Table 16 ranging from 110mmØ to 250mmØ
- Steel or cast-iron flange adaptor for uPVC pipes, drilled in accordance with SABS 1123 Table 16 (epoxy powder coated) ranging from 355mmØ to 450mmØ
- Cast Iron / Plastic saddles ranging from 110x40mm to 250x40mm
- Mild steel saddles (epoxy powder coated) ranging from 315mmØ to 450mmØ
- Flanged Cast iron reducing Tees ranging from 160x110mm to 250x200mm
- Flanged steel reducing Tees, flange drilled to SABS 1123 Table 1600/3 (epoxy powder coated), ranging from 160x110mm to 400x355mm
- Flanged adapters by butt welding for the following HDPE pipes (SABS 1123 Table 16) ranging from 315mmØ to 630mmØ
- Fire – Hydrants Woodlands Wdz-100 Thread To 115mm Storz D/Ward Adapt Tshwane Only

(e) House Connections

The provision and installation of connections to users complete (excluding supply of water meters) as per detail drawing 7515-W206 and W207

(f) Valves

- Supply and installation of Cast Iron / PVC Valve box complete for "RSV" valves as shown drawing 7515-W203 (type A)
- Supply and installation of Cast Iron / PVC Valve box complete for "RSV" valves as shown drawing 7515-W203 (type B)

(g) Thrust Blocks

- Concrete 15/19Mpa

(h) Bedding & Backfill Material

- Excavated Granular Material
- Imported material from sources provided by the Contractor

C3.2.3.2 SEWER INFRASTRUCTURE

(i) uPVC Pipes

Class 34 uPVC pipes, SANS 791: ranging from 110mmØ to 315mmØ

(j) Bedding

Class B Bedding for flexible pipes

(k) House Connections

- Type A (as per DWG 7515-S206)
- Type B (as per DWG 7515-S206)
- Type C (as per DWG 7515-S206)

(l) Cleaning Eyes (Lamp Poles)

Construction of cleaning eyes (Lamp poles) (DWG 7515-S208): ranging from 1.5m depth up to 4m depth

(m) Manholes

Concrete sewer manholes with ND of 1250mm for sewers 315 mm in diameter and smaller: ranging from 1.5m depth up to 5m depth

(n) Manhole Covers and Frames

- SANS 558 Type 4 circular frame(LI)
- Precast concrete cover with type 4 CI frame

C3.2.3.3 PLANT & EQUIPMENT

- Tractor Backhoe Loaders (TLBs)
- Excavators
- Tipper Trucks
- Walk-behind Vibrating Drum Rollers
- Compaction Rammers
- Plate Compactor
- Horizontal Directional Drilling (HDD) Equipment
- CCTV inspection equipment
- Dewatering Equipment: (Pumps)
- Jetting and Vacuum Trucks
- Pipe Welding and Cutting Equipment:
- Safety Equipment, Personal Protective Equipment (PPE), Barricades and Shoring
- Concrete Mixers

C3.2.4: LIST OF DRAWINGS

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Construction of water services in Andeon Ext 37: General Water Layout Sheet 1 of 1	2022-AND-W-01U01
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Part C3: Scope of Work

Section C3.2: Engineering

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NOTES:

1. FOR THE POSITION OF SERVICES WITHIN THE ROAD RESERVE REFER TO THE LATEST VERSION OF THE DRAWINGS OBTAINABLE FROM THE ROADS AND STORMWATER DIVISION
2. FOR WATER AND SEWER STANDARD DETAILS REFER TO THE LATEST VERSION OF THE DRAWINGS OBTAINABLE FROM THE WATER AND SEWER DIVISION

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SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
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C3.3 PROCUREMENT

C3.3 PROCUREMENT

C.3.3.1 PREFERENTIAL PROCUREMENT PROCEDURES

C3.3.1.1 Requirements

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 engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.
 - 1.2 The EPWP Ministerial Determination, as revised from time to time, sets out a minimum wage and minimum conditions of employment and Contractors must comply with its requirements.
 - 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.
 - 1.5 The Contractor shall, through all available community structures, inform the local community of the labour-intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:
 - (a) where the head of the household has less than a primary school education;
 - (b) that have less than one full time person earning an income;
 - (c) where subsistence agriculture is the source of income;
 - (d) those who are not in receipt of any social security pension income.
 - 1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:
 - (a) 55% women;
 - (b) 55% youth who are between the ages of 16 and 35; and
 - (c) 2% persons with disabilities.

C3.3.1.1.2 Appointment of Community Liaison Officer

1. A community liaison officer (CLO) will be appointed in terms of the Policy Framework for the Recruitment of EPWP and the Code of Good Practice to appoint Community Liaison Officers.
2. The relevant Ward Councillor shall in cooperation with the Office of the Speaker and the Expanded Public Works Programme (EPWP) Division, facilitate an initial public meeting for the community and stakeholders to enable them to nominate for the Project Steering Committee (PSC).
3. After the election of the PSC at the same meeting, residents and stakeholders in attendance are to vote for a pool of three (3) potential CLO's coming from the community concerned.
4. In an event that the PSC is not constituted by public meeting, or it cannot proceed with its work as contemplated by Section 6.1.3.5 of the Policy Framework for the Recruitment of EPWP, the appointed PSC should nominate potential CLO's.
5. It is from this pool that the Contractor after interviewing the three nominees, and consultation with the PSC, appoints the CLO.
6. Provision for the payment of the CLO has been made in the Pricing Data and will, be in terms of the salary scale Task Level 5
7. The successful tenderer shall enter into an employment agreement with the appointed community liaison office (CLO)
8. The duties or functions of the CLO can be summarised as follows:
 - Liaising with project manager
 - Liaising with community on detail construction activities of the project
 - Attending community meetings
 - Arranging special meetings
 - Facilitation of community disputes

C3.3.1.2 Resource standard pertaining to targeted procurement

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

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

1. **General**

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

2. **Amendments to SANS 1914-4**

- 2.1 Replace the existing definitions with the following:
contract participation goal (CPG)

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

2.2 Add the following definitions:

contract amount

1) targeting strategy, A

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

2) targeting strategy B

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

targeting strategy, A

a strategy which:

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

targeting strategy B

a strategy which:

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

2.3 Replace clauses 3.11 and 3.12 with the following:

3.1.1 The contractor shall engage targeted enterprises directly or indirectly in the performance of the contract to the extent that the total monetary value of such engagements exclusive of any value added tax or sales tax required by law, is

sufficient to achieve the contract participation goal provided for in the specification data.

3.1.2 The contractor shall, in the case of targeting strategy A, submit details of his plan to achieve the contract participation goal to the employer's representative on the contract participation goal implementation plan form contained in annex C, within five working days of being instructed to do so. If no such instructions are given, these plans shall be submitted before the submission of the first claim for payment.

2.4 Replace 3.2.2 with the following:

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

2.5 Replace 4.1 with the following:

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

2.6 Replace 4.2.1 with the following:

4.2.1 Where targeting strategy A applies and in the event that, through no fault of the contractor, a contracted targeted enterprise is found to be:

- a) unable to perform, or to perform on time;
- b) unable to produce acceptable work;
- c) unwilling to perform work required; or
- d) not fit to perform the service;

the contractor shall notify the employer's representative of the apparent necessity to reduce or

terminate such a targeted enterprise's contract, citing the reasons therefor.

2.7 Replace 4.3 with the following:

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

2.8 Replace 6 with the following:

In the event that, and where targeting strategy A applies, the contractor fails to substantiate that any failure to achieve the contract participation goal was due to

- a) quantitative underruns,
- b) the elimination of items contracted to targeted enterprises, or
- c) any other reason beyond the contractor's control which may be acceptable to the employer,

the sanctions provided for in the contract shall apply.

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

Clause	Specification Data	
The specification data associated with SANS 1914-5 is as follows		
2.7	The employer's representative is:	Aseda Consulting Engineers
	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 City of 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	<i>The min. goal is 10% and the maximum goal</i>

	goal is	is 20% (The combined goal for the contract will not exceed 30%)
	The contract participation goal may only be achieved by subcontracting work to one or more targeted enterprises to perform commercially useful functions in the performance of the contract.	
2.9	The following weightings shall apply:	
	Target Area 1	1.2
	Target Area 2	1.0
	Target Area 3	0.8
	Target Area 4	0.6
6	Sanctions	<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><i>D</i> = required Contract Participation Goal percentage <i>D_o</i> = the Contract Participation Goal which the Employer's representative based on the credits passed, certifies as being achieved upon completion of the work package <i>N_A</i> = Net Amount <i>P</i> = Rand value of penalty payable</p>

C3.3.2 SCOPE OF MANDATORY SUBCONTRACT WORK

C3.3.2.1 Scope of mandatory subcontract works

The contractor is to identify and present to the Engineer the works to be subcontracted. The contractor can however add to this scope at his discretion or if he needs such services from the local subcontractors. The following shall be subcontracted to the local subcontractors:

- Kerbing
- Construction of manholes
- Construction of brickwork related work;
- Supply and erection of fence and gate;

- Construction of segmented block paving;
- Construction of concrete pavements;
- Construction of edge restraints;
- Construction of subsoil drains;
- Reinstatement of bitumen surfacing;

C3.3.3 PREFERRED SUBCONTRACTORS/SUPPLIERS

Local emerging contractors must be Black Enterprises. A black enterprise (BE) is defined as a company or economic activity that is owned by black persons and where there is substantial management control by Black People. Ownership refers to economic interest, whilst management refers to the membership of any board or similar governing body of the enterprise. The Broad-Based Black Economic Empowerment Act No. 53 of 2014, principles must apply to BE's.

Enterprises must comply with the following:

- Business must be registered within the CoT boundaries,
- Owners must reside within the CoT,
- Owners or business address must be in Region 3. Other Regions within the COT will only be considered if no suitable candidates are available in Region 3.

C3.3.4 SUBCONTRACTING PROCEDURES

The contractor shall advertise and call for competitive quotations in respect of each portion of the works that are required to be subcontracted in terms of the contract in accordance with the relevant provision of the latest edition of the CIDB Standard for Uniformity in Construction Procurement. The Contract Data in the associated procurement documents shall be based on the City of Tshwane standards and any other relevant documentation of subcontracting with minimal project specific variations and amendments that do not change their intended usage.

The Employer together with the Contractor shall evaluate the quotations received in accordance with the provision of the Standard Conditions of tender. The evaluation panel shall comprise equal representatives from the Employer and from the Contractor.

The Contractor shall without delay enter into contract with the successful tendering subcontractor based on their accepted tender submission.

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

Note: 1) The CIDB Best Practice Guideline D1, *Subcontracting Arrangements*, provides Guidance on

the selection of a suitable form of subcontracts.

- 2) Provision in the Pricing Data should be made for provisional sums for portions of the works that are to be subcontracted in this manner.

C3.3.5 EVALUATION CRITERIA

The bids submitted by the prospective local subcontracting companies will be evaluated by the Main Contractor and the Engineering representative.

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE
CONSTRUCTION OF WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS**

C3.4 CONSTRUCTION

C3.4 CONSTRUCTION

C3.4.1 WORKS SPECIFICATIONS

The applicable "Standard Specifications" shall be the document "**Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005**", issued by the Group Head: Water and Sanitation of the City of Tshwane, read together with the Particular Specifications.

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.

The Particular Specifications together with the Drawings and Bill of Quantities clearly indicate the sections of the Standard Specifications which apply to this contract.

Section C3.6 covers references to the Particular Specifications in the Standard Specifications as well as variations and additions to the Standard Specifications.

Section C3.7 covers corrections and amendments to the **Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005**

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 meters
- b) sewer installation
- c) sidewalks and non-motorized transport infrastructure
- d) 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 15 blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm;

- b) cohesive materials:
 - i) whose consistency when profiled may in terms of Table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
 - ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 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	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in

	pick		30-40mm; can be molded by fingers with some pressure
Medium dense	Considerable resistance to penetration by sharp end of a geological pick	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10mm; very difficult to mold with fingers; can just be penetrated with an ordinary hand spade
Dense	Very high resistance to penetration by the sharp end of geological pick; requires many blows for excavation	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be molded by fingers
Very dense	High resistance to repeated blows of a geological pick	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point

0

4 Trench excavation

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

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

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

- a) to 90% Proctor density;
- b) such that in excess of 5 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

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.

C3.4.2 PLANT AND MATERIALS

C3.4.2.1 Plant and materials supplied by the employer

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

C3.4.2.2 Materials, samples and shop drawings

C3.4.2.2.1 Construction Materials

No borrow pits are provided. Where material cannot be obtained from excavations on the works, the Contractor will be responsible to obtain the material required for the bedding, blanket and backfill from commercial sources.

C3.4.2.2.2 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.

C3.4.2.2.3 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.

C3.4.2.2.4 Cement for concrete

The cement used for the construction of manholes, benching and any other concrete

structures as well as for stabilisation must be in accordance with SANS 50197-1

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.

All construction equipment to be supplied by the Contractor.

C3.4.4 CONTRACTOR'S EMPLOYEES

C3.4.4.1 Minimum employment Conditions for Conventional Construction Works

Contractors shall comply with the Basic Conditions of Employment Act (Act No 75 of 1997).

As a determination has not been made in terms of the aforesaid act for the building sector, the minimum employment conditions which will apply to this Contract shall be guided by the Amendment of Sectoral Determination 2: Civil Engineering Sector published in the Government Gazette dated 4th September 2012, as and when amended from time to time.

Contractors shall also take in considerations the clauses of the Government Gazette 39293 of 16 October 2015 regarding Bargaining Council for Civil Engineering Industry: Extension of Conditions of Employment amending collective agreements to non-parties.

The following minimum conditions shall apply to this Contract and Contractors shall include such conditions in employment contracts.

C3.4.4.1.1 Employment contracts

The Contractor shall enter into an employment contract with every one of his/her employees, including short-term contracts i.e. contracts in which employment commencement and employment termination dates are specified. Short-term employment contracts will also apply an employee employed for only one day.

C3.4.4.1.2 Normal working hours

Normal working hours are from 07:00 to 17:00 from Monday to Friday. A tea break is taken from 09:00 to 09:15 and lunch from 12:30 to 13:00.

Actual hours to work and be paid for is 9 hours per day. If a lunch break of one (1) hour is taken then the normal working day will be as follow:

Morning work sessions from 07:00 to 12:00, lunch break from 12:00 to 13:00, and afternoon sessions from 13:00 to 17:00.

C3.4.4.1.3 Minimum wages

Minimum wages shall be according to the Government Gazetted rates for the Civil Engineering Sector for Gauteng Province (Regulation Gazette No 9360 Vol. 542). For a full day's work, the hourly rate shall be multiplied by 9. Normal 5-day week hours of work shall be 45 hours and the wage calculated according to the applicable hourly rate.

Overtime pay shall be 1.5 times the ordinary wage.

An employee shall be paid monthly.

Wages should be increased by CPI excluding owners' equivalent rent (eoe) plus two percentage point for the second and third years of the determination. The CPI to be used is the one that is published by StatsSA six weeks prior to the scheduled increment date. Below are the recommendations of the Department regarding new minimum wages levels:

Table 1: Minimum wages per hour for all employees in the Civil Engineering Sector.

Task Grade	Hourly Rate from 1 September 2020 to August 2021 adjusted by 7.5% or CPI whichever is the greater	Hourly Rate from 1 September 2021 to August 2022 adjusted by 7.5% or CPI whichever is the greater	Hourly Rate from 1 September 2022 to August 2023 adjusted by 7.5% or CPI whichever is the greater
1	R 39.82	R 41.72	R 44.85
2	R 40.75	R 42.70	R 45.90
3	R 41.88	R 43.89	R 47.18
4	R 43.44	R 45.53	R 48.94
5	R 49.16	R 51.56	R 55.43
6	R 55.80	R 58.56	R 62.95
7	R 63.92	R 67.06	R 72.09
8	R 71.66	R 75.19	R 80.83
9	R 81.00	R 84.98	R 91.35

C3.4.4.1.4 Short time (excluding short time due to inclement weather)

If for reasons, which may be ascribed to the employee, e.g. arriving late for work or taking an afternoon off, the hours not worked shall be deducted from the daily wage calculation.

C3.4.4.1.5 Short time resulting from inclement weather

- i. If the Contractor informs his/her employees that no work will be done the following day due to inclement weather, no payment will be due to the employee for such a day.
- ii. If the Contractor has not informed his/her employees that no work will be done due to inclement weather and no work or less than four (4) hours of work is possible during a day, the Contractor must pay the employee for four (4) hours of work. If more than four (4) hours of work is done, the Contractor shall pay the employee for the number of hours worked.

C3.4.4.1.6 Vacation leave

If an employee has been in full time employment for more than four (4) months, he/she shall be entitled to 1 day's paid leave for every seventeen (17) days the employee worked or was entitled to payment.

C3.4.4.1.7 Family responsibility leave

If an employee has been in full time employment for more than four (4) months, he/she shall be entitled to three days paid leave in a leave cycle of thirty-six (36) months of employment:

- i. When the employee's child is born;
- ii. When the employee's child is sick;
- iii. In the event of death of the employee's spouse or life partner, parent, grandparent, child or grandchild.

The employee shall provide the required proof to the Contractor of the event, failing which the leave shall be unpaid leave

C3.4.4.1.8 Maternity leave

At least four (4) months unpaid leave.

C3.4.4.1.9 Sick leave

The employee shall be entitled to one (1) day's paid sick leave of normal wages for

every twenty-six (26) days worked.

If an employee is absent for three (3) or more consecutive days, the employee shall provide a sick certificate from a registered medical practitioner to qualify for sick leave payment. If such certificate is not provided, no sick leave payment will be due to the employee.

C3.4.8.1.10 Piece work

Irrespective of the quantity of work done under a piece work system during a working week, the employee shall be entitled to a minimum of a week's wages determined as if no piece work applied.

The Contractor or employee may terminate an employment contract by giving notice of termination of not less than:

- i. On short period contracts i.e., a contract which states from which date work employment commences and on which day employment terminates, the terms of the employment contract shall apply;
- ii. One week if employee has been employed for four (4) weeks or less, unless it is a short-term project;
- iii. Two (2) weeks if employee has been employed for more than four (4) weeks but not more than one (1) year;
- iv. Four (4) weeks if employee has been employed for more than one year.

C3.4.4.2 EMPLOYMENT CONDITIONS FOR LABOUR INTENSIVE WORKS AND CONSTRUCTION

The Ministerial Determination 4, Expanded Public Works Programme (revised 2012) issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour as reproduced below, shall apply to works described in scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers. The Ministerial Determination must be read in conjunction with the Code of Good Practises for the Expanded Public Works Programme as published in Government Notice N° R64 of 25 January 2002,

This clause contains the standard terms and conditions for workers employed in elementary occupations on an Expanded Public Works Programme (EPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of an EPWP.

C3.4.4.2.1 Terminology

- (a) "department" means any department of the State, implementing agent or contractor;
- (c) "employer" means any department, implementing agency or contractor that hires workers to work in elementary occupations on an EPWP;
- (d) "workers" means any person working in an elementary occupation on an EPWP;

- (e) “elementary occupation” means any occupation involving unskilled or semi-skilled work;
- (f) “management” means any person employed by a department or implementing agency to administer or execute an EPWP’
- (g) “task” means a fixed quantity of work;
- (h) “task-based work” means work in which a worker is paid a fixed rate for performing a task;
- (i) “task-rated worker” means a worker paid on the basis of the number of tasks completed;
- (j) “time-rated worker” means a worker paid on the basis of the length of time worked.

C3.4.4.2.2 Terms of Work

Workers on an EPWP are employed on a temporary basis or contract basis.

C3.4.4.2.3 Normal Hours of Work

- i. An employer may not set tasks or hours of work that require a worker to work:
 - (a) more than forty hours in any week;
 - (b) on more than five days in any week; and
 - (c) for more than eight hours on any day.
- ii. An employer and worker may agree that a worker will work four days per week. The worker may then work up to ten hours per day.
- iii. A task-rated worker may not work more than a total of 55 hours in any week to complete the tasks allocated (based on a 40-hour week) to that worker.

C3.4.4.2.4 Meal Breaks

- i. A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- ii. An employer and worker may agree on longer meal breaks.
- iii. A worker may not work during a meal break. However, an employer may require a worker to perform duties during a meal break if those duties cannot be left unattended and cannot be performed by another worker. An employer must take reasonable steps to ensure that a worker is relieved of his or her duties during the meal break.
- iv. A worker is not entitled to payment for the period of a meal break. However, a worker who is paid on the basis of time worked must be paid if the worker is required to work or to be available for work during the meal break.

C3.4.4.2.5 Special Conditions for Security Guards

- i. A security guard may work up to 55 hours per week and up to eleven hours per day.
- ii. A security guard who works more than ten hours per day must have a meal break of

at least one hour or two breaks of at least 30 minutes each.

C3.4.4.2.6 Daily Rest Period

Every worker is entitled to a daily rest period of at least twelve consecutive hours. The daily rest period is measured from the time the worker ends work on one day until the time the worker starts work on the next day.

C3.4.4.2.7 Weekly Rest Period

Every worker must have two days off every week. A worker may only work on their day off to perform work which must be done without delay and cannot be performed by workers during their ordinary hours of work ("emergency work").

C3.4.4.2.8 Work on Sundays and Public Holidays

- i. A worker may only work on a Sunday or public holiday to perform emergency or security work.
- ii. Work on Sundays is paid at the ordinary rate of pay.
- iii. A task-rated worker who works on a public holiday must be paid –
 - (a) the worker's daily task rate, if the worker works for less than four hours;
 - (b) double the worker's daily task rate, if the worker works for more than four hours.
- iv. A time-rated worker who works on public holiday must be paid –
 - (a) the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
 - (b) double the worker's daily rate of pay, if the worker works of more than four hours on the public holiday.

C3.4.4.2.9 Sick Leave

- i. Only workers who work more than 24 hours per month have the right to claim sick-pay in terms of this clause.
- ii. A worker who is unable to work on account of illness or injury is entitled to claim one day's sick leave for every full month that the worker has worked in terms of a contract.
- iii. A worker may accumulate a maximum of twelve days' sick leave in a year.
- iv. Accumulated sick-leave may not be transferred from one contract to another contract.
- v. An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- vi. An employer must pay a time-rated worker the worker's daily rate for a day's sick leave.
- vii. An employer must pay a worker sick pay on the worker's usual payday.
- viii. Before paying sick-pay, an employer may require a worker to produce a certificate

stating that the worker was unable to work on account of sickness or injury if the worker is –

- a. absent from work for more than two consecutive days; or
 - b. absent from work on more than two occasions in any eight-week period.
- ix. A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.
- x. A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Disease Act.

C3.4.4.2.10 Maternity Leave

- i. A worker may take up to four consecutive month's unpaid maternity leave.
- ii. A worker is not entitled to any payment or employment-related benefits during maternity leave.
- iii. A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- iv. A worker is not required to take the full period of maternity leave. However, a worker may not work for four weeks before the expected date of birth of her child or for six weeks after the birth of her child, unless a medical practitioner, midwife or qualified nurse certifies that she is fit to do so.
- v. A worker may begin maternity leave –
 - (a) four weeks before the expected date of birth; or
 - (b) on an earlier date –
 - if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
 - if agreed to between employer and worker; or
 - (c) on a later date, if a medical practitioner, midwife or certified nurse has certified that the worker is able to continue to work without endangering her health.
- vi. A worker who has a miscarriage during the third trimester of pregnancy or bears a stillborn child may take maternity leave for up to six weeks after the miscarriage or stillbirth.
- vii. A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the EPWP on which she was employed has ended.

C3.4.4.2.11 Family Responsibility Leave

- i. Workers, who work for at least four days per week, are entitled to three days paid

family responsibility leave each year in the following circumstances –

- a. when the employee's child is born;
- b. when the employee's child is sick;
- c. in the event of a death of –
 - the employee's spouse or life partner;
 - the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

C3.4.4.2.12 Statement of Conditions

- i. An employer must give a worker a statement containing the following details at the start of employment –
 - a. the employer's name and address and the name of the EPWP;
 - b. the tasks or job that the worker is to perform; and
 - c. the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
 - d. the worker's rate of pay and how this is to be calculated;
 - e. the training that the worker will receive during the EPWP.
- ii. An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.
- iii. An employer must supply each worker with a copy of these conditions of employment.

C3.4.4.2.13 Keeping Records

- i. Every employer must keep a written record of at least the following –
 - a. the worker's name and position;
 - b. copy of an acceptable worker identification;
 - c. in the case of a task-rated worker, the number of tasks completed by the worker;
 - d. in the case of a time-rated worker, the time worked by the worker;
 - e. payments made to each worker.
- ii. The employer must keep this record for a period of at least three years after the completion of the EPWP.

C3.4.4.2.14 Payment for the Labour-Intensive Component of the Works

Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the scope of work. Any non-payment for such works shall not relieve the Contractor in any way from his obligations either in

contract or in delict.

- i. An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- ii. A worker may not be paid less than the minimum EPWP wage rate of R102.00 per day or per task. This will be adjusted annually on the 1st of November in line with inflation (available CPI as provided by Stats-SA six (6) weeks before implementation).
- iii. A task-rated worker will only be paid for tasks that have been completed.
- iv. An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.
- v. A time-rated worker will be paid at the end of each month.
- vi. Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- vii. Payment in cash or by cheque must take place –
 - a. at the workplace or at a place agreed to by the worker;
 - b. during the worker's working hours or within fifteen minutes of the start or finish of work;
 - c. in a sealed envelope which becomes the property of the worker.
- viii. An employer must give a worker the following information in writing –
 - a. the period for which payment is made;
 - b. the numbers of tasks completed or hours worked;
 - c. the worker's earnings;
 - d. any money deducted from the payment;
 - e. the actual amount paid to the worker.
- ix. If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.
- x. If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

C3.4.4.2.15 Deductions

- i. An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- ii. An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- iii. An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

- iv. An employer may not require or allow a worker to –
 - a. repay any payment except an overpayment previously made by the employer by mistake;
 - b. state that the worker received a greater amount of money than the employer actually paid to the worker; or
 - c. pay the employer or any other person for having been employed.

C3.4.4.2.16 Health and Safety

- i. Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- ii. A worker must –
 - a. work in a way that does not endanger his/her health and safety or that of any other person;
 - b. obey any health and safety instruction;
 - c. obey all health and safety rules of the EPWP;
 - d. use any personal protective equipment or clothing issued by the employer;
 - e. report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

C3.4.4.2.17 Compensation for Injuries and Diseases

- i. It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on an EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- ii. A worker must report any work-related injury or occupational disease to their employer or manager.
- iii. The employer must report the accident or disease to the Compensation Commissioner.
- iv. An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

C3.4.4.2.18 Termination

- i. The employer may terminate the employment of a worker for good cause after following a fair procedure.
- ii. A worker will not receive severance pay on termination.
- iii. A worker is not required to give notice to terminate employment. However, a

worker who wishes to resign should advise the manager the employer in advance to allow the employer to find a replacement.

- iv. A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract.
- v. However, the worker may be re-engaged if a position becomes available of the balance for the 24-month period.
- vi. A worker who does not attend required training events, without good reason will have terminated the contract. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.

C3.4.4.2.19 Certificate of Service

On the termination of employment, a worker is entitled to a certificate stating –

- a. the worker's full name;
- b. the name and address of the employer;
- c. the EPWP on which the worker worked;
- d. the work performed by the worker;
- e. any training received by the worker as part of the SPWP;
- f. the period for which the worker worked on the SPWP;
- g. any other information agreed on by the employer and worker.

C3.4.4.4. EMPLOYMENT OF UNSKILLED AND SEMI-SKILLED WORKERS IN LABOUR-INTENSIVE WORKS

C3.4.4.4.1 Requirements for the Sourcing and Engagement of Labour

- i. Unskilled and semi-skilled labour require for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour – Part 5, 1st edition, 2002.
- ii. Tasks established by the contractor must 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.
- iii. 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 6.1.3.
- iv. The Contractor shall, through all available community structures, inform the local community of the labour-intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:

- a. where the head of the household has less than a primary school education;
 - b. that have less than one full time person earning an income;
 - c. where subsistence agriculture is the source of income;
 - d. those who are not in receipt of any social security pension income.
- v. The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:
- a. 60 % women;
 - b. 55 % youth who are between the ages of 18 and 35; and
 - c. 2 % on persons with disabilities.

C3.4.4.4.2 Specific Provisions Pertaining to SANS 1914-5

i. Definitions

Targeted labour: Unemployment persons who are employed as local labour on the project.

ii. Contract participation goals

- a. there is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.
- b. The wages and allowances used to calculate the contract participation goal shall, with respect to both time-related and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

iii. Terms and conditions for the engagement of targeted labour

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

iv. Variations to SANS 1914-5

- a. The definition for net amount shall be amended as follows:
Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.
- b. The schedule referred to in 5.2 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the

number of formal training provided to targeted labour.

C3.4.4.4.3 Training of Targeted Labour

- i. The contractor shall provide all the necessary **Bold** Accredited 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.
- ii. The cost of the formal training of targeted labour, shall be measured and paid for in the schedule of quantities of this contract document.
- iii. 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.
- iv. 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 (iii) above.
- v. This training should take place as close to the project site as practically possible. The CoT will ensure that training arrangements for participants are in place and appointment of the training provider facilitated in time.
- vi. The project Manager and Consulting Engineer shall approve the training provided prior to commencement of training
Proof of compliance with the requirements of (ii) to (iv) must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

C3.4.4.5 COMMUNITY LIAISON OFFICER

C3.4.4.5.1 The successful tenderer shall enter into an employment agreement with the appointed community liaison office (CLO) who shall be responsible for the following:

- a) A Community Liaison Officer (CLO) for liaison with the recipient community, who as part of his/her duties will also act as a Labour Desk Officer (LDO) for labour recruitment.

C3.4.4.5.2 The CLO shall attend all site and other meetings concerning the project.

C3.4.4.5.3 The CLO will be remunerated according to the entry level salary of Administrative Officer (T5-level monthly notch) in the City of Tshwane.
CoT will provide the Contractor with the figures accordingly.

Community Strategy

The CLO shall be available full time on site when contractor is active. Furthermore, it will be required of him to liaise any pertinent communication to the community.

He/she shall attend all site and technical meetings as well as steering committee

meetings as well as steering committee meetings happening after hours.

C3.4.4.5.4 Only one CLO shall be appointed per project. If the project spans over more than one Ward, the relevant Ward Councillors shall agree on one CLO to be appointed by the Contractor. Should no agreement be found as envisaged, the relevant Project Manager together with the Executive Director: Integrated Community Development, or their nominees, will interview prospective appointees and in their discretion appoint such CLO.

Notwithstanding the above, if the vastness of the project requires the use of more than one CLO, this will be permitted provided that the total monthly sum paid to all CLO's shall not exceed the amount allowed for in paragraph 5.3.

C3.4.4.5.5 Should the Contractor experience any difficulties with the community, these difficulties shall immediately be brought to the attention of the Department/Project Manager who shall arrange a meeting with the relevant Ward Councillor(s) and the CLO to resolve such difficulties.

C3.4.4.5.5 The main Contractor shall ensure that any Sub-Contractor he may appoint shall adhere to these conditions but also subject to the provisos applicable to the duration of such sub-contract.

C3.4.4.5.6 Should any of the above conditions be less favourable than any Bargaining Council Agreement or Act applicable to the Contractor, the more favourable condition will apply.

C3.4.5 EXISTING SERVICES

C3.4.5.1 Location of services

The location of services is not known at this stage. The Contractor shall locate and establish the actual position of any services on Site before starting the construction. The Contractor will be responsible to obtain the necessary permissions and way leave approvals from the relevant Service Owners.

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.

C3.4.5.2 Treatment of existing services

As per the Engineer's Instructions.

C3.4.5.3 Use of detection equipment for the location of underground services

Equipment to be used at the direction of the Engineer

C3.4.5.4 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.

C3.4.5.5 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.

C3.4.6 Site establishment

C3.4.6.1 Contractor's Camp site

The Contractor shall provide 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.

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.

C3.4.6.2 Water Supply

The Contractor shall make his own arrangement for potable and construction water. It shall be the responsibility of the contractor to apply for a water connection and water meter at CoT for his site camp. The contractor shall be responsible for payment of all water used. Water quality shall be verified before use in concrete is allowed.

C3.4.6.3 Power Supply

The Contractor shall make his own arrangements.

C3.4.6.4 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.

C3.4.6.5 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 the applicable contact details must be made available to the Employer as well as the staff on site. 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.

C3.4.6.6 Site Facilities required by the Engineer

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

One office for site meetings for 10 – 12 people.

Two carports for the engineers' exclusive use, with solid sheeting, not shade cover.

An ablution unit for his exclusive use.

The engineer does not require a separate office for his personnel.

C3.4.6.7 Storage and laboratory facilities

The Engineer will order the Contractor to provide as needed.

C3.4.6.8 Other facilities and services

None.

C3.4.6.9 Vehicles and equipment

The Engineer will order the Contractor to provide as needed.

C3.4.6.10 Advertising rights

Not applicable.

C3.4.6.11 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.

C3.4.7 Site usage

Not applicable.

C3.4.8 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.

C3.4.9 Alterations, additions, extensions and modifications to existing works

To be carried out with the instruction from the Engineer.

C3.4.10 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.

C3.4.11 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.

C3.4.12 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.

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR
CONSTRUCTION OF WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS.**

C3.5 MANAGEMENT

C3.5 MANAGEMENT

1. Construction Programme

The Contractor shall submit, within the period stated in the Contract Data, a suitable and realistic construction programme for the consideration of the Engineer.

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.

Together with the programme as detailed above the contractor shall submit to the engineer a cash flow projection, indicating projected monthly invoice amounts. 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 4.2 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 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 9.2 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 5.6 of the General Conditions of Contract when drawing up his programme.

2. Sequence of the works

The Contractor shall supply the proposed sequence of the works.

3. Accommodation of traffic

The following contain the Employer's general requirements for accommodating the traffic during construction:

The travelling public shall have the right of way on public roads and the contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.

Failure to maintain road signs, warning signs, etc, in a good condition shall constitute ample reason for the engineer to bring the works to a stop until the road signs, etc, have been repaired to his satisfaction.

The contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual Volume 2 Chapter 13.

The contractor shall submit proposals in connection with directional signs to the engineer for approval prior to construction.

Sufficient signage shall be provided, erected and relocated as necessary by the contractor to reroute traffic onto the deviations.

4. Extension of time on account of abnormal rainfall

Extension of time due to abnormal rainfall shall be determined by means of Method 1 using the rainfall records below.

RAINFALL ANALYSIS FOR: PRETORIA UNIVERSITY PROEFPLAAS : PERIOD 2018 to 2022

Date: 2023/04/20

Data for the Average Calculation is not used if:

There are more than five consecutive days of accumulation

The data for certain days in the month is not available

The accumulation period occurred at the end of the month

Data for the Frequency calculation is not used if:

The data for certain days in the month is not available

The accumulation period occurred at the end of the month

Month	Average Monthly Rainfall (mm)	Standard Deviation	Average Number of Rain Days per Month	Number of Months	Average number of days of Rain						Maximum 24-hour Rainfall (mm)	Date of Maximum 24-hour Rainfall
					1 - 5 mm	5.1 - 10mm	10.1 - 20mm	20.1 - 50mm	50.1 - 100 mm	> 100 mm		
JAN	146.2	53.8	14.7	3.0	3.3	2.3	2.0	1.7	0.7	0.0	85.4	2021/01/10
FEB	112.9	18.6	15.0	3.0	6.3	2.0	2.0	0.7	0.3	0.0	82.4	2022/02/04
MAR	120.0	68.8	10.8	4.0	2.8	1.0	2.5	0.8	0.3	0.3	132.4	2018/03/22
APR	98.1	41.6	9.8	5.0	2.0	1.2	1.6	1.2	0.4	0.0	76.0	2018/04/11
MAY	6.6	7.3	2.3	3.0	1.0	0.0	0.3	0.0	0.0	0.0	15.0	2022/05/20
JUN	5.6	8.9	1.3	4.0	0.5	0.0	0.3	0.0	0.0	0.0	18.0	2022/06/24
JUL	0.4	0.4	0.6	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	2018/07/10
AUG	0.4	0.4	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	2018/08/24
SEP	18.4	20.3	3.3	4.0	0.8	0.5	0.3	0.3	0.0	0.0	36.0	2021/09/30
OCT	67.4	15.8	9.0	2.0	2.5	1.0	1.5	1.0	0.0	0.0	52.0	2018/10/13
NOV	158.2	0.0	17.0	1.0	3.0	3.0	7.0	1.0	0.0	0.0	62.0	2020/11/20
DEC	121.4	0.0	11.0	1.0	3.0	2.0	2.0	2.0	0.0	0.0	96.8	2019/12/09
YR	855.6		8.0	37	25	13	20	9	2	0		

5. Community participation

Community participation for the appointment of the PSC will be as per Section 6.1.3.1 of the Expanded Public Works Recruitment Framework, in the Office of the Speaker, in consultation with ward councillors, is responsible to hold public meetings to elect a project steering committee once a development project is to commence within a ward.

The functions of the PSC will be to:

- Assist in monitoring the project.
- Ensure that the community aid 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.

The committee, which may be chaired by the Ward Councilors, shall consist of representatives of:

- (a) The Ward Councilors(s)
 - (b) The Client
 - (c) The Engineer
 - (d) The Contractor
 - (e) The CLO(s)
 - (f) Members of Ward Committees nominated by Ward Councilors(s)
 - (g) Local Security Company
- The Community Liaison Officer shall manage the labour desk and will have regular meetings with the Contractor where all construction and labour matters will be addressed. Some of the role players will only attend these meetings on an ad hoc basis as needed.
 - The Local Security Company shall be responsible for the safekeeping of all plant, materials, construction equipment and all personnel employed on the project, 24 hour a day, seven days a week from site handover to project completion.
 - The following aspects will have to be clarified by the labour desk before any person is engaged in construction work:
 - Contract of Employment
 - Type of Work
 - Duration of appointment
 - Workman's Compensation
 - Tax deduction
 - Insurance (UIF)
 - Wages and bonus and overtime regulations
 - Production pay-rate per unit of production
 - Working hours
 - Start and end times of a daily shift
 - Lunch breaks
 - Company policy regarding:
 - Rain time
 - No work no pay
 - Disciplinary policy
 - Grievance policy

- Method of payment and intervals
- Safety equipment where applicable
- The appointment of any local labour under this project will be the responsibility of the main contractor. All employee/employer issues will be ruled by the statutory labour relations' regulations as well as per the relevant contractual clauses.

6. Construction management service requirements

The Contractor shall appoint a Construction Manager whose duties will be to provide construction management and materials management services to the Local Emerging Contractors in line with the employer's objective as stated in Clause 3.1.1, Description of Work.

6.1 General

The construction manager shall, in order to achieve the employer's objectives stated in Clause 3.1.1, Description of Work,

- a) comply with agreements made with the employer and the local community, if any, monitor and report on project expenditure and costs and construction progress, and co-ordinate site activities,
- b) advise, assist and train the supported contractor on the job in terms of the contract between the employer and the supported contractor and, if so required in the specification data, arrange for the supply of certain items of equipment and the supply and delivery to site of materials,
- c) remain impartial in his dealings with the employer and the supported contractor,
- d) engage, on behalf of and with the approval of the employer, specialist contractors to execute parts of the works and coordinate the work of supported contractors and the specialist contractors,
- e) cooperate with other professional service providers appointed by the employer,
- f) visit the site at appropriate intervals during the various stages of construction in order to confirm that the supported contractor is making satisfactory progress, that he shows technical competence in the execution of all aspects of the works and generally fulfils all contractual obligations,
- g) provide continuous support to the supported contractor in order to ensure that the employer's objectives are achieved,
- h) operate within any structured framework developed by the employer to enable interim payments to be made to supported contractors within relatively short time frames,
- i) provide site facilities for the employer and his agents, as provided for in the specification data,
- j) ensure the economic and efficient use of all plant and, to this end, maintain adequate records of plant usage,

- k) maintain detailed records of all costs relating to the construction of the works including those relating to the provision of construction management services, and report to the employer at intervals not exceeding one month on the financial status of the contract, and
- l) assist supported contractors in registering with a public body, if required, in terms of the specification data.

6.2 Construction stage requirements

6.2.1 General

Following the award of the contract to the supported contractor, the construction manager shall, as a minimum,

- a) attend site and coordination meetings conducted by the employer and his agents,
- b) arrange weekly or fortnightly site progress meetings with the supported contractor and record and distribute the minutes thereof,
- c) liaise with the employer at coordination meetings at regular, agreed intervals and keep him fully informed regarding all aspects of the supported contractors' contracts,
- d) confirm insurance arrangements, notify insurers of all claims and ensure that all insurance policies are maintained,
- e) bring to the attention of the employer without delay any deficiencies in materials or in work performed by the supported contractor and follow up corrective actions which might be prescribed,
- f) inspect all exposed services, report in writing any damage to the employer and, subject to the approval of the employer, take the necessary action to have the damage repaired,
- g) implement and monitor approved security arrangements and recommend and implement changes which might be necessary, where required by the employer in terms of the specification data, arrange for the supply and erection of suitable name boards,
- h) maintain and update the assets register,
- i) monitor the progress of the supported contractor and submit monthly progress reports to the employer which provide information relating to,
 - progress in relation to the programme,
 - costs incurred in respect of materials, labour, plant, transport, specialist contractors and construction management services,
 - the actual cash flow compared with the predicted cash flow,
 - expected savings or excess expenditure,
 - site meetings,
 - details of plant hired, including standing-time charges, breakdowns and reasons for the use thereof, and
 - details regarding the theft of materials issued to site,
- j) coordinate and monitor the activities of the supported contractor and others involved in the works,
- k) maintain all necessary site records and documentation including those pertaining to

personnel on site, equipment, progress, deliveries of materials to supported contractors, variations to their respective contracts, quantities of work executed, etc.,

- l) ensure that the supported contractor implements a systematic testing programme,
- m) review and monitor the supported contractor's quality control systems,
- n) establish and maintain a list of defects and ensure that these are remedied,
- o) brief supported contractors on health and safety requirements, and
- p) verify claims for payment to supported contractors and other parties in accordance with the provisions of the contract.
- q) Provide a full-time **site agent**

6.2.2 6.2.2 Advice and assistance to the supported contractor

The construction manager shall, as a minimum,

- a) process and resolve supported contractors' queries regarding the interpretation of drawings, specifications and contractual matters pertaining to their respective contracts,
- b) motivate and guide supported contractors and, where necessary, recommend measures to expedite their progress,
- c) assist supported contractors with
 - the preparation and updating of a realistic and achievable programme,
 - the setting out of the works,
 - the management, administration and employment of their work forces,
 - the performance of their contracts,
 - all registrations required in terms of legislation and all applicable taxes and levies,
 - the preparation of payment certificates,
 - the handing over of the works to the employer upon completion, and
 - liaison with external organizations and the local community with regard to the works, and
- d) advise the supported contractor on safety measures which shall be implemented in order to comply with safety legislation.

6.2.3 Training

The construction manager shall, as a minimum,

- a) teach the supported contractors how to assess and order materials required for incorporation into the works,
- b) train, advise and guide supported contractors both in-house and on the job with regard to the following aspects of the contract:
 - the basic work techniques required to perform the contract;
 - the need to develop communication skills;
 - what is expected of a supported contractor;

- health and safety requirements;
 - the need to execute appropriate tasks correctly the first time;
 - how to submit claims for payments;
 - how to control and motivate their work-forces;
 - the necessity for planning;
 - how to prepare and use construction programmes;
 - the relationship between tender pricing, productivity and profit; and
 - payment procedures for payments required in terms of the law, including all applicable taxes and levies, and
- c) act generally as a mentor to the supported contractor and facilitate, when appropriate, training of the supported contractor by other organizations.

6.2.4 Tools and equipment

The construction manager shall, as a minimum,

- a) advise supported contractors regarding their hand-tool requirements and assist them with the procurement thereof,
- b) arrange for the timeous supply and cost-effective use of items of equipment and plant required for the execution of the works which supported contractors are not, in terms of their contracts, required to provide,
- c) arrange for the supply of calibrated testing equipment to supported contractors, as required, and ensure that tests are properly carried out and the results forwarded to the relevant parties that require such information, and
- d) arrange for the supply of all fuel and power required for the operation of power-driven equipment and tools.

6.2.5 Materials (where materials management services are provided to supported contractors)

The construction manager shall, where a materials manager has been appointed, as a minimum,

- a) provide the materials manager with a programme of materials requirements, based on the programmes of supported contractors, at the commencement of their respective contracts and update such programmes as necessary,
- b) review supported contractors' requests for materials, adjust quantities, if necessary, and forward orders timeously to the materials manager,
- c) arrange with the materials manager for the delivery of materials direct to the site, where necessary,
- d) where required, collect materials from the materials manager's store and deliver to the

site,

- e) monitor and approve the overnight storage of unused materials on the site by supported contractors or, should such materials not be suitable for overnight storage on site, arrange for their return to the store,
- f) determine appropriate allowances for tolerances and wastage on items where such allowances are not laid down in the supported contractor's scope of work, and
- g) reconcile quantities of materials issued to supported contractors with quantities used in the works and issue a materials reconciliation certificate to supported contractors upon completion of the works.

6.2.6 Post-construction stage requirements

After the completion of the works associated with supported contractors' contracts, the construction manager shall, as a minimum,

- a) compile a completion report that includes:
 - the final cost of the works in respect of materials, labour, plant, transport, supervision and construction management services;
 - the time of completion relative to the programme;
 - the nature and extent of training received by the supported contractor;
 - details of damage to services and insurance claims;
 - details of the construction manager's staff and organizational structure, equipment purchased for the contract and establishment costs; and
 - details of actual expenditure compared with projected expenditure,
- b) monitor remedial work undertaken during the defects liability period and advise and assist the supported contractor as necessary, and
- c) return, if required, to the employer or dispose of in accordance with the employer's instructions, all items of equipment on the register of assets.

7. Materials management service requirements

7.1 General

The materials manager shall, in order to achieve the employer's objectives,

- a) procure, store and issue materials for incorporation into the works either to the construction manager, who will deliver such materials to the place of work or directly to the supported contractor,
- b) establish a stores facility which is capable, at short notice, of supplying all the materials required for the project in a reliable, efficient and cost-effective manner,
- c) establish and implement management procedures and systems for procuring, storing, issuing and accounting for materials that

- take cognizance of specific storage requirements for individual materials,
 - comply with the employer's procurement policies and procedures,
 - provide for quality checks upon delivery,
 - provide for the processing and timeous payment of statements for materials supplied and the delivery of materials to site,
 - account for the quantities of materials that are procured, stored and issued to or on behalf of each individual supported contractor,
 - ensure that records are readily auditable and protect the employer against corruption and theft, and
 - allow the employer to be informed monthly as to the status of all aspects of the materials management,
- d) ensure that all possible trade and settlement discounts are obtained and that the most favourable prices are paid for materials, and
- e) ensure that all materials purchased and issued comply fully with the employer's specifications embodied in the scope of work of the supported contractors' contract or in the contract with the employer.

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS04-2021/22

**TENDER FOR THE APPOINTMENT OF A CONSTRUCTION
CONTRACTOR FOR WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS**

**C3.6 PARTICULAR SPECIFICATIONS AND VARIATIONS AND
ADDITIONS TO THE STANDARD SPECIFICATIONS**

C3.6 PARTICULAR SPECIFICATIONS AND 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 0: GENERAL

SECTION 001: GENERAL REQUIREMENTS AND CHARGES

B001.01 Preliminary and General Charge

Add the following:

Over and above the normal requirements as specified, provision need to be made for a permanent EPWP sign board, in addition to the Contract Name Board. EPWP branding must be part of the sign boards. These boards will remain on site after completion of the contract to indicate that the service provided was done according to the EPWP guidelines. See **Part 7: Additional Documents** for particulars about the EPWP sign board. All labourers will be required to wear EPWP branded orange overalls.

Measurement and Payment:

B001.01 Preliminary and General Charge

Change the following:

"Item	Description	Unit
B001.01.01	Fixed Charges	Lump Sum

The unit of measurements shall be lump sum over the specified contract period as set out in the contract data.

The tendered rates under sub item B001.01.01 shall represent that part of the contractor's fixed charges for the completion of the project. The number of months payable shall only be the number of months the contractor shall be employed on a project. The monthly rate will be paid per month pro-rata to the contractor's progress percentage on site.

Change the following:

"Item	Description	Unit
B001.01.02	Time Related Charges	Months

The unit of measurements shall be in months over the specified contract period as set out in the contract data.

The tendered rates under sub item B001.01.02 shall represent that part of the contractor's fixed charges for the completion of the project. The number of months payable shall only be the number of months the contractor shall be employed on a project. The monthly rate will be paid per month pro-rata to the contractor's progress percentage on site.

B001.02: Location of Existing Services

Add the following sub item :

"Item	Description	Unit
B001.02.01	Relocation, Removal, Re alignment and Replacement of existing services	Prov Sum
B001.02.02	(a) Handling cost in respect of item B001.02.01	%

Item B001.02.01 shall be as per the engineer's instruction in accordance to the site instruction, the provisional sum item shall be paid in accordance with the provisions of the general conditions and pricing data. The tendered percentage under item B001.02.02 is a percentage of the actual amount spent under the provisional sum item, which shall include full compensation of the profit in connection with providing the specified service.

B001.04.01: Provision of a Health and Safety plan

Change the following:

"Item	Description	Unit
B001.04.01	Provision and Implementation of a Health and Safety plan	Lump Sum

The lump sum tendered shall include full compensation for the provision and maintenance of a health and safety plan, risk assessment, permit applications and notifications as called for in the act and regulations for both the main contractor and subcontractors.

Eighty per cent (80%) of the amount will be paid when an approved health and safety plan has been received by the client. A further 10% will be paid when the value of all work done, excluding escalation, exceeds one-half of the Tender Price, and the remaining 10% will be payable when the completion certificate has been issued.

B001.04.02: Provision of a Health and Safety file

Change the following:

"Item	Description	Unit
B001.04.02	Provision of a Health and Safety file	Lump Sum

The lump sum tendered shall include full compensation for the provision and maintenance of a health and safety file on site containing all the documentation required in terms of the act and applicable regulations for both the main contractor and subcontractors.

The payment will be made in four equal instalments when the value of all permanent work done, excluding escalation, reaches 25%, 50% and 75% of the Tender Price. The final payment will be made

when a consolidated health and safety file is handed to the client on completion of the works.

B001.04.04: Provision of a safety officer (full-time)

Change the following:

“Item	Description	Unit
B001.04.04	Provision of a safety officer (full-time)	Months

The lump sum tendered shall include full compensation for the provision of a competent and experienced safety officer, full-time for the duration of the construction work or contract period.

The payment for a full-time safety officer will be made per month on the project.

B001.04.08 Implementation of Health and Safety Obligations

Change the following:

“Item	Description	Unit
B001.04.08.01	Implementation of Health and Safety Obligations	Lump Sum

The tendered lump sum shall include **entry-medical screening and exit-medical screening** and other obligations not specifically covered here for the main contractor and subcontractors appointed on this contract.

Price the item to allow for all labourers on site to wear the necessary protective clothing including an orange overall. All labourers must also wear a bright reflected jacket over their overall. On the front of the jacket (coat) the “City of Tshwane” name must appear with the CoT logo. On the back the letters “EPWP” must appear. The contractor needs to provide personnel with an identification card in order to ensure that everybody on site can be identified at all times. All vehicles and plant will have stickers on, that indicates that the contractor is appointed by CoT to execute the work.

The above obligations shall be applicable to the main contractor and subcontractors appointed on this contract.

The monthly rate will be paid per month pro-rata to the contractor’s progress percentage on site.”

Change the following:

“Item	Description	Unit
B001.04.08.02	Compliance with Environmental Management Obligations	Lump Sum

The rate of pay shall include formulation and compliance with an approved Environmental Management plan for the duration of the project per month of construction activities The above obligations shall be applicable to the main contractor and subcontractors appointed on this contract.

The monthly rate will be paid per month pro-rata to the contractor’s progress percentage on site.”

Add the following:

“Item	Description	Unit
B001.04.09	Provision of an Environmental Officer	Months

The unit rate tendered shall include full compensation for the provision of a competent and experienced environmental officer, full-time for the duration of the construction work. The payment for a full-time safety officer will be made per month on the project.

B001.07 Appointment of Local Security Company

Add the following:

"Item	Description	Unit
B001.07	Appointment of Local Security Company	Months

The rate tendered shall include full compensation for the appointment of a Local Security Company for the duration of the project include a 10% mark-up fee for the contractor.

Payments shall be made per month pro-rata to the contractor's progress percentage on site, upon proof of payment to the Local Security Company. Should the contractor fall behind programme attributable to the contractors own slow rate of progress, the contractor shall still be obligated to remunerate the Local Security Company. In the event of the construction period exceeding the tendered completion period and no extension of time been granted, the Contractor shall still pay the Local Security Company the specified remuneration, but shall not be reimbursed therefore.

The monthly rate will be paid per month pro-rata to the contractor's progress percentage on site.

B001.08 Print, supply, distributions and removal of water interruptions notice color printed

Add the following:

"Item	Description	Unit
B001.08	Print, supply, distributions and removal of water interruptions notice color printed	
	Color printed on correx A5 flyers	No.

The tendered rate shall include full compensation for the supply, printing, distributing flyers and the placing of posters on the appropriate lamp poles as requested by the Engineer. The transporting, labour and removal of posters must also be included in the tendered rates. Posters and flyers must be distributed fourteen working days prior to the water interruption and must be removed within two days after the interruption. Schools, hospitals, old age homes, retirement villages, shops and office buildings must sign for receiving this notification and proof must be submitted to the CoT before the date of interruption."

Item B001.09: Contract notice board

Add the following pay item:

Item	Unit
B001.09 Contract Notice Board	number (no)

Payment of the rate tendered shall be in full compensation for the provision, erection, maintenance and dismantling and removing of the contract notice board.

The contractor shall supply and erect, at points to be designated by the Engineer, two name boards

confirming to the City of Tshwane standard detail drawings as amended from time to time. The description of the project, name and titles of the employer, Engineer and contractor to be painted on the boards shall be as shown on this drawing. The contractor shall remove the two-name boards upon issue of a final completion certificate by the Engineer or when instructed earlier by the Engineer.

The contractor shall in addition keep the name boards in good repair for the duration of the contract or until instructed by the engineer earlier than the final completion of the contract. Eighty percent (80%) of the amount will be paid after the name boards has been erected and the remaining 20% when the contractor removes the name board, after completion of the works

B001.10	Cost of Survey in terms of the Land Survey Act	Unit
.01	Trigonometrical Survey and Plot boundary pegs, Verify Benchmarks and Nodes Mark and Record Critical levels During Construction and As-Built	Prov Sum

The Engineer will provide survey beacons (of adequate type and in sufficient quantity) as bench marks and instruct the Contractor to appoint a professional registered land surveyor. From information provided on drawings issued by the Engineer, the Contractor shall be responsible to provide all positions and levels, of all intermediate points required for proper control of the works. As bench marks may be disturbed during the execution of the works, all levels and setting-out pegs shall be referred to at least two bench marks. The contractor will ensure that all works are set out from existing survey beacons by a professional registered land surveyor as instructed by the Engineer. The setting out data, including the elevation (obtain x, y, z coordinates) from these pegs shall be submitted to the Engineer evaluate final natural ground levels (NGL) prior to the commencement of excavations. The contractor shall be responsible to Mark and Record Critical levels During Construction and As-Built

Preservation and replacement of beacons and pegs will be subject to the Land Survey Act, 1927 (Act No 9 of 1927).

Item B001.10.01 shall be as per the engineer's instruction in accordance to the site instruction, the provisional sum item shall be paid in accordance with the provisions of the general conditions and pricing data.

Payment for item B001.10.01 will be inclusive costs for a professional registered land surveyor to place erf boundary pegs as instructed by the Engineer.

B SECTION 003: TRAINING AND DEVELOPMENT

SECTION B003: TRAINING & DEVELOPMENT

B003.01 INTRODUCTION

B003.02 SELECTED TRAINING PROVIDER / SUBCONTRACTOR

B003.03 SELECTED SMME DEVELOPMENT AGENT

B003.04 TRAINING PROVISION: SMMES

B003.05 TRAINING PROVISION: TECHNICAL SKILLS

B003.06 TRAINING SCOPE OF WORKS AND DELIVERABLES

B003.07 SMME DEVELOPMENT AGENT DELIVERABLES

B003.08 MEASUREMENT AND PAYMENT

INTRODUCTION

The Training Specification Data has been prepared in line with City of Tshwane Municipality socio-economic responsibilities, Small Business Act No. 102 of 1996, Affirmative Procurement policies as developed by PWD led task team and deliverables as described in the October 2007 edition of the CIDB Specification for Social and Economic Deliverables in Construction Works Contracts (SSED) (www.cidb.org.za).

The training targeted as described below; will also assist the contract in implementing labour enhanced construction methods for maximization of employment of unskilled previously disadvantaged individuals.

B003.02 SELECTED TRAINING PROVIDER / SUBCONTRACTOR

The Engineer shall instruct the Principal Contractor to appoint an accredited training subcontractor to conduct training as detailed under sections B003.04 and B003.05. A service level agreement to be provided by the Engineer or Client will be signed by the Principal Contractor and the Nominated Training Subcontractor. The nominated training subcontractor shall be accredited with CETA (Construction Education Training Authority) & QTCO (Quality Council of Trades and Occupations) and will furnish the Engineer with the following documentation/information:

- Tax Clearance Certificate and Compliance Pin
- Certified Copies of Company Registration Documents and Director's ID Copies
- Certified B-BBEE Verification Certificate/Affidavit
- Valid proof of CETA accreditation letter for the required training
- Accreditation with QTCO
- Proof of Availability of training facilities within the City of Tshwane (training facilities can also be hired if not available)

- Minimum of 3 written testimonials from Previous Clients
- Qualifications and CVs of Key Staff to be used in the project if not the same as those listed on the accreditation letter
- Training Schedule and Methodology and Project Approach incl. how disabled learners will be accommodated
- Letter from the Bank confirming banking details
- Proof of payment of Rates and Taxes (City of Tshwane Municipality) for Company and Directors - Not older than three (3) months
- COIDA Letter of Good Standing
- CSD Registration (National Treasury)

B003.03 SELECTED SMME DEVELOPMENT AGENT / SUBCONTRACTOR

The Engineer shall instruct the Principal Contractor to appoint an accredited SMME Development subcontractor to conduct SMME Development Services as detailed under sections B003.07. A service level agreement to be provided by the Engineer or Client will be signed by the Principal Contractor and the nominated SMME Development Subcontractor. The nominated SMME Development subcontractor shall be having an ECSA or SACPCMP Registered within their organization and will furnish the Engineer with the following documentation/information:

- Tax Clearance Certificate and Compliance Pin
- Certified Copies of Company Registration Documents and Director's ID Copies
- Certified B-BBEE Verification Certificate/Affidavit
- ECSA Pr. Tech/ Eng in civil engineering or SACPCMP Pr. CPM Registration in civil engineering
- Minimum of 3 written testimonials from Previous Clients
- Qualifications (Civil Engineering B-Tech or Degree) and CVs of Key Staff (10 years post Qualification) to be used in the project, ECSA Pr. Tech/ Eng or SACPCMP Pr. CPM Registration
- SMME Development Schedule and Methodology and Project Approach incl. how disabled learners will be accommodated
- Letter from the bank confirming bank details
- Proof of payment of Rates and Taxes (City of Tshwane Municipality) for Company and Directors - Not older than three (3) months
- COIDA Letter of Good Standing
- CSD Registration (National Treasury)
- Professional Indemnity of at least R 2,000,000-00

B003.04 TRAINING PROVISION: SMMES

The provision must be made for SMME Training to benefit local SMMEs. This training must be conducted prior to individual labour commencing work on site.

The Contractor together with the Social Facilitator and Selected Training Subcontractor shall select the appropriate candidates to undergo SMME Development, in preparation for employment on the Project in at least four of the unit standards listed below in accordance with the contractor's operational requirements

The following accredited unit standards may be used to address SMME skills needs, aligned with the contract scope of works:

US ID No.	US Description
9976	Business and financial management
9982	Comply with legal requirements for construction contract
9981	Tender for Construction Contracts
9985	Demonstrate, understand and develop entrepreneurship
8894	Manage construction Resources
9986	Apply quality principles on a construction site
9987	Implement site administration on a construction project
8962	Maintain and adapt oral communication
8964	Write and define content
9988	Apply surveying techniques on a construction contract

For a detailed description of the unit standards identified above, kindly refer to the South African Qualifications website www.saqa.org.za/ registered qualifications and unit standards, and enter the unit standard number (given in the first column) in the search field.

The Contractor shall be responsible for employing all learners participating in the training, after the individual's completion of the theoretical component of the training. The employment must be aligned to their practical experiential requirement to enhance their competency in their trained area.

B003.05 TRAINING PROVISION: CONSTRUCTION RELATED TECHNICAL SKILLS

The provision must be made available for Technical Training for non-seconded and second local labour. This training must be conducted prior to individual labour commencing work on site.

The Contractor together with the Social Facilitator and Selected Training Subcontractor shall select the appropriate candidates to undergo Technical Training at a semi-skilled level, in preparation for employment on the Project in any (as many as possible, budget permitting) of the unit standards listed below aligned with the contractor's operational requirements.

US ID No.	US Description
12916	Batch and mix concrete by volume
119056	Identify, describe and utilise materials in construction

114917	Apply labour intensive construction methods to construct and maintain water and sanitation services
119064	Install and maintain basic plumbing components
119076	Use and maintain small plant and equipment on a construction site
114917	Apply labour intensive construction methods to construct and maintain water and sanitation services
116573	Assemble, tie and fix reinforcing cages
119067	Build masonry superstructures using solid units
119077	Install control valves
116051	Demonstrate fundamental knowledge of earthworks
116152	Demonstrate mechanical awareness and plant appreciation
10252	Identify, inspect, use, maintain and care for engineering hand tools
119059	Install and maintain a below ground drainage system
119079	Install pressure pipes
119075	Understand and describe basic plumbing principles
12913	Mix and apply slurry (By mixer)
10255	Select, use and care for power tools
14567	Use a small self-propelled compactor to compact material
12875	Use and maintain small plant and equipment on a construction site

For a detailed description of the unit standards identified above, kindly refer to the South African Qualifications website www.saqqa.org.za/ registered qualifications and unit standards, and enter the unit standard number (given in the first column) in the search field.

The Contractor shall be responsible for employing all learners participating in the training, after the individual's completion of the theoretical component of the training. The employment must be aligned to their practical experiential requirement to enhance their competency in their trained area.

B003.06 TRAINING SCOPE OF WORKS AND DELIVERABLES

The training scope of works and deliverables by the Selected Training Subcontractor will be as follows:

- Identification of the target group and the candidates together with the Contractor and Social Facilitator.
- Pre-assessment and qualification of candidates
- Code of conduct to be explained and signed to the Learners
- Enrolment of Learners (Registration and Particulars)
- Induction on the first day of Learners
- CETA accredited learning materials will be handed to all Learners on day one of the training.
- Facilitation will be done as referred from learning materials during theory session.
- Learning activities for each specific outcome will be done in class.

- Practicals will be done as per drawing plans and instruction sheets in the learning materials.
- To assess competency in each specific outcome, assessment criteria and finding will be filled to a portfolio of evidence (P.O.E)
- Each learner will compile his/her own P.O.E which will be moderated by Selected Training Subcontractor Quality Assurance Manager.
- On completion of internal moderation all competent Learners will receive Certificate of Completion.
- Provision of a detailed training report

B003.07 SMME DEVELOPMENT AGENT DELIVERABLES

In order to achieve the goals of this policy and to ensure that the SMMEs are mentored and developed to advance their business whilst delivering a successful project, the SMME Agent is to assist as follows:

The SMME Agent to produce a detailed SMME management and monitoring plan for Employer and Employer's Agent approval within 21 days of appointment by COT.

The SMME Agent shall be responsible to monitor and ensure that local SMME Contractors execute works as per the approved scope, specification and programme. The SMME Agent shall provide the CoT with monthly/bi-weekly (as per Employer's Request) progress reports clearly indicating progress and challenges affecting local SMMEs. The SMME Agent shall hold monthly/bi-weekly production meetings with the local SMME Contractors where minutes are to be kept and signed off by both parties.

The SMME Agent is to assess the skills of the SMME Contractor and provide the relevant support and training where it is necessary in order for the local SMME Contractors to complete the works to programme, budget and specification. The SMME Agent will be expected to provide on-site training to the SMME Contractors that will ensure that the SMME Contractor's staff is suitably trained to execute the works and that they receive sufficient relevant experience on the project.

The SMME Agent will assist the SMME Contractors in all aspects to achieve safety compliance, that will include:

- Assisting the local SMME Contractors with developing their safety files, legal appointments, etc
- Assisting the local SMME Contractors with achieving safety on site.
- Having tool box talks with the local SMME Contractor's employees on a daily basis.
- Providing all safety equipment and signage.
- Providing safety training where necessary.

The SMME Agent will be expected to monitor the local SMME Contractor's works for quality compliance and provide all the necessary support to local SMME Contractors in order to achieve quality requirements. The SMME Agent is to ensure that if the local SMME Contractor's quality of works does not achieve specification the necessary corrective measures are developed and implemented to assist the SMME Contractors to achieve specification and shall not allow the works to continue until the quality requirements are achieved.

The SMME Agent is to generate monthly reports for the COT that includes the following:

- SMME Contractor resources on the site, i.e. supervisors, labour (as per EPWP reporting requirements), plant, tools and equipment

- SMME Contractor progress of works on site.
- SMME Contractor quality control on site.
- SMME Contractor expenditure on the project versus target expenditure.
- Copies of minutes of the SMME Contractor and Main Contractor progress meetings.
- Concerns and improvements to be made.
- The report shall be signed by both the Main Contractor and the local SMME Contractors

B003.08 MEASUREMENT AND PAYMENT

Item Unit

B003.08.01 Provision of Accredited SMME Training Provisional Sum

(a) Handling cost and charges for the Contractor on Item B003.01 percentage (%)

The percentage tendered for handling costs and charges shall cover all additional costs for the Contractor over and above the sums paid.

Item Unit

B003.08.02 Provision of Accredited Technical Skills Training Provisional Sum

(a) Handling cost and charges for the Contractor on Item B003.02 percentage (%)

The percentage tendered for handling costs and charges shall cover all additional costs for the Contractor over and above the sums paid.

Item Unit

B003.08.03 Provision of SMME Development Agent Provisional Sum

(a) Handling cost and charges for the Contractor on Item B003.03 percentage (%)

The percentage tendered for handling costs and charges shall cover all additional costs for the Contractor over and above the sums paid.

Item Unit

B003.08.04 Provision of Social Facilitator / Community Consultant Provisional Sum

(a) Handling cost and charges for the Contractor on Item B003.04 percentage (%)

The percentage tendered for handling costs and charges shall cover all additional costs for the Contractor over and above the sums paid.

SERIES 1: ANCILLARY WORK

SECTION 103: OVERHAUL

Amend as follows:

B103.01 Overhaul distance

After the first paragraph add the following sub-clause:

“The free haul distance for the purpose of this project shall be measured to be 15km’.

“Material procured from commercial sources shall not be regarded as overhaul material.”

SECTION B107: DAYWORKS

SCOPE

GENERAL

MEASUREMENT AND PAYMENT

01 SCOPE

This section covers the listing of Dayworks items in accordance with Conditions of Contract Clause 6.5, for the use in determining payment for work which cannot be quantified in specific units in the schedule of quantities, or work ordered by the Engineer during construction period which was not foreseen at bid stage and for which applicable rate exist in the schedule of quantities.

02 GENERAL

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

03 MEASUREMENT AND PAYMENT

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

The Contractor is also referred to Clause 6.5 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 6.5 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 6.5 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 the hour 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..

SERIES 2: TRENCHING

SECTION 202: TRENCHING WATER

B16: Measurements for certificates

Add the following new clause:

“Items under Section 202 will be measured up to a limit of 1km of a section without pressure tests”

Standard Specifications:

B202.03: Classification of Materials Excavated

Add the following:

“All excavations in soft and intermediate material will be measured and paid for under item 202.01 as soft material.”

Add the following new clauses:

“B16: Cutting and Removal of premix

“The cutting and removal of premix shall be measured and paid for under item B202.16 in the Schedule of Quantities. Every trench will be cut two times on each side. The measurement for payment will however only be the length of the trench excavated.”

“B17: Hand excavation for trenches inside erven

Trenches are to be 500mm wide and 600mm deep and will be paid under item B202.17. This rate will not be extra over item 202.01”

Measurement and Payment:

B202.07: Extra over items 202.06 and 202.13 for using backfill obtained -

Add the following:

“Item	Description	Unit
B202.07.03	G5 provided by Contractor	m ³

B202.11: Timbering and shoring

Replace the payment clause with the following:

“Item	Description	Unit
B202.11	Timbering and shoring	m

The unit of measurement shall be the metre length of tunnel wall or roof or trench wall against which timbering and shoring is required to be left in position permanently on the Engineer’s instructions. Each side of the trench or tunnel shall be measured.

The tendered rate shall include full compensation for leaving the timbering and shoring permanently in position, for ensuring that the timbering and shoring will not be disturbed during backfilling, and that the backfilling is compacted fully around the shoring.”

Add the following new payment clauses:

Item	Description	Unit
B202.16	Cutting and removal of premix	
	.01 Premix thickness up to 100mm	m ²
	.02 Premix thickness 101mm up to 200mm	m ²
	.03 Premix thickness 201mm up to 300mm	m ²
	.04 Premix thicker than 300mm	m ²

The unit of measure shall be the square meter of premix removed for the specified thickness, measured along the length and width of the final cut on the outside. The tendered rate shall include full compensation for the cutting of the premix twice on both sides of the trench and removing and discarding the removed premix."

Add the following new payment clauses:

Item	Description	Unit
B202.17	Hand excavations for trenches inside erven	
	Trenches 500mm wide and 600mm deep	m ³

The unit of measurement shall be the cubic meter of material excavated and measured in accordance with the dimensions specified.

The tendered rate shall include full compensation for the additional expenses of excavating by means of hand labour instead of traditional trenching equipment

SECTION 202: TRENCHING SEWER

Measurement and Payment:

B202.07: Extra over items 202.06 and 202.13 for using backfill obtained -

Add the following:

“Item	Description	Unit
B202.07.03	G5 provided by Contractor	m ³

B202.11: Timbering and shoring

Replace the payment clause with the following:

“Item	Description	Unit
B202.11	Timbering and shoring	m

The unit of measurement shall be the metre length of tunnel wall or roof or trench wall against which timbering and shoring is required to be left in position permanently on the Engineer’s instructions. Each side of the trench or tunnel shall be measured.

The tendered rate shall include full compensation for leaving the timbering and shoring permanently in position, for ensuring that the timbering and shoring will not be disturbed during backfilling, and that the backfilling is compacted fully around the shoring.”

B202.16 Cutting and removal of premix

Add the following new payment clauses:

“Item	Description	Unit
B202.16	Cutting and removal of premix	
	.01 Premix thickness up to 100mm	m ²
	.02 Premix thickness 101mm up to 200mm	m ²
	.03 Premix thickness 201mm up to 300mm	m ²
	.04 Premix thicker than 300mm	m ²

The unit of measure shall be the square meter of premix removed for the specified thickness, measured along the length and width of the final cut on the outside. The tendered rate shall include full compensation for the cutting of the premix twice on both sides of the trench and removing and discarding the removed premix. “

B202.17 Services that adjoin a trench

Unit
No

(Parallel to or at an angle between centre-lines in plan of less than 45°)

In a case where a trench of specified width

1. runs parallel to or at an angle (in plan) of less than 45° to an existing service, and
2. is such that the nearer side of the bottom of the trench lies at least partly between a vertical plane and a plane that lies at an angle of 45° below the horizontal, both planes passing through the axis of the service;
3. The length of service within the minimum base width of the trench, determined in accordance

with 5.2, will be measured for payment under this item and the remaining length, the side of the existence of such service, will be measured for shoring.

The rate for an item scheduled in terms of B202.16 and B202.17 above shall cover the additional cost of:

- i) Care in excavation necessitated by the presence of such service in or across the trench;
- ii) Protecting and maintaining such service in operation by means of temporary supports of shoring, as necessary;
- iii) Delays and disruption of the progress of the work due to the existence of the service; and
- iv) Repairs necessitated by damage caused by the Contractor.

B202.18	Services that intersect a trench	Unit No
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Except where water pipes are to be recovered, existing water pipes, sewers, stormwater pipes, concrete lined channels and drains, box culverts, electric cables, ducts, kerbs, channels, erf connections and various sizes of pipes and services that intersect a trench of specified width require various degrees of care, whether or not their presence is known before they are uncovered, and will be measured separately. The unit refers to one service, but services that are grouped that they can be contained within a horizontal dimension of 200mm measured at right angles to the axis of the services will be measured as one unit.

B202.19	Hand excavation for trenches inside erven. Trench 750mm wide and 1500mm deep	Unit m³
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Hand excavations for trenches inside erven.

The unit of measurement shall be the cubic meter of material excavated and measured in accordance with the dimensions specified.

The tendered rate shall include full compensation for the additional expenses of excavating by means of hand labour instead of traditional trenching equipment.

SERIES 3: SEWERS

SECTION 302: SEWER CONSTRUCTION **Unit**

B302.09 **Supply, handle, store if necessary and construct pre-cast Concrete sewer manholes with ND of 1250mm according to drawings.** **No**

Replace the first paragraph

The unit of measurement for the construction of manholes shall be the number of each type of manhole constructed (irrespective of the angles of deflection, where these apply) for different pipe diameter ranges and different depths, complete, as shown on detail drawings and as specified. The depth of the manhole shall be measured from the top of the manhole cover to the invert channel in the centre of the manhole.

SERIES 4: WATER RETICULATION AND WATER MAINS

SECTION 402: CONSTRUCTION

Standard Specification

B16: Measurements for certificates

Add the following new clause:

“Items under Section 202 will be measured up to a limit of 1km of a section without pressure tests”

Measurement and Payment:

Add the following new payment clauses:

“Item	Description	Unit
402.09	Installation of hydrants complete, as per drawing 7515-W208	No

The unit of measurement shall be the number of hydrants installations done.

The tender rate shall include full compensation for hydrant head/stainless steel spindle as approved, all galvanised bends, wrapped with grease tape and then covered with PVC tape, anchor block, excavation, backfilling and all the fittings necessary to complete the installation. The hydrant T-piece, valve where required, flanges and 80mm diameter horizontal galvanised steel pipe are excluded from the rate and will be paid separately.

B402.12 The provision and installation of connections to users complete (excluding water meters):

Add the following new payment clause:

“Item	Description	Unit
B402.12.01	The provision and installation of connections to users complete (excluding supply of water meters) as per detail drawing 7515-W206 and 7515-W207: .01 Short single erf connection	
	.01 15 mm dia watermeter, 40 mm pipe size	No
	.02 20 mm dia watermeter, 40 mm pipe size	No
	.03 25 mm dia watermeter, 40 mm pipe size	No
	.04 40 mm dia watermeter, 50 mm pipe size	No
	.05 50 mm dia watermeter, 80 mm pipe size	No
	.06 80 mm dia watermeter, 100 mm pipe size	No
	.07 100 mm dia watermeter, 150 mm pipe size	No

A short single connection is defined as a water meter connection with five (5) metres or less piping between the main supply and the meter installation, where no crossing of a public road is required.

The unit of measurement shall be the number of meter installations done. The size of the water connection refers to the size of the water meter used, which shall be connected to the next largest nominal pipe size. (For example a 80mm diameter water meter will be fitted to a 100mm diameter pipe.)

The tender rate shall include full compensation for travelling, locating existing services, excavating, supplying and laying of pipes and all necessary fittings including the valves to complete the installation as per drawing, installation of new water meter or connecting to existing water meter, the extension of the communication pipe if necessary as indicated on the drawings, the meter installation with 1,5m HDPE downstream pipe where required and all other plumbing material necessary to complete the work as indicated on the drawings, flushing of system, connecting the water supply, backfilling and compaction to 90% modified AASHTO density and the cleaning and tidying of the work place after completion of the installation.

The CoT will supply all water meters. Saddles will be paid separately.”

“Item	Description	Unit
B402.12.02	The provision and installation of connections to users complete (excluding supply of water meters) as per detail drawing 7515-W206 and 7515-W207: .02 Short double erf connections	
	.01 15 mm dia watermeter, 40 mm pipe size	No
	.02 20 mm dia watermeter, 40 mm pipe size	No
	.03 25 mm dia watermeter, 40 mm pipe size	No
	.04 40 mm dia watermeter, 50 mm pipe size	No
	.05 50 mm dia watermeter, 80 mm pipe size	No
	.06 80 mm dia watermeter, 100 mm pipe size	No
	.07 100 mm dia watermeter, 150 mm pipe size	No

A short double connection is defined as the water meter connection where less than five (5) metres piping is required between the main supply and the installation of the two meter installations without the crossing of a public road.

The unit of measurement shall be the number of double meter installations done. The size of the water connection refers to the size of the water meter used, which shall be connected to the next largest nominal pipe size. (For example a 80mm diameter water meter will be fitted to a 100mm diameter pipe.)

The tender rate shall include full compensation for travelling, locating existing services, excavating, supplying and laying of pipes and all necessary fittings including the valves to complete the installation as per drawing, installation of new water meter or connecting to existing water meter, the extension of the communication pipe if necessary as indicated on the drawings, the meter installation with 1,5m HDPE downstream pipe and all other plumbing material necessary to complete the work as indicated on the drawings, flushing of system, connecting the water supply, backfilling and compaction to 90% modified AASHTO density and the cleaning and tidying of the work place after completion of the installation.

The CoT will supply all water meters. Saddles will be paid separately.”

“Item	Description	Unit
B402.12.03	The provision and installation of connections to users complete (excluding supply of water meters) as per detail 7515-W206 and 7515-W207 : .03 Long single erf connection	
	.01 15 mm dia watermeter, 40 mm pipe size	No
	.02 20 mm dia watermeter, 40 mm pipe size	No
	.03 25 mm dia watermeter, 40 mm pipe size	No
	.04 40 mm dia watermeter, 50 mm pipe size	No
	.05 50 mm dia watermeter, 80 mm pipe size	No
	.06 80 mm dia watermeter, 100 mm pipe size	No

.07 100 mm dia watermeter, 150 mm pipe size No

A long single connection is defined as a water meter connection with piping more than five (5) metres up to seventeen (17) metres between the main supply and the meter installation and where the crossing of a public road is required.

The unit of measurement shall be the number of meter installations done. The size of the water connection refers to the size of the water meter used, which shall be connected to the next largest nominal pipe size. (the minimum pipe size is 40mm diameter)

The tender rate shall include full compensation for travelling, locating existing services, excavating, horizontal drilling or trenching of tarred road surfaces and resurfacing the tarred road, supplying G5 material, additional compaction, supplying and laying of pipes and all necessary fittings including the valves to complete the installation as per drawing, installation of new water meter or connecting to existing water meter, the extension of the communication pipe if necessary as indicated on the drawings, the meter installation with 1,5m HDPE downstream pipe and all other plumbing material necessary to complete the work as indicated on the drawings, flushing of system, connecting the water supply, backfilling and compaction to 90% modified AASHTO density and the cleaning and tidying of the work place after completion of the installation.

The CoT will supply all water meters. Saddles will be paid separately.”

Item	Description	Unit
B402.12.04	The provision and installation of connections to users complete (excluding supply of water meters) as per detail drawing 7515-W206 and 7515-W207:	
	.04 Long double erf connections	
	.01 15 mm dia watermeter, 40 mm pipe size	No
	.02 20 mm dia watermeter, 40 mm pipe size	No
	.03 25 mm dia watermeter, 40 mm pipe size	No
	.04 40 mm dia watermeter, 50 mm pipe size	No
	.05 50 mm dia watermeter, 80 mm pipe size	No
	.06 80 mm dia watermeter, 100 mm pipe size	No
	.07 100 mm dia watermeter, 150 mm pipe size	No

A long double connection is defined as a water meter connection with piping more than five (5) metres up to seventeen (17) metres between the main supply and the two-meter installations without the crossing of a public road.

The unit of measurement shall be the number of double meters installations done. The size of the water connection refers to the size of the water meter used, which shall be connected to the next largest nominal pipe size. (the minimum pipe size is 40mm diameter)

The tender rate shall include full compensation for travelling, locating existing services, excavating, horizontal drilling or trenching of tarred road surfaces and resurfacing the tarred road, supplying G5 material, additional compaction, supplying and laying of pipes and all necessary fittings including the valves to complete the installation as per drawing, installation of new water meter or connecting to existing water meter, the extension of the communication pipe if necessary as indicated on the drawings, the meter installation with 1,5m HDPE downstream pipe and all other plumbing material necessary to complete the work as indicated on the drawings, flushing of system, connecting the water supply, backfilling and compaction to 90% modified AASHTO density and the cleaning and tidying of the work place after completion of the installation. The CoT will supply all water meters. Saddles will be paid separately.”

B402.13: Horizontal drilling

B17: Horizontal drilling

Add the following new clause:

“If a crossing cannot be completed by means of horizontal drilling, payment for the drilling will only be made if more than half of the crossing was completed. The rest of the crossing must then be completed by conventional methods. Payment for drilling will be made under item B402.13.”

The unit of measurement shall be the length of hole drilled and pipe installed. The diameter of each hole to be formed will be a size larger than the pipe diameter to be installed. This pay item shall be used if and when horizontal drilling is required underneath streets and paved areas by other Departments, Divisions and Sections within the CoT.

The tender rate for forming horizontal drilling holes and installing pipes shall include full compensation for locating existing services, drilling and for disposing of surplus material resulting from the formed hole, the installation of all material supplied by the Engineer to complete the work, transporting and delivering to the point of use, and the cleaning and tidying of the work place after completion of the work. The tendered rate is for drilling in any soil condition, inclusive of rock.

Add the following new clause:

B19: Trenchless Technology: Materials and Equipment

B19.1: Materials - HDPE Pipes and fittings for Trenchless Technology (Pipes SABS ISO 4427 SABS 1315)

Add the following new clause:

“Polyethylene pipes shall have been manufactured with high quality materials that conform to the standards of ISO 9000 and the finish product shall conform to the technical specifications as shown below. The values below shall be applicable to both PE100 Black polyolefin grades.

TECHNICAL SPECIFICATIONS FOR PE 100 BLACK

PHYSICAL PROPERTIES	TEST METHOD	VALUE	UNIT
Density	ISO 1183	0.958	g/cm ³
Melt Flow Index (190°/5kg)	ISO 1133	9.0	g/10min
Melt Flow Index (190°/5kg)	ISO 1133	0.23	g/10min
Vicat Softening Point (190°/5kg)	ISO 306	67	°C
Crystalline Melting Range	ISO 3146-85	130-133	°C
Viscosity Number	ISO 1628-3	390	cm ³ /gm
MECHANICAL PROPERTIES	TEST METHOD	VALUE	UNIT
Shore D, Hardness	ISO 868	61	-
Tensile @ Yield	ISO 527	24	MPa
Ultimate Tensile	ISO 527	35	MPa
Ultimate Elongation	ISO 527	>600	%
Elastic Modulus	ISO 527	900	MPa
Flexural Strength (3.5% deflection)	ISO 178	19	MPa
Notched Impact (Charpy) can 23°	ISO 179	20	KJ/m ²
Notched Impact (Charpy) can -30°	ISO 179	6	KJ/m ²
Thermal Stability (OIT, 210°)	ISO 10837	>20	Min
Carbon Black Content	ASMD 1603	≥ 2	%

Pipes with nominal diameter of less than 100mm shall not be used in through lines but may be used in secondary short and terminal sections.

Any section of pipe with a gash, blister, abrasion, nick, scar or other deleterious fault greater in depth

than ten percent of the wall thickness shall not be used and must be removed from the site. However, a defective area of the pipe may be cut out and the joint fused in accordance with the procedures stated in Clause B21.4. In addition, any section of pipe having other defects such as concentrated ridges, discoloration, excessive spot roughness, pitting, variable wall thickness or any other defect of manufacturing or handling as determined by the engineer and/or his representative shall be discarded and not used.

Couplings and Fittings (HS Welding as per SABS 0268)

Pipes may be joined by means of thermofusion by butt welding or by socket welding. Pipes may also be joined by mechanical means, such as stub and end flanges, compression couplings or Victaulic/Tak couplings. Pipes shall under no circumstances be joined by means of solvents or adhesives.

Compression fittings for pipes up to 63mm nominal diameter shall be of type Alprene Series AZ or equal approved.

All other fittings shall conform to the requirements of the applicable ISO specifications (5 through 8)."

B19.2: Equipment

B19.2.1: General

Add the following new clause:

"Various types of specialized equipment are utilized in pipe bursting projects and the types are generally unique to each of the generic methods static pull, pneumatic and hydraulic. The primary difference between methods is the manner in which the force is generated and transferred to the host pipe during bursting operations."

B20: Preparatory Arrangements and Work

Add the following new clause:

"The Employer shall approve the location of entry/exit pits. Before any excavation is done for any purpose, the contractor shall contact the various service providers for determining field location of existing services. All buried services adjacent/parallel to the pipe bursting operation shall be reviewed and where necessary be excavated to relieve transient loading during insertion operation. If any services are approximately within 500mm of the pipe to be burst, the contractor shall excavate a pit at the location to check clearance. The amount of clearance will be affected by the soil type, the amount of up-sizing and the location of the existing service in relation to the line being burst. If adequate separation does not exist between the existing water line and the subject service, the contractor shall employ substitute means to rehabilitate the existing water line.

Any concrete encasements shall be excavated and broken out prior to the bursting operation to allow the steady and free passage of the pipe bursting head. All in-line valves and fittings shall be removed prior to the bursting operation.

Any damage to adjacent properties that are not part of this work shall be repaired and restored to its original condition at the contractor's expense."

B21: Installation

B21.1: General

Add the following new clause:

The contractor shall take all precautions required by statutory regulations or dictated by actual circumstances to ensure the safety of the public and workmen and to avoid interrupting or demanding public or private utilities that may be encountered during the course of the work. When utilizing a

winch, the winch, cable and cable drum must be provided enclosed so that it may be operated safely without injury to persons or property.

Add the following new clause:

B21.2: Excavations- Trenches/Working Space/Entry and Exit Pits

Trenches should be wide enough to provide safe working conditions and adequate working space for workmen to place and joint the pipe properly. The contractor shall provide a system of guide pulleys and bracing at the exit pit to minimise cable contact with the existing line between launch and exit pits. The winch cable, burst head and polyethylene pipe cannot come into contact with the supports of the trench shoring in the insertion pit.

Add the following new clause:

B21.3: Laying of Pipes

The new polyethylene pipe shall be inserted immediately behind the bursting head in accordance with the manufacturer's recommended procedures. The bursting equipment shall be specifically designed and manufactured for the type of insertion process being used.

The maximum pulling force shall not exceed the estimated value given by the formula $F=SA$, where F = max pulling force in N; S = max permissible stress of the pipe material in MPa; A = cross-sectional area of the pipe wall in mm^2 .

B21.4: Jointing

Add the following new clause:

If new pipe and fittings become damaged before or during installation it shall be repaired as recommended by the manufacturer or replaced as required by the engineer at the contractors expense, before proceeding further.

The polyethylene pipe shall be assembled and joined at the site using the butt-fusion method to provide a leak proof joint. Threaded or solvent-cement joints and connections are not permitted. All equipment and procedures used shall be in strict compliance with the manufacturer's recommendations. Personnel certified as fusion technicians by a manufacturer of polyethylene pipe and/or fusing equipment shall perform fusing.

The butt-fused joint shall be in true alignment and shall have uniform rollback beads resulting from the use of proper temperature and pressure. The joint shall be allowed adequate cooling time before removal and pressure. The fused joint shall be watertight and shall have tensile strength equal to that of the pipe. All joints shall be subject to acceptance by the Engineer and/or his representative prior to insertion. All defective joints shall be cut out and replaced at no cost to the Employer.

Terminal sections of pipe that are joined shall be connected with connectors with tensile strength equivalent to that of the pipe being joined.

Service connections with the polyethylene pipe shall be accomplished by the sidewall fusion method in accordance with the manufacturer's printed instructions.

Where polyethylene pipes are connected to ductile iron fittings and valves, HDPE flange adaptors shall be fused to the end of the pipe and the connection made with bolted flange components.

The Engineer shall inspect all joints before insertion. The pipe shall be joined on site in appropriate working lengths near the launching pit.

All service connections and valves on the existing water main will be taken out of service. This will include water meters, hydrant valves, isolation valves etc. all of which shall be replaced with new

equipment and fittings.

After the new polyethylene pipe has been installed, disinfected and tested, each existing service shall be connected to the new pipe in accordance with manufacturer's recommendations for sidewall fusion.

B21.5: Testing

Add the following new clause:

The polyethylene pipe shall be pressure tested in accordance with the manufacturer's specifications and procedures after the line and all fittings and valves have been installed. Connections may be left exposed for visual leak inspection.

B21.6: Temporary water supply system

Add the following new clause:

The contractor shall be required to provide, install and maintain a temporary water supply system. Such temporary supply shall be provided where no supply interruptions will be allowed by the Employer or the works duration will exceed the maximum allowable supply interruption.

The temporary supply shall typically –

- be light weight, easy to handle and easy to assemble;
- be between isolation valves, preferably existing valves;
- not leak;
- be properly anchored;
- positioned not to interfere with pedestrians and vehicular traffic;
- be protected from damage, where required; and
- be periodically checked for damage, minimum every two hours.

Once the works have been successfully completed, the Contractor shall dismantle the temporary system. The system can be re-used if it is still in a good working order.

Measurement and payment

"Item	Description	Unit
B402.13	Horizontal drilling	
	.01 10mm to 50mm dia pipe	m
	.02 51mm to 80mm dia pipe	m
	.03 81mm to 100mm dia pipe	m
	.04 101mm to 150mm dia pipe	m
	.05 151mm to 200mm dia pipe	m
	.06 201mm to 250mm dia pipe	m
	.07 251mm to 350mm dia pipe	m
	.08 351mm to 400mm dia pipe	m
	.09 401mm to 450mm dia pipe	m

The unit of measurement shall be the meter drilled for the different sizes indicated.

The tendered rate shall include full compensation for establishing the drilling team on site as and when required, excavating and backfilling of launch and exist pits for the drilling machine, providing all necessary equipment and tools required for drilling. The unit of measurement shall be the length of hole drilled and pipe installed. The diameter of each hole to be formed and pipe installed. This pay item shall be used if and when horizontal drilling is required underneath streets and paved areas by any Departments, Divisions and Sections within the CoT

The tender rate for forming horizontal drilling holes and installing pipes shall include full compensation

for locating existing services, drilling and for disposing of surplus material resulting from the formed hole, the installation of all material supplied by the Engineer to complete the work, transporting and delivering to the point of use, and the cleaning and tidying of the work place after completion of the work.”

B402.14: Connections to existing PVC/AC/HDPE water reticulation pipes irrespective of depth

Add the following new payment clause:

“Item	Description	Unit
B402.14	Connection to existing PVC water reticulation pipes Irrespective of depth	No

The unit of measure shall be the number of connections made to existing water networks.

The rate shall include full compensation for supplying all tools, labour and equipment necessary to make the connection.”

B402.15: Launching and Exit Pits

Add the following new payment clause:

“Item	Description	Unit
B402.15	Launching and Exit Pits	No

The unit of measure shall be the number of pits excavated not exceeding 1 500mm deep.

The rate shall include for shoring if and where required, protective and safety measures, preparation of the pit bottom, breaking of the existing pipe, backfilling, compaction and levelling on completion of the work.”

B402.16: Excavate and disconnect existing services

Add the following new payment clause:

“Item	Description	Unit
B402.16	Excavate and disconnect existing services	No

The unit of measure shall be the number of pits excavated not exceeding 1 500mm deep.

The rate shall include for shoring if and where required, protective and safety measures, preparation of the pit bottom, disconnecting and/or reconnecting the water meter/valve/hydrant/saddle etc., backfilling, compaction and levelling on completion of the work. Purchase, supply and installation of new items including fittings, will be measured separately as an extra over.”

B402.20: Supply and installation of stub and Flanged Adapters by butt welding to the following HDPE pipes

Add the following new payment clause:

“Item	Description	Unit
B402.20	Supply and installation of stub and Flanged Adapters by butt weld to the following HDPE pipes (SABS 1123 Table 16)	
	.01 110mm pipe	no
	.02 160mm pipe	no
	.03 200mm pipe	no
	.04 250mm pipe	no
	.05 300mm pipe	no

.06 315mm pipe	no
.07 355mm pipe	no
.08 400mm pipe	no
.09 500mm pipe	no

The unit of measure shall be the number of flanged adapters supplied and installed by butt welding to the HDPE pipe.

The rate tendered shall include the purchase and supply of the new flanged adapters, placing of all materials, labour, tools, equipment, cleaning and preparation of the existing pipe to receive the flanged adapter, butt welding and ancillary work to accomplish successful installation.”

B402.21: Supply and installation of temporary HDPE pipes

Add the following new payment clause:

“Item	Description	Unit
B402.21	Supply and installation of temporary HDPE pipes	
	.01 63mm pipe	m
	.02 110mm pipe	m
	.03 160mm pipe	m

The unit of measure shall be the meter of HDPE pipe supplied.

The rate tendered shall include the purchase and supply of the HDPE (PE100 PN12.5) pipes, placing of all materials (saddles, bends, communication pipes etc), labour, tools, equipment and connecting of the temporarily pipe to the existing reticulation system and the end user, butt welding and ancillary

Measurement and Payment:

Add the following new payment clauses:

“Item	Description	Unit
B402.22	Custom made Steel special to be measured, manufactured and installed (epoxy powder coated - refer to Series 401.05):	Prov sum

Payment for custom made steel specials: The Contractor shall present a Quotation that will include for the measurement, manufacturing, installing and testing of the steel special. The quotation will be approved by the Engineer and reimbursement shall be for the actual purchase cost of the steel special plus 10%. (Excluding handling, delivery or any other fees).

SERIES 805: SPECIFIC WORK

Section 805: Building Work (Toilets)

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PA 01	SCOPE
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PA 05	ROOF SHEETING AND ACCESSORIES
PA 06	PLUMBING
PA 07	PAINTING
PA 08	MEASUREMENT AND PAYMENT

PA 01 **SCOPE**

This is a Particular Specification and covers the various construction activities associated with the erection of the standard toilet structures which form part of this Contract.

Building work shall be carried out in accordance with the National Building Regulations, SABS 0400, the applicable clauses of the SABS Standardized Specifications and the information contained in this Specification.

Work appurtenant to the erection of the standard toilet structures such as earthworks, concrete work, roof sheeting, etc, shall be carried out as specified in the appropriate Standardized Specifications but will be measured and paid for under this Specifications.

PA 02 **BRICKWORK**

PA 02.1 **MATERIALS**

(a) Bricks

Bricks shall comply with SABS 227 and shall be of the class scheduled or shown on the Drawings.

Satisfactory proof of the load-bearing capacity of the bricks offered shall be submitted before deliveries are made to the Site.

Three samples of each type of brick shall be submitted to the Engineer for approval. All subsequent deliveries shall be of a standard equal to or better than that of the approved samples.

(b) Cement

Cement shall comply with the requirements of SABS 471 and shall be stored under cover. The use of Portland blast-furnace cement (PBFC) which complies with the requirements of SABS 626 will only be allowed if approved by the Engineer.

(c) Aggregate

Fine aggregate shall consist of natural sand, or crushed rock or gravel, and shall be hard, clean and free from adherent coatings or other deleterious matter. Sand for plaster and mortar shall comply with the requirements of SABS 1090, whereas the aggregates for normal and granolithic floor screeds shall comply with the requirements of BS 1199 and BS 1201 respectively.

(d) Water

Water shall be clean and free from clay, silt, oil, acid, alkali, organic or other matter which would impair the required strength and durability of the mortar, plaster or floor screed.

(e) Wall ties

Wall ties shall be of the galvanized, crimped, single-wire type, 3,5 mm in diameter, and shall comply with the requirements of SABS 28.

(f) Damp-proof sheeting

Damp-proof sheeting shall comply with SABS 248, type FV for fibre felt, or SABS 952, type B for embossed polyethylene sheeting.

PA 02.2

CONSTRUCTION OF BRICKWORK

(a) Cement mortar

Cement mortar shall, unless otherwise specified, consist of one part Portland cement to four parts sand (1:4) by volume for normal brickwork and one part Portland cement to three parts sand (1:3) by volume for reinforced brickwork. The ingredients for cement mortar shall be measured in proper gauge boxes on a boarded platform and thoroughly mixed. Alternatively, mixing may be by means of an approved mechanical batch mixer. Only when the dry ingredients have been thoroughly mixed and a mixture of uniform colour has been obtained may the water be added in sufficient quantity to obtain mortar with the required consistency.

Cement mortar shall be used within two hours of adding water to the mix and shall not be used after two hours or if it has begun to set. Mortar shall be turned over frequently to prevent it from setting until it is used.

(b) Brickwork

Dimensions of all the brickwork shall be set out and built as shown on the Drawings. Bricks shall be kept wet before laying and the top of brickwork shall be wetted before any further bricks are laid. Bricks shall be well buttered with mortar before being laid and all joints shall be thoroughly flushed up as the work proceeds. All joints to face brickwork shall be neatly made and key-drawn with a 6 mm key.

Brickwork shall be carried up in a uniform manner with no portion being raised more than 1 m above an adjacent portion. All pends, quoins, etc, shall be kept strictly true and square and the whole properly bonded together.

Brickwork shall be built in stretcher bond or english bond as shown on the Drawings, and bats shall not be used except where required for the bond. All joints shall be 10 mm wide and four courses shall measure 340 mm.

Brickwork for cavity walls and solid walls built in stretcher bond shall be tied with wall ties placed not more than one metre apart in every third course, and shall be staggered vertically. At openings, the ties shall be positioned not more than 300 mm apart along the periphery of the opening and 150 mm from the opening.

Face brickwork shall be kept perfectly clean and rubbing down of the brickwork shall not be allowed. Scaffold boards shall be turned back during heavy rain to avoid splashing. Soiled brickwork shall be cleaned at the Contractor's expense, and the cleaning method shall be approved by the Engineer.

(c) Reinforced brickwork

Brickwork over door and window openings shall be reinforced with steel rods, welded or expanded mesh, etc. Reinforcement shall be placed in each course of brickwork for a minimum of four (4) courses or as shown on the Drawings. Reinforced brickwork shall continue at least 300 mm on each side of the openings.

Brick lintels shall be built upon rigid temporary supports left in position for not less than seven (7) days after brick-laying. Prestressed concrete lintels may be used where approved by the Engineer.

(d) Key for plaster

Joints of all brickwork receiving plaster shall be raked out, or the brick surfaces shall otherwise be prepared with an acrylic slurry or any other approved bonding agent.

(e) Damp-proofing

A damp-proof course shall be laid over the full width of all the walls at a minimum height of 150 mm above the final ground level or wherever else it may be required, and it shall be lapped for at least 150 mm at angles and joints. A damp-proof course shall also be laid and stepped up under all external sills.

(f) General

Rough and fair cutting shall be performed as required, and the brickwork shall be fitted around any steel work. Face brickwork shall be carefully cut and fitted to suit fittings.

Chases shall be left or formed for edges of concrete floors, staircases, etc. Chases shall also be provided wherever they may be required for pipes, conduits, switch boxes, distribution boards, and the like. Joints shall be raked out for flashings.

PA 03

DOORS

PA 03.1

MATERIALS

(a) General

All steel and iron work shall be delivered clean and free from rust, pitting or other defects. Shop primings shall be applied before delivery and shall consist of a coat of red oxide paint, or any other approved anti-rust paint on all surfaces.

Unless otherwise specified, all materials shall conform at least to the appropriate SABS or BS standards where such standards apply to ironmongery, or steel, cast iron and any other related materials.

(b) Pressed-steel door frames

Pressed-steel door frames shall comply with SABS 1129 and shall be manufactured from 1,6 mm thick mild-steel sheeting, pressed to the required shapes, properly mitred, welded and reinforced, with all welding neatly cleaned off.

Frames shall be of the widths required to suit the thickness of the walls into which they are built and shall be fitted with suitable tie bars and braces at the bottom. Three lugs to be built into the brickwork shall be provided on each jamb.

Rebates in frames and transoms for doors shall be of the widths required to suit the thicknesses of the doors and shall be fitted with a pair of approved steel butt hinges

set flush into recesses in the frames. 4,5 mm thick reinforcing plates shall be welded to the backs of the frames at hinge positions.

Heads of frames over double doors shall be drilled where required to form keeps for bolts and shall be fitted with one rubber buffer for each leaf of the door.

Frames for single doors shall be fitted with approved chromium striking plates and an adjustable striking-plate keeper boxed in at the back of the frame by a welded-on sheet-metal box. The frames shall be fitted with a minimum of two rubber buffers.

Frames shall be protected against twisting and damage during transit and erection.

(c) Pressed-steel doors

Pressed-steel doors shall be manufactured from 1,6 mm thick steel plate. The doors shall be of standard design, pressed to shape with 40 mm reveals all round. The doors shall be strengthened with full-length vertical V-shaped or other approved sectional strengthening ribs projecting to the outer face. Two horizontal stiffening rails shall also be welded to the inner face of the doors.

A door shall be hung on a pair of 100 mm long steel butt hinges with loose pins. The leaves of the hinges shall be welded to both the door and the door frame, and a 1,6 mm thick steel plate shall be welded to the inner face of the door to protect the lock.

One leaf of double doors shall be fitted at the top and bottom with approved 150 mm cast brass barrel bolts in an approved manner and the other leaf shall be fitted with a lock, the striking plate of which shall be fixed to the first leaf.

Where indicated on the drawings, doors shall be fitted with louvred ventilation grills of approved design, backed with insect and vermin-proof gauze screening.

(d) Door-locks and handles

All door-locks shall comply with the requirements of SABS 4 and shall be of approved manufacture and pattern. All locks shall be supplied with two keys.

External doors shall be fitted with two-lever mortice locks.

All locks shall be properly installed and, after completion, striker plates shall be adjusted and the locks serviced.

Door-handles shall be of cast zinc of approved manufacture and pattern.

PA 03.2

INSTALLATION OF DOORS

All built-in door frames shall be set straight, plumb and level, and shall operate to the satisfaction of the Engineer after fixing has been completed.

Fittings shall be either removed, or wrapped and protected from damage, until all rough trades have been completed.

PA 04 **CARPENTRY AND JOINERY**

PA 04.1 **GENERAL**

(a) Materials

All timber used for structural purposes shall be of merchantable grade and shall comply with the requirements of SABS 563 and SABS 1245. Structural timber shall be carefully selected and of the best quality, free from large or dead knots, shakes, waney edges or other defects. Purlins and brandering shall comply with the requirements of SABS 653. Finger-jointed structural timber shall comply with the requirements of SABS 096 and laminated timber with the requirements of SABS 1089.

Unless otherwise specified, all materials shall conform to the appropriate SABS or BS Specification where such standards exist for nails, screws, bolts, adhesives, etc.

(b) Preservative treatment

All structural timber shall be given a preservative treatment suitable for the duty for which the timber is intended in accordance with SABS 05, and no untreated timber shall be used. The preservative treatment shall not impair the final finish. The timber shall be impregnated throughout. When surface coating is specified, the compounds applied on the surfaces of the timber shall form an unbroken film.

PA 04.2 **CARPENTRY WORK**

(a) Scope of work

Carpentry work shall be carried out in a manner consistent with good workmanship and in compliance with the Drawings.

(b) Dimensions

Unwrought timber shall be as sawn and shall be to the dimensions and within the tolerances specified in the relevant SABS Standard Specifications mentioned in subclause PA 05.1(a).

(a) Timber roof construction

The plates, joists, rafters, purlins, brandering and other pieces used for the construction of the roof and trusses shall be of the dimensions, spacing and construction as shown on the Drawings.

All the joints in the framework shall be of the most appropriate type, accurately formed and adequately secured with fasteners as specified.

PA 05 **ROOF SHEETING AND ACCESSORIES**

Roof sheeting and accessories shall comply with and will be measured and paid for under SABS 1200 HB.

PA 06 **PLUMBING**

PA 06.1 **MATERIALS**

(a) General

All materials shall be of the best quality and shall be approved by the Engineer before installation. Cracked, chipped, dented or faulty items or materials shall be

replaced at the Contractor's expense. Glazed ceramic sanitary ware shall comply with the requirements of SABS 497 and all other materials shall comply with the standards as specified, scheduled or shown on the Drawings.

(b) Water closet (WC) suites

WC suites shall consist of a white plastic closet with an S or P trap and seat lugs, a 14 litre low-level matching flat-bottomed flushing cistern placed and fixed on the closet, or a suspended cistern with the flush pipe connected to the flushing rim of the closet with rubber cone joints, and a solid heavy-duty plastic seat with cover, hinges and buffers.

(c) Wash-troughs

Wash-troughs shall be of precast concrete wall mounted on a pair of precast concrete stands, and fitted with chromium-plated fittings consisting of tap, outlet and chain, and supplied with a plug and an anti-siphon trap.

(d) Pipes and tubing

Cast-iron and steel pipes used in plumbing work shall comply with the requirements of SABS 746 and SABS 62 respectively. Copper tubing shall comply with the requirements of SABS 460 and malleable cast-iron fittings with SABS 509.

(e) Tap

Supply and install 15mm brass hose bib-tap.

PA 06.2

CONSTRUCTION

Plumbing shall be carried out strictly in accordance with the Drawings and with the National Building Regulations, with specific reference to Government Notice R1875 dated 31 August 1979.

Steel pipes and their malleable cast-iron fittings shall be joined with red lead and hemp, lead pipes shall have wiped soldered joints, and cast-iron pipes shall be joined by caulking with hemp and metallic lead.

Soil pipes from WCs shall have an internal diameter of at least 100 mm and shall be fitted with a pan connector and an access bend (or an access junction where a vent pipe is used), and carried through walls and into the ground for connection to the sewer. Vent pipes shall be fitted with approved two-way vent valve.

Waste pipes from wash-troughs shall have an internal diameter of at least 40 mm and shall discharge into WC soil pipes. Bends for waste pipes shall incorporate cleaning eyes.

PA 07

PAINTING

PA 07.1

GENERAL

No paint shall be applied to any surface containing traces of dust, grit, grease, oil, loose rust, millscale or corrosion products of any kind or to any surface that is not free from moisture. Where necessary, surfaces shall be thoroughly washed to remove all traces of soluble salts and/or corrosive air-borne contaminants prior to painting, and the surfaces shall be dried and painted immediately thereafter.

Surfaces of members which are to rest on concrete or other floors or which will be otherwise inaccessible after erection shall receive the full paint system prior to erection.

Damaged paint areas on metal surfaces shall be cleaned, rust spots removed where applicable and the surrounding paint which is still intact shall be feathered for a distance of 20 mm beyond the damaged area. Spot priming and repair shall consist of all the coats previously applied and shall overlap the damaged area.

Damaged galvanised areas shall be cleaned and any rust spots and any flakes of the coating surrounding the damaged area removed. The coating shall then be restored by zinc spraying or soldering, or painting with a zinc-rich paint, as may be approved by the Engineer.

Where the shop coat is allowed to age for a few months before the final painting is done, light sanding or rubbing with steel wool or scrubbing with clean water using a bristle brush shall be carried out.

Each priming coat and each undercoat of paint shall be inspected and approved by the Engineer before any subsequent undercoat or finishing coat is applied.

All finishing colours shall be as shown on the Drawings, or as directed by the Engineer.

PA 07.2

MATERIALS

Paints shall comply with the requirements of the appropriate Specifications below:

(a) Primers

SABS 679 :	Zinc chromate for steel
SABS 723 :	Etch-wash primer for metals
SABS 926 :	Zinc-rich epoxy for steel

(b) Undercoats

SABS 681 :	For all undercoats
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(c) Finishing coats

SABS 684 :	For exterior use on steel
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The Contractor shall furnish the Engineer with the following information and details regarding the paints and decorative materials for the painting system he proposes to use, for written approval:

- (i) The name of the manufacturer and trade name
- (ii) The brand, type or grade of paint and the appropriate SABS Specification
- (iii) Manufacturer's data sheets, colour references, instructions for use, including surface preparation, sealers, primers, undercoats, finishing coats, coat thicknesses and curing periods, which shall all be considered as being part of these Specifications if approved by the Engineer
- (iv) Safeguards to protect the applied paint from damage until the work is accepted by the Engineer
- (v) The shelf or pot life of materials, if applicable

- (vi) An undertaking that the proposed paint system is suitable for its intended use and that the various coats of paint are compatible with one another

Where proprietary brands are used, the manufacturer's priming and all subsequent coats of paint suitable for that particular brand shall be employed in accordance with the manufacturer's instructions.

No other materials of a similar nature and quality or from another manufacturer may be used instead of those approved, unless written permission to do so has been obtained from the Engineer.

All materials shall be brought onto the Site in containers sealed by the manufacturer. Paints of a different quality, type, brand or colour shall not be mixed, or thinned and shall not be adulterated in any way, but shall be used as supplied by the manufacturer. Any mixing or tinting required shall be carried out by the manufacturer.

Tinting of paint on the Site by the Contractor will only be allowed with the written permission of the manufacturer and the Engineer.

PA 07.3 INSPECTION AND PRELIMINARY WORK

Before commencing paintwork, the Contractor shall carefully inspect the surfaces to be painted to satisfy himself that the surfaces are in a satisfactory or acceptable condition to receive the paint system specified.

All metal fittings and fastenings shall be removed where applicable before the preparatory processes are commenced. On completion, the metal fittings and fastenings shall be cleaned and refitted in position.

PA 07.4 WORKMANSHIP AND FINISHES

Paint may be applied by brush or roller depending on the materials used, the surface to be painted, and the manufacturer's instructions.

Every coat of paint, irrespective of the method of application, shall be adequately and permanently keyed or bonded to the base material or previously applied coat, and shall be evenly distributed, continuous, free from sags, runs, brush marks, pin holes or other imperfections, and shall dry to a smooth finish.

Undercoats shall be tinted by the manufacturer to distinguish between successive coats.

The final coats or finishing coats of paint shall be applied after all the other work in the vicinity has been completed.

The painter shall keep some of the final paint in reserve in the event of his having to make good any patching which may be required as a result of damage or unforeseen circumstances.

All inflammable materials, comprising solvents, thinners, wiping cloths, etc, shall be placed in tightly closed containers and properly disposed of.

PA 07.5 PAINTING OF METAL SURFACES

- (a) General

Wherever possible, all painting shall be done at the manufacturer's works, but where this is not feasible, the Engineer may permit the application of the undercoat and finishing coats to be carried out on the Site, in which case a prime coat shall be

applied at the manufacturer's works prior to the members being despatched to the Works.

(b) Surface preparation

The preparation of metal surfaces shall comply with SABS Code of Practice 064 and shall receive the greatest care to ensure rust-free conditions prior to the paint system being applied.

All surfaces shall be prepared by removing loose paint, rust, plaster, scale, dust, dirt, grease, etc and by repairing or patching defective paint surfaces before painting or repainting. Damaged shop-primed surfaces shall be thoroughly cleaned of rust and patched with a prime coat.

(c) Paint application

(i) Iron and steel work

All iron and steel work shall be properly primed with a red-lead-based primer where steel work is likely to be exposed to the elements for longer than 30 days. Zinc-chromate primer may be used where overpainting will be completed within 30 days of priming. Metal-etch wash primers may be used under dry conditions where overpainting will be completed within 24 hours of priming. The dry-film thickness of the prime coat shall not be less than 0,300 mm.

After priming, one coat of universal undercoat shall be applied. If necessary, the undercoat shall be tinted to a shade just lighter than the desired finish with approved liquid stainers. The dry-film thickness shall not be less than 0,250 mm.

The two finishing coats shall either be of alkyd resin-based synthetic enamel, gloss or matt oil paint, or as specified elsewhere. The dry-film thickness shall not be less than 0,250 mm per coat.

When mating surfaces are brought together, both surfaces shall have been given the full treatment specified, but where this cannot be done, each surface shall be given a copious coating of primer and the surfaces drawn together while the paint is still wet.

The portion of structural steel members to be buried in soil, and all bases to a height of 500 mm shall be given two coats of an epoxy-tar primer instead of the zinc-chromate primer specified for other surfaces.

The surfaces of steel and cast-iron articles, such as floor gratings, grids and manhole covers, shall, after a thorough brushing to remove loose rust, be painted with two coats of epoxy-tar paint, each at least 0,230 mm thick.

PA 07.6

PAINT THICKNESS

Unless otherwise specified, all coats of paint, whether prime coat, undercoat or finishing coat, shall have a dry-film thickness of not less than 0,200 mm, irrespective of the method of application.

PA 07.7

INSPECTION

The Contractor shall provide the necessary equipment to establish whether the primers, undercoats and finishing coats have been applied to the correct thickness according to

the correct applications. The Engineer may take samples of the paints during painting operations for testing and quality control.

PA 07.8 SOLAR LIGHT AND PANEL (10W Solar Lighting Kit)

The specification is as follows:

- Charging time: 5 hours.
- Battery capacity: 4Ah/12.8VDC (51.2Wh).
- Working hours: 8 hours for 1 x 2W LED lamp.
- PV module type: Polycrystalline Silicon.
- PV max power: 10W.
- PV voltage: 18V.
- Battery cycle performance: 1000.
- LED indicators: Solar charging, battery power, and load status.
- Lamp power: 2W.
- Protection features: Overcharge protection, over-discharge protection.
- Overcurrent protection.
- Short circuit protection.
- PV polarity reverse connection protection
- Battery compartment must be openable, and the IP rating must be 60
- Solar light and panel to be mounted/ fixed

PA 08 MEASUREMENT AND PAYMENT

The rates shall be as per items allowed in the Bill of Quantities and payments shall be made as per the units and stages below:

B805.13	Platform Preparation - excavate to a minimum depth of 300mm and dispose material, import G5 and compact to 93% Mod ASSHTO density, Rate to include identification of material and transportation (SC).....	Unit: number
B805.14	15Mpa Micro fibre Concrete Raft foundation	Unit: number
B805.15	Superstructure and roofing (including brickwork, door, door frame, ironmongery, bagging, backwash beam filling and roofing).....	Unit: number
B805.16	Tiling and grouting including plastic end strip... ..	Unit: number
B805.17	Plumbing (including concrete wash trough, sealed with epoxy, toilet,cistern, pipework - water and sewer, holders bats)	Unit: number
B805.18	Solar Light and Panel (10W Solar Lighting Kit)	Unit: number
B805.19	Cut and fit 20mm diameter pipe to existing water supply	Unit: number
B805.20	Supply and install 20mm equal T-piece adaptor	Unit: number
B805.21	Supply and install 15mm brass hose bib-tap	Unit: number
B805.22	Extraover for the disabled	Unit: number

The unit of measurement for items B805.13 to B805.22 is the number as scheduled for each item.

The rates shall include full compensation for all labour, material, plant, equipment, transport, etc, manufacturing or providing, building and installing each item complete

as scheduled and shown on the Drawings, and further include all corrosion protection where applicable.

Payments will only be made upon completion of the item and approval by the Engineer.

B805.23 User Agreement and Happy Letters..... Unit: number

SERIES 9: QUALITY CONTROL

SECTION B903: TESTING

B903.06 Other special tests requested by the Engineer

13. Measurement and Payment

Add the following new item:

“Item	Unit
B903.07	Independent Geotechnical Laboratory/Engineers Controls

Omit the first paragraph under section 02 (testing laboratories and equipment and add the following:

“For engineers commissioned tests, the Contractor shall be instructed by the Engineer to appoint an independent Geotechnical/Civil Materials Laboratory that is accredited with SANA’s (ISO/IEC17025:2017) for applicable test methods. The Independent Laboratory shall meet the following minimum requirement to be considered for appointment:

- Accredited Independent Laboratory through the Engineers Procurement Process
- Tax Compliancy at the Time of Appointment
- Minimum Level 1 BBBEE compliancy
- Company Registration with the National Treasury Department (CSD)
- Professional Indemnity of minimum R2000,000.00
- Accredited Testing Facilities within the City of Tshwane jurisdiction

B903.07.01 Remuneration and other costs for the combined laboratory (Prov Sum)

B903.07.02 Charge on Provisional Sum under B903.07.01 percentage (%)

Expenditure under this item will be made in accordance with the general conditions of contract.

Payment under Item B903.07 shall be made once the remuneration and other costs for the combined laboratory has been processed and signed to the satisfaction of the Engineer, but only on submission of a proof of payment by the Contractor. Payment for the remuneration and other costs for the combined laboratory will be made in the next monthly certificate.

Contract No: HHS 02-2023/24 Tender for the appointment of a contractor for the construction of water and sewer reticulation services in Andeon Extension 37 for a period of 36 months.

Part C3: Scope of Work

Section C3.7: Socio-Economic Plan and Community Participation and Upliftment Through Projects

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR FOR THE
CONSTRUCTION OF WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS**

**C3.7 SOCIO-ECONOMIC PLAN AND COMMUNITY
PARTICIPATION AND UPLIFTMENT THROUGH
PROJECTS**

SOCIO-ECONOMIC PLAN AND COMMUNITY PARTICIPATION AND UPLIFTMENT THROUGH PROJECTS

1. SOCIO-ECONOMIC PLAN

- 1.1 The successful tenderer shall provide an economic plan which will include the job creation plan (i.e. skills required and the number for each skill). The job creation plan where applicable should include interns.
- 1.2 The successful tenderer shall provide details of all training to be provided, through on-site, accredited training and formal training for employees at all levels, to ensure that they enhance their competence, and are able to provide the required operation and maintenance skills across the various process streams. This shall also include SHEQ training.
- 1.3 The successful tenderer shall also detail the capacity building and skills transfer initiatives to be implemented so that the City can manage the facility on contract completion, in a seamless and sustainable manner.

Contract No: HHS 02-2023/24 Tender for the appointment of a contractor for the construction of water and sewer reticulation services in Andeon Extension 37 for a period of 36 months.
Part C3: Scope of Work
Section C3.8: References to the Scope of Works in terms of the occupational Health and Safety act and regulations: Health and

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONSTRUCTION
CONTRACTOR FOR WATER AND SEWER RETICULATION
SERVICES IN ANDEON EXTENSION 37 FOR A PERIOD OF 36
MONTHS**

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

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

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ANNEXURES

Annexure 1

Appointment letters

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- 1.2 Appointment of Construction Site Health and Safety Officer

- 1.3 Appointment of Construction Vehicle and Mobile Plant Inspector
- 1.4 Appointment of Subcontractor
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Annexure 2 Notification Templates

2.1 Notification of Construction Work

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

1. SCOPE

1.1 Scope of Specification

This specification covers the principles, duties, responsibilities, liabilities, and requirements applicable in respect of health and safety in the workplace on construction work.

This document constitutes the Employers' Health and Safety Specification as defined in Section 5(1)(b) of the Construction Regulations, 2014 of the Occupational Health and Safety Act (Act 85 of 1993).

This specification applies to tunneling although the minimum requirements for tunneling are contained in the Mines Health and Safety Act. This specification however does not apply to underground construction at this point in time as covered by the Mines Health and Safety Act, 1996 (Act 29 of 1996) as amended.

1.2 Philosophy contingencies

Some of the terms and requirements of the Occupational Health and Safety Act and its Regulations may be novel to Contractors. This specification has therefore been prepared as an instructive guideline without being prescriptive, constraining the competitive advantage or interfering with the legal obligations of the responding parties.

The Health and Safety Plan required in terms Section 7(1)(a) of Construction Regulation 2014 as well as this specification may also be novel to Contractors. This specification has therefore been prepared in such a way to allow Contractors to employ the services of specialist consultants for the preparation and implementation of the same during the construction of the Works.

Health and safety can only be assured on construction works if all stakeholders buy into the Health and Safety plan and when the health and safety of all is an integrated line accountability of all management staff and workers on site. The management systems that are provided for in this specification is to enable the performance statistics of health and safety to be regularly captured, the intention of these systems is not to achieve health and safety by policing the conduct of the Contractor's employees but rather to ensure legal and regulatory compliance.

In addition to ensuring health and safety, the intention of the management system is rather to commercially exploit the benefit of doing things right the first time that goes hand in hand with the highest standard of health and safety performance. Accidents and injuries never pay. The loss of production and the cost of injuries, however, relatively infrequent they may be, far outweigh the effort required to maintain the highest standard of health and safety on any construction project.

The specification accordingly provides for:

- a) Independent periodic audits to ensure an unbiased pursuit of health and safety,
- b) Follow-up audits to ensure the implementation of prescribed remedial actions,
- c) The review of the efficiency and effectiveness of the Contractor's Health and Safety Plan,
- d) The preparation of regular reports of inspections and accidents to enable the tracking of changes in health and safety performance,
- e) The monitoring of conditions on a continuously pro-active basis to ensure that hazards are without delay identified, assessed and remedied should it threaten the health and safety of persons and property,
- f) Ad hoc inspections to ensure that health and safety is pursued with dedication and not out of intimidation or coercion, and
- g) Development of all aspects of the Contractor's Health and Safety Plan.

The fundamental intention of this specification is that the preservation of health and safety will become a core value of all involved during the construction of the Works.

This Specification does not require the preparation of an unduly extensive or complex risk assessment. The Contractor should rather prepare a risk assessment which takes the size of the project, the size of the Contractor's organization, the conditions of the workplace and the nature, complexity and significance of the hazards likely to be encountered during the execution of the Works into account. All risk assessments must be done in accordance with Section 9 of Construction Regulation 2014.

1.3 Consultant OHS Inspector

Candice Projects & Safety Concern will be representing the client/client's agent as their Occupational Health and safety agent in accordance with Section 5(6) of the Construction Regulations of 2014.

2. INTERPRETATIONS

2.1 Supporting specifications

Where this specification is required for a project, the following legislation, regulations, and specifications (as amended) shall, inter alia, form part of the contract document:

- a) Occupational Health and Safety Act, (Act 85 of 1993), and all regulations associated with the scope of works which shall include, but shall not be limited to the following:
 - Construction Regulations, 2014.
 - Regulations for Hazardous Biological Agents, 2001 read with COVID-19 OHS Directives issued under the Disaster Management Act (Act 57 of 2002).
 - General Safety Regulations, 1986.
 - General Administrative Regulations, 2003,
 - Driven Machinery Regulations, 2015,
 - Electrical Installation Regulations, 2009,

- Electrical Machinery Regulations, 2011,
 - Environmental Regulations for Workplaces, 1987.
 - Facilities Regulations, 2004.
 - Noise-Induced Hearing Loss Regulations, 2003
- b) Clauses 4.5.2, 4.6, 4.7 and 4.8 of the Contract Data.
- c) Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005, of City of Tshwane Metropolitan Municipality.

2.2 Application

This specification contains specific clauses of various regulations that are applicable to the scope of work under the provisions of the Occupational Health and Safety Act, (Act 85 of 1993) and its Regulations, in particular the Construction Regulations, 2014 promulgated on 07 February 2014 in terms of Section 43 of the OHS Act.

2.3 Definitions

In the Contract (as defined in clause 1. (1)(e) of the Conditions of Contract) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

- (a) "Assistant Construction Supervisor" means a competent person appointed in accordance with Section 8(8) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (b) "Batch Plant/Bulk Mixing Plant Supervisor" means a competent person appointed in accordance with Section 20(1) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (c) "Construction Health and Safety Officer" means a competent person appointed in accordance with Section 8(5) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (d) "Construction Supervisor" means a competent person appointed on a full-time basis in accordance with Section 8(7) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (e) "Construction Vehicles & Mobile Plant Operator" means a competent person appointed in accordance with Section 23(1)(d) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (f) "Contractor" means the natural or juristic person or partnership whose tender has been accepted by or on behalf of the Employer and, who is defined as the Principal Contractor in Section 5(1)(k) of the Construction Regulations, 2014.
- (g) "Demolition Work Supervisor" means a competent person appointed in accordance with Section 14(1) of the Construction Regulations, 2014, in writing by the Contractor with written notification to the Engineer.
- (h) "Employer's Designer" means the natural or juristic person or partnership named in the Appendix to Tender or any other natural or juristic person or partnership appointed from time to time by the Employer for the design of the portion of the Permanent Works which the Employer is responsible to design in terms of this Contract.

- (i) “Contractor’s Designer” means the natural or juristic person or partnership appointed from time to time by the Contractor and notified in writing to the Engineer and Employer for the design of the portion of the Permanent Works which the Contractor is responsible to design in terms of this Contract, and for the design of the Temporary Works.
- (j) “Electrical Temporary Installation Inspector” means a competent person appointed in accordance with Section 24(d) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (k) “Employer” means the natural or juristic person or partnership for whom the Works are to be executed, who is named as the Employer in the Conditions of Contract and who is known as the “Client”, in the Occupational Health and Safety Act, 1993 and its regulations.
- (l) “Engineer” means the natural or juristic person or partnership named as the “Employer’s Agent” in the Conditions of Contract (clause 1.1.1.16) and appointed by the Employer to act as the Engineer in terms of this Contract.
- (m) “Engineer’s Representative” means the person appointed by the Engineer in terms of Clause 1.1.1.17 of the Conditions of Contract.
- (n) “Excavation Work Supervisor” means a competent person appointed in accordance with Section 13(1) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (o) “Explosive Powered Tools Issuer” means a competent person appointed in accordance with Section 21(2)(g)(i) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (p) “Fall Protection Developer” means a competent person appointed in accordance with Section 10(1)(a) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (q) “Fire Extinguisher Inspector” means a competent person appointed in accordance with Section 29(h) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (r) “Temporary Works Designer” means a competent person appointed in accordance with Section 12(1) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (s) “Temporary Works Supervisor” means a competent person appointed in accordance with Section 12(2) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (t) “Hazard” means any object, action or condition that can potentially harm the health and safety of persons or property.
- (u) “Hazard Identification” means the identification and documenting of existing or expected hazards.
- (v) “Health and Safety Consultant” means the natural or juristic person or partnership appointed by the Contractor to assist in any matters related to health and safety on the construction site.
- (w) “Health and Safety Plan” means a documented plan, prepared by the Contractor, of work procedures to mitigate, reduce or control hazards identified.
- (x) “Health and Safety Specification” means a documented specification of all health and safety requirements and criteria to mitigate, reduce or control hazards identified.
- (y) “Health and Safety Representative” means the person/s designated in accordance with Section 17 of the Occupational Health and Safety Act.

- (z) "Ladder Inspector" means a competent person appointed in accordance with Section 13A (1) of the General Safety Regulations, in writing by the Contractor, with written notification to the Engineer.
- (aa) "Material Hoist Inspector" means a competent person appointed in accordance with Section 19(8)(a) of the Construction Regulations, 2014 in writing by the Contractor, with written notification to the Engineer.
- (bb) "Method Statement" means a document detailing the key activities to mitigate, reduce or control hazards identified.
- (cc) "Professional Engineer" means any person employed from time to time by either the Employer or Contractor who holds registration as either a Professional Engineer or Professional Certificated Engineer under the Engineering Profession Act, 2000 (Act No. 46 of 2000).
- (dd) "Professional Technologist" means any person employed from time to time by either the Employer or Contractor who holds registration as a Professional Technologist under the Engineering Profession Act, 2000 (Act No. 46 of 2000).
- (ee) "Risk" means the likely occurrence and impact of a hazard.
- (ff) "Risk Assessment" means a program carried out to identify and evaluate the likely occurrence and impact of all hazards.
- (gg) "Risk Assessor" means a competent person appointed in accordance with Section 9(1) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (hh) "Safety Agent" means a competent natural or juristic person or partnership named in the Appendix to Tender or any other person appointed from time to time by the Employer and notified in writing to the Contractor to act on behalf of the Employer for the purposes of this specification.
- (ii) "Scaffolding Supervisor" means a competent person appointed in accordance with Section 16(2) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (jj) "Stacking Supervisor" means a competent person appointed in accordance with Section 28(a) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.
- (kk) "Subcontractor" means the natural or juristic person or partnership who is appointed by the Contractor with prior consent of the Engineer to execute certain tasks associated with the Works and who is also an employer as defined in section 1 of the Occupational Health and Safety Act.
- (ll) "Suspended Platforms Supervisor" means a competent person appointed in accordance with Section 17(1) of the Construction Regulations, 2014, in writing by the Contractor, with written notification to the Engineer.

2.4 Duties, responsibilities, and liabilities

2.4.1 Principal Parties

This section covers the duties, responsibilities, and liabilities of the following principal parties:

- Employer
- Employer's Safety Agent

- Contractor
- Subcontractor
- Employer's Designer
- Contractor's Designer

The duties and responsibilities of the various principal parties are briefly summarized below (the numbers indicated correspond to the applicable regulation number in the Construction Regulations, 2014). The intention of the summary is not to replace the Regulations but is included for indicative purposes. The liabilities of each party are also shown.

a) Employer

In addition to the duties, responsibilities and liabilities specified in the Conditions of Contract, the Employer shall have the following duties and responsibilities to ensure compliance with the Construction Regulations, 2014:

5.(1) A client must –

- prepare a baseline risk assessment for an intended construction work project;
- prepare a suitable, sufficiently documented and coherent site-specific health and safety specification for the intended construction work based on the baseline risk assessment contemplated in paragraph (a);
- provide the designer with the health and safety specification contemplated in paragraph (b);
- ensure that the designer takes the prepared health and safety specification into consideration during the design stage;
- ensure that the designer carries out all responsibilities contemplated in regulation 6;
- include the health and safety specification in the tender documents;
- ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures;
- ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely;
- take reasonable steps to ensure co-operation between all contractors appointed by the client to enable each of those contractors to comply with these Regulations;
- ensure before any work commences on a site that every principal contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer as contemplated in the Compensation for Occupational Injuries and Diseases Act, 1993 (Act No. 130 of 1993);
- appoint every principal contractor in writing for the project or part thereof on the construction site;
- discuss and negotiate with the principal contractor the contents of the principal contractor's health and safety plan contemplated in regulation 7(1), and must thereafter finally approve that plan for implementation;
- ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor;
- take reasonable steps to ensure that each contractor's health and safety plan contemplated in regulation 7(1)(a) is implemented and maintained;

- (o) ensure that periodic health and safety audits and document verification are conducted at intervals mutually agreed upon between the principal contractor and any contractor, but at least once every 30 days;
- (p) ensure that a copy of the health and safety audit report contemplated in paragraph (o) is provided to the principal contractor within seven days after the audit;
- (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;
- (r) where changes are brought about to the design or construction work, make sufficient health and safety information and appropriate resources available to the principal contractor to execute the work safely; and
- (s) ensure that the health and safety file contemplated in regulation 7(1)(b) is kept and maintained by the principal contractor.

In terms of Clause 4.6 of the Contract Data, the Contractor accepts sole liability as mandatory for due compliance in accordance with Section 37(2) of the Occupational Health and Safety Act, (Act 85 of 1993) and all regulations associated with the scope of work for which the contractor have been appointed. The Employer will be responsible for the duties imposed on the Employer in terms of the OHS Act and relevant regulations.

b) Employer's Safety Agent

Where the Employer decides to appoint an agent in accordance with either Section 5(5) or Section 5(6) of the Construction Regulations, 2014, the duties and responsibilities as imposed by these regulations upon the Employer shall as far as reasonably practicable apply to his Safety Agent.

c) Contractor

In addition to the duties, responsibilities and liabilities specified in the Conditions of Contract, the Contractor shall have the following duties and responsibilities to ensure compliance with the Construction Regulations, 2014:

Only some sections of the Construction Regulations 2014 have been highlighted here but it does not mean that the Contractor does not have to comply with the sections not highlighted here.

- 4(1) Notify the provincial director in writing (Annexure 2 or similar form) 7 days prior to the commencement of the intended construction works. Ensure that a copy of the notification letter is kept on site for inspection on request as well as proof of its receipt by the Department of Labour.
- 7(1)(a) Prepare a Health and Safety Plan which includes a COVID-19 Response Plan, based on the Employer's health and safety specifications.
- 7(1)(a) Implement the Health and Safety Plan from the Commencement Date until completion of the Works.
- 7(1)(b) Open and keep on site a health and safety file which must include all documentation required by the OHS Act and the associated regulations as well

- as the Employers health and safety specifications, which shall be made available on request of an Inspector, the employer or employers' agent.
- 7(4) Ensure co-operation between all contractors to enable each to comply with the provisions of Construction Regulations.
- 7(1)(c)(i) Provide any Tenderer or Sub-Contractor with copies of the Employer's health and safety specifications.
- 7(1)(c)(v) Appoint each Sub-Contractor in writing for their part of the project.
- 7(1)(c)(vi) Ensure that each Subcontractor's Health and Safety Management Plan is implemented and maintained on their portion of the Works.
- 7(1)(c)(vii) Ensure that periodic site audits and document verification is done at regular intervals as agreed between Principal Contractor and Sub-Contractor not exceeding 30 days in between.
- 7(1)(c)(viii) Stop any Sub-Contractor from executing Works, not in accordance with, the Employers Health and Specifications and/or the Principal Contractors Health and Safety Plan or which poses a threat to the health and safety of persons.
- 7(1)(c)(ix) Ensure that sufficient health and safety information and appropriate resources are made available where applicable, to the Sub-Contractor when changes are brought about to the design of the Works.
- 7(1)(c)(iv) Ensure that his Sub-Contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works.
- 7(1)(c)(ii) Ensure that his Tenderers have made provision in their tenders for the cost of health and safety measures during the construction of the Works in line with the requirements of the Employers Health and Safety Specification and his Health and Safety Management Plan.
- 7(1)(c)(x) Discuss and negotiate the contents of his Sub-Contractor's Health and Safety Plan, to ensure compliance with the Employer's Health and Safety Specification and consistent with the Contractors Health and Safety Management Plan.
- 7(2)(a) Approve his Sub-Contractor's Health and Safety Plan for implementation and to keep records of all such approvals on site for auditing purposes.
- 7(2)(a) On request, make available a copy of his and his Sub-Contractor's Health and Safety Plan to an employee, inspector, contractor, the Employer or the Employer's Safety Agent.
- 7(2)(b) Open and keep on site a health and safety file which must include all documentation required by the OHS Act and the associated regulations as well as the Employers health and safety specifications and the Principal Contractors Health and Safety Plan, which shall be made available on request of an Inspector, the employer or employers' agent and the Principal Contractor or its agent.
- 7(e) Hand over a consolidated health and safety file to the employer upon completion of the Works.
- 7(f) Ensure that a comprehensive and updated list of all his Sub-Contractors (including their respective sub-contracting agreements) are included in the health and safety files.
- 7(c)(iii) Satisfy himself on the competencies and resources of the Sub-Contractor he intends appointing.

- 7(5) Ensure that all employees undergo health and safety induction prior to permitting each employee access to the Works. The Contractor shall ensure that proof of such is available on site for auditing purposes.
- 7(6) Ensure that all visitors undergo health and safety induction and are provided with the necessary personal protective equipment. The Contractor shall ensure that proof of such is available on site for auditing purposes.
- 7(7) Ensure that every employee is in possession and carries at all times his proof of health and safety induction training.
- 8(5) The Contractor shall after due consideration of the complexity, size and potential hazards and associated risks as well as controls towards the mitigation of risks, appoint a safety officer in writing. The contractor shall submit a detailed CV of the envisaged Safety Officer appointment for final acceptance thereof by the Employer or his Safety Agent.
- 8(6) Satisfy himself with the competencies and resources of the construction safety officer he intends appointing.
- 8(7) Appoint a construction supervisor.
- 8(8) Appoint assistant construction supervisors if required by an inspector.
- 8(10) Appoint individual construction supervisors for individual construction sites.
- 9(1) Perform a risk assessment prior to the commencement of any construction work.
- 9(2) Analyze ergonomic related hazards and address the same in the risk assessment.
- 9(3) Ensure that all employees are informed, instructed and trained regarding any hazard and the related work procedures before any work commences. The contractor shall ensure that proof of such is available on site for auditing purposes.
- 9(4) Ensure that all Subcontractors are informed regarding any hazard as stipulated in the risk assessment. Further that Subcontractors conduct their own risk assessments as and when required
- 9(5) Consult with the health and safety committee on the development, monitoring and review of the risk assessment.
- 9(6) On request, make available copies of the risk assessments.
- 11(1)(a) Prevent the uncontrolled collapse of any structure which may become unstable due to the carrying out of construction work.
- 11(1)(b) Ensure that no structure is loaded in an unsafe manner.
- 11(1)(c) Ensure that all construction drawings are on site and available on request by an inspector, contractors, Employer, the Employer's Safety Agent or employee.

In terms of Clause 4.6 of the Contract Data, it shall be deemed that the parties to this Contract have agreed in writing in terms of Section 37(2) of the Occupational Health and Safety Act, 1993 that 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 and all its regulations, including the Constructions Regulations, 2014, for which he is liable as mandatory.

d) Sub-Contractor

To ensure compliance with the Construction Regulations, the Subcontractor shall:

- 7(2)(a) Demonstrate a Health and Safety Plan based on the Employer's health and safety specification.
- 7(2)(a) Apply his Health and Safety Plan from the Commencement Date and until completion of the Works.
- 7(2)(c) Satisfy himself on the competencies and resources of any Sub-Contractor he intends appointing.
- 7(2)(e) Provide the Contractor with any information which might affect the health and safety of any person or which might justify a review of the Health and Safety Plan.

In addition to the above items, the Sub-Contractor shall, to ensure compliance with all regulations associated with the scope of work for which he was appointed.

e) Duties of Designer (Employer's Designer or Contractor's Designer)

To ensure compliance with the Construction Regulations, 2014, the Designer (as defined in Section 6 of the Construction Regulations, 2014) shall:

- 6(1)(c)(i) Make available to the Employer all relevant information affecting the pricing of the Works.
- 6(1)(c)(iii) Ensure that information relating to geo-sciences, designs loads, and the methods and sequencing of construction processes are made available to the Contractor in a report.
- 6(1)(d) Inform the Client/Employer of any hazards relating to the Works.
- 6(1)(d) Make available all information required for the safe execution of the Works.
- 6(1)(e) Not include dangerous procedures or hazardous materials in the structure's design which could be avoided.
- 6(1)(f) Make provision in the design of the Works for hazards likely to be encountered during its subsequent maintenance.
- 6(1)(g) Carry out inspections of the construction work during the construction period to ensure compliance with the designs.
- 6(1)(h) Stop any contractor from executing works not in accordance with the designs.
- 6(1)(i) Conduct a final inspection of the completed Works prior to its commissioning.
- 6(1)(i) Issue a completion certificate to the Contractor subsequent to a successful final inspection.
- 6(1)(j) Ensure that cognizance is taken of ergonomic design principles in order to minimize related hazards.

The Employer's Designer shall only accept responsibility to comply with the Construction Regulations, 2014 for that portion of the Permanent Works which the Employer is responsible to design in terms of the Contract.

The Contractor's Designer shall accept sole responsibility and liability to comply with the Construction Regulations, 2014 for that portion of the Permanent Works for which the Contractor is responsible to design in terms of the Contract as well as the design of the Temporary Works.

2.4.2 Secondary Parties

This section covers the duties, responsibilities, and liabilities of the following secondary parties:

- Construction Manager
- Construction Health and Safety Officer
- Contractor's Employees
- Fall Protection Developer
- Health and Safety Consultant
- Health and Safety Representative
- Risk Assessor

a) Construction Manager CR 8(1)

The Principal Contractor shall appoint in writing a full-time competent person as the Construction Manager for the intended project, with the duty of managing all the construction work on a single site, including the duty of ensuring that all occupational health and safety requirements are adhered to. In the absence of the Construction Manager an alternate person (assistant Construction Manager) shall be appointed under Section 8(2) of the construction Regulations 2014.

b) Construction Health and Safety Officer CR 8(5)

The Principal Contractor must appoint a Construction Health and Safety Officer with proof of registration with the statutory body approved by the chief inspector SACPCMP and the appointed person must be available full time on site.

Principal Contractor must appoint a Construction Health and Safety Officer with proof of registration with the statutory body approved by the chief inspector SACPCMP and the appointed person must be available full time on site.

The Contractor is responsible for the development of the position outcomes descriptors for the Construction Health and Safety Officer. This documentation shall be available on site for auditing purposes.

The Construction Health and Safety Officer shall if given an opportunity, provide an input into the Contractor's Health and Safety Plan in terms of CR 8 for the management and supervision of construction work.

c) Contractor's Employees

All employees will be responsible for safety on the construction site and the workplace as prescribed in Section 14 of the Occupational Health and Safety Act, (Act 85 of 1993) which is briefly summarized as follows:

- Take reasonable care for the health and safety of himself and of other persons who may be affected by his acts,

- Co-operate with his employer with regards to health and safety to ensure that his employer complies with requirements imposed on him,
- Obey the health and safety rules and procedures laid down by his employer,
- Report any unsafe or unhealthy situation to his employer or to the health and safety representative for his workplace,
- Immediately report any incident including near miss incidents, in which he was involved, or which has caused an injury to himself or others, and
- Assist in inquiries and incident investigations.

No employee shall intentionally or recklessly interfere with, damage or misuse anything which is in the interest of health and safety.

d) Fall Protection Developer CR 10(1)(a)

The Fall Protection Developer will be responsible for the preparation and maintenance of a fall protection plan to be implemented by the Contractor, in such a manner to ensure compliance with Section 10 of the Construction Regulations, 2014.

e) Health and Safety Consultant CR 5(6)

The Health and Safety Consultant shall assist the Contractor in any health and safety matters on the Works for which he is appointed.

f) Health and Safety Representative Section 17 of the OHS Act

The Health and Safety Representative shall fulfill the duties as set out in Section 17 of the Occupational Health and Safety Act, (Act 85 of 1993). A health and safety representative shall not incur any civil liability by reason of the fact only that he failed to do anything which he may do or is required to do in terms of the Act.

g) Risk Assessor CR 9(1)

The Risk Assessor shall facilitate the risk assessment process of the Contractor or Sub-Contractor. The Risk Assessor shall be responsible for the compilation and implementation of a management plan towards the continuous mitigation of identified risks to as low as is reasonably practicable. All risks shall be managed in accordance with Section 9 of the Construction Regulations 2014.

2.4.3 Supervisors, Inspectors and Issuers

This section covers the duties, responsibilities and liabilities of the following Supervisors, Inspectors, and Issuers likely to be found on the Works:

a) Construction Supervisor CR 8(7)

The Construction Supervisor shall be responsible for supervising the construction work inclusive of the implementation and maintenance of safe work practices on the construction site.

b) Construction Vehicle & Mobile Plant Inspector CR 23(1)

The Construction Vehicle and Mobile Plant Inspector will ensure the safety of all construction vehicles and plant in such a manner to ensure compliance with Section 23 of the Construction Regulations, 2014. The inspector will also be responsible for the regular inspection of all vehicles and plant and the recording of his findings. The Contractor shall ensure that proof of such is available on site for auditing purposes.

c) Demolition Work Supervisor CR 14(1)

The Demolition Work Supervisor will supervise and control all demolition work on the Works in such a matter to ensure compliance with Section 14 of the Construction Regulations, 2014. The supervisor will be responsible for all administration related to the demolition works. The Contractor shall ensure that proof of such is available on site for auditing purposes.

d) Electrical Temporary Installation Inspector CR 24(d)

The Electrical Temporary Installation Inspector will control all temporary electrical installations on the Works to ensure compliance with Section 24 of the Construction Regulations, 2014, the Electrical Installations Regulations, 1992 and SANS 0142. The Contractor shall ensure that proof of such is available on site for auditing purposes.

e) Excavation Work Supervisor CR 13(1)(a)

The Excavation Work Supervisor will supervise all excavation work on the Works in such a matter to ensure compliance with Section 13 of the Construction Regulations, 2014 and shall ensure that every excavation is inspected:

- On a daily basis before each shift,
- After every blasting operation,
- After an unexpected fall of ground,
- After substantial damage to supports, and
- After rains.

The Contractor shall ensure that proof of such is available on site for auditing purposes.

f) Explosive Power Tools Issuer CR 21(2)(g)(i)

The Explosives Power Tools issuer will control the issuing and collection of explosive tools, cartridges and nails or studs to ensure compliance with Section 21 of the Construction Regulations, 2014. The Contractor shall ensure that proof of such is available on site for auditing purposes.

g) Fire Extinguisher Inspector CR 29(h)

The Fire Extinguisher Inspector will be responsible for the operation and inspection of all firefighting equipment on the Works to ensure compliance with Section 29 of the Construction Regulations, 2014. The Contractor shall ensure that proof of such inspections is available on site for auditing purposes.

h) Ladder Inspector GSR 13A(1)

The Ladder Inspector will be responsible for the regular inspection and recording of his/her findings of all ladders on the Works and to ensure compliance with Section 13A of the General Safety Regulations. The Contractor shall ensure that proof of such is available on site for auditing purposes.

i) Material Hoist Inspector CR 19(8)(a)

The Material Hoist Inspector will be responsible for the daily inspection of material hoists or similar machinery and to ensure Works to ensure compliance with Section 19 of the Construction Regulations, 2014. The inspector must have experience pertaining to the erection and maintenance of all hoists on the Works. The inspector must be able to determine the serviceability of the entire material hoist including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices. The Contractor shall ensure that proof of such is available on site for auditing purposes.

j) Scaffolding Supervisor CR 16(1)

The Scaffold Supervisor will be required to supervise all scaffolding work operations carried out on the Works and to ensure compliance with Section 16 of the Construction Regulations, 2014 as well as ensure compliance with applicable SANS 10085-1:2014 Standards. The Contractor shall ensure that proof of such is available on site for auditing purposes.

k) Stacking and Storage Supervisor CR 28(a)

The Stacking Supervisor shall supervise the stacking and storage of all articles on site and shall be responsible to ensure compliance with Section 28 of the Construction Regulations, 2014.

l) Suspended Platform Supervisor CR 17(1)

The Suspended Platform Supervisor will supervise all suspended platform work operations carried out on the Works and to ensure compliance with Section 17 of the Construction Regulations, 2014. The supervisor will also see to it that all suspended platform erectors, operators, and inspectors are competent to carry out their work. The Contractor shall ensure that proof of such is available on site for auditing purposes.

3. GENERAL REQUIREMENTS OF HEALTH AND SAFETY PLAN & COVID-19 RESPONSE PLAN

3.1 Outline of COVID-19 Response Plan

It will be expected from the Contractor to include in his safety plan a COVID-19 Response Plan on how to accomplish the requirements relating to the Construction Regulations, 2014, Regulations for Hazardous Biological Agents read with COVID-19 OHS Directives issued under the Disaster Management Act (Act 57 of 2002) and related incorporated standards and regulations.

The following aspects must be covered in the Contractors COVID-19 Response Plan:

- The appointment of a COVID-19 Compliance Officer.
- The duties of the COVID-19 Compliance Officer.
- Strategies to prevent the spreading of COVID-19.
- Risk Assessments on high-risk areas, activities and employees.

- Develop Policies on:
 - COVID-19
 - Social Distancing
 - Protection of Vulnerable Employees
 - Medical Surveillance Policy
 - Transport Policy on Company Provided Transport as well as Public Transport (Protection of other commuters)

- Develop Procedures for:
 - Access Control and Screening Procedures for Employees and Visitors
 - Contact Tracing (Assisting the Department of Health)
 - Protection of vulnerable employees.
 - Reporting of positive cases.
 - Procedures following positive cases.
 - Resumption of work after positive cases.
 - Medical Surveillance of employees.
 - Hygiene in the Workplace
 - Social Distancing
 - Engineering methods (providing protective barriers)
 - Safe Work Procedures (where social distancing cannot be established)
 - Staggered work hours, tea times, lunch times etc.

- Awareness Programs focusing of providing critical information, safety tips, hygiene protocols, social distancing, the use of protective equipment etc.

Contractors should describe how their safety management systems will work and what control procedures they plan on using to ensure safety on the construction site

The following generic aspects should be covered in their safety plan

- What administrative procedures the Contractor envisages to use in the implementation and maintenance of the safety plan with reference to the construction site
- How continuous assessment of the safety plan will be assessed and implemented with respect to construction site
- What control systems the Contractor envisages to implement on site to support his safety program
- How the Contractor will ensure that he adheres to the construction regulations in respect of competent persons for appointments
- What external resources the Contractor envisages on using to ensure successful implementation and sustainability of the safety plan
- What training to employees the Contractor envisages and how he would go about to execute it?
- The Contractor should indicate which competent persons he plans on employing

During the tendering phase it will be expected from the tenderer to briefly explain how the abovementioned will be accomplished.

Once a successful tenderer has been appointed, the Contractor shall supply a detailed Health and Safety Plan for review by the Employer, prior to site mobilization, to ensure compliance with the Construction Regulations, 2014. Mobilization shall be dependent upon the acceptance of the Contractor's Health and Safety Management Plan by the Employer. The Contractor's Health and Safety Plan should include, but not be limited to, those sections indicated in Section 3.2 of this specification.

3.2 Outline of Health and Safety Plan

The Contractor's Health and Safety Plan prepared in accordance with this specification shall consist of at least the following sections and sub-sections:

1. Aim and Scope of Plan,
2. COVID-19 Response Plan,
3. Scope of Work
 - a. Main Construction Work,
 - b. Excavations,
 - i. Demarcation of excavations,
 - ii. Access and Egress,
 - iii. Shoring,
 - iv. Inspections,
 - v. Public Access,
 - c. Bulk Earthworks,
 - i. Clearing and Grubbing,
 - ii. Stockpiling,
 - iii. Borrow pits,
 - iv. Transporting,
 - v. Environmental Management Plan
 - d. Temporary Works,
 - i. Formworks,
 - ii. Support Works,
 - e. Road Works,
 - i. Traffic Accommodation Plan
4. Location of the Works
5. Risk Management,
 - a. Alternative Forms of Risk Assessment,
 - b. Methodology of Risk Assessment,
 - c. Elements of Risk Assessment,
 - i. Scope of assessment,
 - ii. Risks Identified,
 - iii. Risk Analysis,
 - iv. Risk Evaluation,
 - v. Risk Treatment,
 - vi. Monitoring and reviewing,
6. Incident Management,
 - a. Incident Management Procedures,
 - b. Reporting of Incidents,

- c. Incident and Accident Investigations,
7. Resources,
 - a. Health and Safety Staffing Organogram,
 - b. Supervisors, Inspectors, and Issuers,
 - c. Employees,
 - d. Sub-Contractors inclusive of their scope of work and their core resources,
 - e. Training,
 - f. Plant,
 - g. Vehicles,
 - h. Equipment
8. Medical Fitness of Employees
 - a. Entry Medical
 - b. Medical Surveillance of employees
 - c. Exit Medicals
9. Employee Facilities,
 - a. Facilities Management
 - b. Hygiene
10. Materials,
 - a. Temporary Materials
 - b. Permanent Materials
11. Categories of Work
12. Implementation of Health and Safety Plan,
 - a. Administrative systems,
 - b. Training,
 - c. Reporting,
 - d. Monitoring,
 - e. Inspections,
13. Auditing,
 - a. Internal audits,
 - b. Follow-up audits,
14. Financial Aspects,

4. COVID-19 RESPONSE PLAN

This section of the specification provides guidelines for the Contractor in preparation of their COVID-19 Response Plan:

In accordance with the COVID-19 Directives every employer must appoint a person who is part of management as a COVID-19 Compliance Officer.

The duties of the COVID-19 Compliance Officer must for part of the COVID-19 Response Plan. The duties must include:

- Developing of strategies to prevent the spreading of COVID-19 in the workplace.
- Conduct Risk Assessments on high-risk areas, activities and employees.
- Develop Policies on:
 - COVID-19
 - Social Distancing

- Protection of Vulnerable Employees
- Medical Surveillance Policy
- Transport Policy on Company Provided Transport as well as Public Transport (Protection of other commuters)

- Develop Procedures for:
 - Access Control and Screening Procedures for Employees and Visitors
 - Contact Tracing (Assisting the Department of Health)
 - Protection of vulnerable employees.
 - Reporting of positive cases.
 - Procedures following positive cases.
 - Resumption of work after positive cases.
 - Medical Surveillance of employees.
 - Hygiene in the Workplace
 - Social Distancing
 - Engineering methods (providing protective barriers)
 - Safe Work Procedures (where social distancing cannot be established)
 - Staggered work hours, tea times, lunch times etc.

- Implement awareness programs focusing of providing critical information, safety tips, hygiene protocols, social distancing, the use of protective equipment etc.

5. SCOPE OF WORK:

The scope of work must highlight all construction activities as well as associated works on the project.

Under each of the construction activities and associated works the contractor must provide a clear description of how the activities shall be managed.

Where management plans are required the contractor to provide a brief description of the plan, the purpose of the plan as well as the implementation process and shall attached to the health and safety a copy of the relevant management plan. E.g., Traffic Accommodation Plan etc.

6. LOCATION OF THE WORKS

Under this section the contractor must provide all the information pertaining to exactly where the project is situated.

The contractor must also make reference to the size of the project, site boundaries, reference beacons or landmarks as well as any area that shall be used outside of the site boundaries which shall be used as site camps, site offices, stockpiles and spill sites, borrow pits, laydown areas as well as areas used to provide early warning systems e.g., Road Closures

7 RISK MANAGEMENT

7.1 General

This section of the specification provides guidelines for the Contractor in preparation of risk assessments in order to ensure compliance with Section 9 of the Construction Regulations, 2014. This section highlights the principles related to the preparation of suitable and sufficient risk assessments. Contractor Staff intending to prepare risk assessments should be trained and suitably experienced in the application envisaged.

A suitable and sufficient risk assessment is an assessment which:

- Accounts for risks that are likely to arise during the construction of the Works,
- Enables the development and implementation of systems to manage the risks,
- Remains valid for a reasonable period of time,
- Provides a basis for training of employees, and
- Improves working procedures and introduce long term controls.

The requirements of the Construction Regulations, 2014, will not be satisfied by a single risk assessment exercise that holds good for all time. The risk assessment process on the Works is an ongoing process.

The objectives of risk assessments are to:

- Identify the risks that are mostly in need of reduction,
- Identify the various options for achieving such reduction,
- Identify the risks that require careful ongoing management, and
- Identify the nature of the required ongoing attention.

7.2 Forms of Risk Assessment

In order to ensure compliance with the Construction Regulations, 2014, the Contractor will be required to carry out the following three forms of risk assessment:

7.2.1 Baseline or datum risk assessments

The Contractor will be required carry out a risk assessment before the commencement of construction activities on the Works. This “baseline” or “datum” risk assessment will form part of the Contractor’s Health and Safety Plan. The risks and hazards to which persons, plant, vehicles and facilities may be exposed during the construction of the Works should be identified and evaluated. Measures to reduce or control these risks or hazards should be defined during this assessment. The effectiveness of the measures defined, and the baseline risk assessment prepared shall be monitored and reviewed from time to time to ensure that it remains relevant and accurate.

7.2.2 Issue based risk assessments

The Contractor will be required to carry out separate risk assessments during construction of the Works when methods and procedures are varied, for example when:

- Designs are amended,
- New machines are introduced,
- Plant is periodically cleaned and maintained,
- Plant is started-up or shut-down,
- Systems of work change or operations alter,
- Incidents or near-misses occur, or
- Technological developments invalidate prior risk assessments.

7.2.3 Continuous risk assessments

The Occupational Health and Safety Act specifically requires that employers shall provide and maintain working environments that are safe and without risk to health. The general awareness of hazards needs to be raised as work ethic to maintain a safe and risk-free environment on an ongoing basis. This is achieved by continuous risk assessments, the most important form of risk assessment that takes place as an integral part of day-to-day management. Examples of continuous risk assessments include:

- Regular inspections and audits,
- Maintaining general hazard awareness,
- Pre-work risk assessment,
- Daily Safety Task Instructions (DSTI’s),

- Planned Task Observations,
- Post Task Observations,
- SLAM Reports (Stop, Look, Assess, Manage)

7.3 Methodology for the Preparation of Risk Assessments

The Contractor shall in the preparation of his risk assessments, follow the following general principles:

- Employ a team of suitably qualified individuals with appropriately varied and relevant experience in risk assessment,
- The appointed risk assessor shall lead the risk assessment,
- Provide the team with background data, scope of work, potential hazards and underlying causes, and
- Where necessary employ experts for complex risk assessments and aspects of risk assessments that require experiential judgment,
- Institute an ongoing system of identifying aspects of the work that require risk assessment, and
- Conduct risk assessments in workshops of the team or by individual members of the team under guidance of the leader as appropriate to the situation.

7.4 Elements of a Risk Assessment

7.4.1 General

The process of carrying out a risk assessment consists of a number of well-defined steps. These steps improve decision-making by providing a greater understanding of the risks and their impacts. The main steps or elements of the risk assessment process are as follows:

- 1) Consider scope and nature of risks involved, determine purpose and physical and legal bounds of assessment and define risk evaluating criteria,
- 2) Systematically identify risks,
- 3) Analyze risks with regard to causes, likelihood of occurrence and possible consequences against the background of existing controls and its effectiveness,
- 4) Evaluate risks in terms of pre-established criteria to determine need and priority for attention,
- 5) Treat risks through a process of risk elimination, substitution, controlling risk at source, risk mitigation such as training and as far as risk remains, provide personal protective equipment (PPE),
- 6) The mitigation methods must focus the 4 T's of risk management.
 - a. Terminate the risk entirely at the source through engineering controls.
 - b. Treat the risk through a combination of engineering controls and Safe Work Procedures.
 - c. Transfer the risk to someone (company) more suited to handle the specific types of risks.
 - d. Tolerate the risk depending on the type of risk as well as the residual risk factor only after the implementation of engineering controls and/or safe work procedures and the use of personal protective equipment.

Bear in mind that Personal Protective Equipment (PPE) shall only be identified as a last resort in the mitigation of risks.

- 7) Monitor and review progress and performance in terms of management system, and
- 8) Communicate and consult.

The following sections 4.4.2 to 4.4.7 deal with items (2) to (7) above. These items form the continuing process of the risk assessment as indicated in Figure 1, below.

The following sections 4.4.2 to 4.4.7 deal with items (2) to (7) above. These items form the continuing process of the risk assessment as indicated in Figure 1, below.

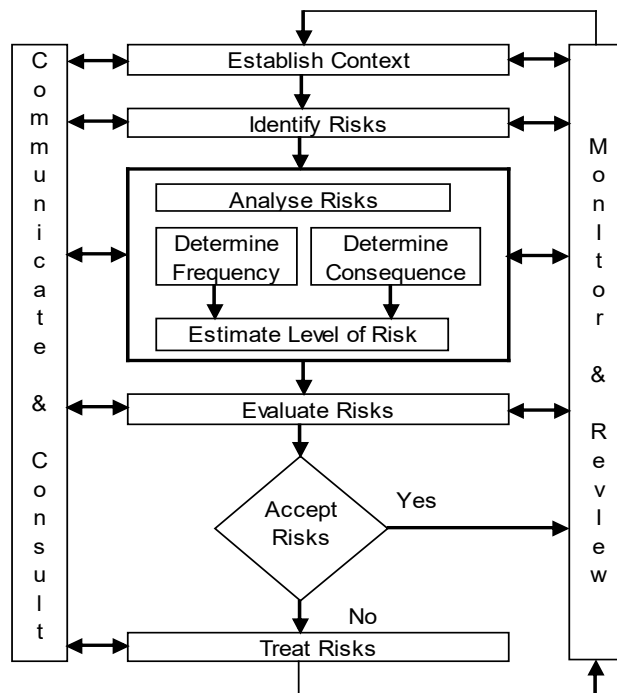


Figure 1: Risk Management Process

The Contractor shall ensure that the risk assessment compiled as part of his Health and Safety Plan contains at least these items.

7.4.2 Risk Identification

The Contractor should regard this step of the risk assessment as the most important. Subsequent analysis and evaluation of risks and the development of risk control measures are wasted if the risks or hazards on the Works are not carefully identified.

The Contractor should bear the following principles in mind when identifying the risks:

- i) Systematically address all risks or hazards on the Works,
- ii) Review all aspects of the work, but consider only those that have a potential to cause harm,

- iii) Rank the risks identified in order of importance and then use appropriately advanced techniques to deal with major risks,
- iv) Deal mainly with major risks and don't obscure these with unimportant information, especially minor risks,
- v) Address what actually happens in the workplace during the work activity
- vi) Consider all persons that may be affected,
- vii) Highlight those groups and individuals who may particularly be at risk, and
- viii) Review the adequacy and effectiveness of existing safety controls and measures

7.4.3 Risk Analysis

In this step, the Contractor will be required to analyze the risks identified by determining each risks frequency and magnitude or severity of the consequence of the risk or hazard.

The frequency of occurrence of a hazard may be expressed as the number of times that it may occur in a year, decade, lifetime, century, or longer period, according to comparative human experience. The magnitude of the likely consequence of a hazard may be expressed in terms of the degree of incapacitation, number of people or costs involved. The frequency of occurrence of a hazard and the magnitude of its consequence may be compounded as the risk that it poses as shown in the "risk matrix" in Figure 2 below.

Frequency of Occurrence of Hazard	Severity of Consequences of Potential Hazard					
	1 Medically treatable injury	1 Compensable injury	10 Compensable injuries	1 Permanently disabling injury	1 Fatality	10 Fatalities
Frequent; 1 or more occurrences per year	Medium	High	Very high	Severe	Severe	Severe
Several times during a career; 0.1 occurrences per year	Medium-low	Medium	High	Very high	Severe	Severe
Unlikely, but possible during a career; 0.01 occurrences per year	Low	Medium-low	Medium	High	Very high	Severe
Very unlikely during a career; 0.001 occurrences per year	Low	Low	Medium-low	Medium	High	Very high
Barely credible; 0.0001 occurrences per year	Low	Low	Low	Medium-low	Medium	High

Figure 2: Compounded Risk Matrix

The columns in the table represent the likely consequence of the hazard and the rows, the frequency of occurrence. The scales for both quantities represent consistent progressions, able they qualitative. The risks evidently range from low to severe. Note that diagonals in the matrix represent the risks of the identified hazards, taking the effectiveness of controls into consideration.

The table represents a typical risk matrix that need not necessarily be adopted by the Contractor. The Contractor may use an alternative risk matrix provided that it is approved as part of his Health and Safety Plan.

Contract No: HHS 02-2023/24 Tender for the appointment of a contractor for the construction of water and sewer reticulation services in Andeon Extension 37 for a period of 36 months.

C3.8: References to the Scope of Works

Health and Safety Specifications

The Contractor must describe in full the method of risk evaluation as well as provide and describe the Risk Formula used to determine the risk factor

7.4.4 Risk Evaluation

In this step the Contractor will be required to compare the assessed risk with similar risks previously experienced for the purpose of deciding how to treat the risk. A useful systematic approach for this purpose is as follows:

- If the assessed risk exceeds similar risks that have occurred in the past and that are considered to be unacceptable, the assessed risk will require treatment depending upon its magnitude as discussed in Section 4.4.5, or
- If the assessed risk exceeds similar historical risks that are acceptable, treatment of the assessed risk will depend on the extent by which it exceeds the historical risks, or
- If the assessed risk is less than historical risks that are unacceptable, treatment of the assessed risk will depend on the extent by which it is less than the historical risks, or
- If the assessed risk is less than historical risks that are acceptable, the assessed risk would also be acceptable and would not require any treatment.

7.4.5 Risk Treatment

In this step, the Contractor will select and implement appropriate measures for dealing with risk. Typically measures comprise the following:

- Elimination by changing designs, procedures, management methods, etc, applicable to high frequency–high consequence risks, or
- Reduction by changing designs, procedures, management methods, etc, applicable to high frequency–high consequence risks, or
- Minimization by changing designs, procedures, management methods, etc, applicable to high frequency–low consequence risks, or
- Transfer or share whole or part of the risk to another party by insurance, contractual arrangements or organizational structures, applicable to low frequency–high consequence risks, or
- Control to ensure that risks do not increase, applicable to low frequency–high consequence risks, or
- Retention together with provision of monitoring and personal protective equipment, applicable to low frequency–low consequence residual risks after reduction, or
- Acceptance without particular action other than provision of personal protective equipment, applicable to low frequency–low consequence risks.

The following principles enable the optimum treatment to be determined:

- Avoid risks altogether, if possible, by using different approaches, substances or methods of work,

- Combat risks at source rather than by adopting secondary measures,
- Adapt work to the individual rather than the individual to the work, that is, in the design consider the people and their attributes that will operate the system
- Take advantage of technological and technical progress,
- Risk prevention measures must be part of a coherent policy and approach to safety management that involves performance measurement, goal setting, feedback, and analysis,
- Give preference to measures that protect the whole work force,
- Ensure that those for whom protection is provided understand what they need to do to make sure that the protection works, and
- Ensure that measures to control risks are an accepted part of an active health and safety culture supported by all levels of the organization; single risk reduction initiatives invariably fail.

7.4.6 *Reporting and Recording*

The Contractor shall ensure that the risk assessment process is recorded in the form of a report and included in his Health and Safety Plan. The report should be easily accessible to the Contractor's employees, their representatives, to inspectors, the Employer or his Safety Agent and the Engineer. The essential contents of the report should be as follows:

- Objectives and expected outcomes,
- Description of the Works under assessment,
- Summary of context of study
- Composition of risk assessment team, (including qualifications and relevant experience),
- Approach used to systematically identify risks,
- Identified risks (ranked in order of priority),
- Method adopted for assessing frequencies and consequences of risks,
- Consequences (ranked in order of magnitude),
- Identification of individuals and groups who may be affected by major hazards and risk and who may especially be at risk,
- Basis for defining safety standards to be achieved,
- Contractor's resources devoted to risk assessment,
- Actions proposed to reduce unacceptably high risks,
- Review effectiveness of existing safety measures to control risks, and
- Implementation program of selected treatments (including controls to manage unacceptably high risks).

7.4.7 *Monitoring and Review*

It is necessary to monitor risks, the effectiveness of the risk treatment plan and the strategies and management system set up to control implementation. Control of the risk management program entails the setting of standards, monitoring actual performance, comparing the performance with the standards, and correcting any deviations from the standard. Risks and the effectiveness of the control measures need to be monitored to ensure changing circumstances do not alter risk priorities. Few risks remain static.

Ongoing review is essential to ensure that the management plan remains relevant. Factors that affect the likelihood and consequences of an outcome may change, as may factors that affect the suitability or cost of the various treatment options. If an accident occurs, or if more is learnt about the hazards in the workplace, the risk assessment may need to be reviewed or modified. Hazards may be observed that have not been anticipated or previously identified and which may require appropriate measures to be taken. After an accident has occurred, it is important to determine whether it was predicted, whether preventive measures were identified, and if so, why they did not work, whether the risk assessment is still suitable and sufficient if it failed to predict the accident, whether the decision to accept a predicted risk as tolerable is still valid, why the accident occurred and what should be done to prevent similar accidents occurring again. It is therefore necessary to regularly repeat the risk management cycle, the time between reviews being dependent on the nature of the risks and the degree of change likely to take place in the work activity. Review is an integral part of the risk management treatment plan.

7.4.8 *Communication and Consultation*

The Contractor will be required to communicate and consult with internal and external stakeholders during each step of the risk assessment process. Stakeholders will include the Employer and his Safety Agent, the Engineer and the Contractor's employees and consultants.

Effective communication will ensure that those responsible for implementing the risk management process and those with a vested interest, understand the basis on which decisions are made and why particular actions are taken. It will also ensure that the perceptions of all those involved are noted and accommodated during the process.

8. **BASELINE RISK ASSESSMENT**

8.1 **Purpose**

The purpose of this Baseline Risk Assessment (BRA) is to ensure that the Principal Contractor and Contractors are taking the highlighted risks and hazards in consideration when they develop their site-specific health and safety plans for the project.

It is to further ensure that the client has advised and inform the Principal Contractor, Contractor and the Department of Labour of the prevailing risk and hazards associated with the project before commencement with the work on site.

To ensure that the Principal Contractor, Contractor identify, analyse, evaluate, and establish control measures to eliminate, mitigate before issuing Personal Protective Equipment of clothing to the workers or any other person affected by activities on site.

8.2 **Scope**

This Baseline Risk Assessment (BRA) apply to the above-mentioned project and for the application of Construction work permit as well as for the Principal Contractor & Contractor appointed for the Project.

8.3 Normative Reference

Section 8(2)(d) of the Occupational Health and Safety Act
 Section 5(1)(a) & Section 9 of the Construction Regulation 2014.
 Section 6 of Regulations for Hazardous Biological Agents read with COVID-19 OHS Directives.

8.4 Baseline Risk Assessment

In terms of Construction Regulation 5(1)(a), a client is required to prepare a baseline risk assessment of the intended construction project. This Baseline Risk Assessment has been developed in order to ensure that risks and hazards are identified, analysed and evaluated in order to eliminate, mitigate and reduce the exposure to such risk.

Effort shall be made to identify more site-based risks and hazards and possible solutions as far as is reasonably practicable to prevent exposure to such risks and hazards, a task-based risk assessment shall have conducted on site.

In the table below are some of identified baseline risks to be taken into consideration when preparing the health and safety plan for the project:

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
1.	Access control	Public access to site	Injury & Damage to property	Medium	Protection of site (Barricade and fence); Controlled access point; Secure; Signage (Information, Warning & Prohibition signs); Traffic management; Notifications and Planning & Identification of high risk areas & Location.
2.	Transportation	Transportation of worker & Material	Road accident; Overloading;	Medium	Training; Inspection of equipment; Competent person; Safe work and operating procedures;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					Personal Protective Equipment & Clothing
3.	Traffic Accommodation	Traffic movement	Accident	Medium	Protection of the road (Barricade, barriers, speed humps); Road traffic control; access point; Signage (Information, Warning & Prohibition signs); Traffic management; Notifications and planning & Identification of high risk areas & Location.
4.	Site Establishment	Plant, Equipment Machinery; workers and environment	Injury; damage to property & Environmental impact	Low	Supervision; Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Personal Protective Equipment & Clothing
5.	Underground Services & Overhead powerlines	Water/Sewage/gas pipes & Electrical cables	Injury; Electrocutation; damage to property & Environmental impact	Medium	Supervision; Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent & qualified person; Safe work and operating procedures; Lockout & Tag; Personal Protective Equipment & Clothing
6.	Redirecting Isolation and disconnecting Services	Electricity, Water/Sewage/gas pipes; Excavation	Electrocutation; damage to property & Environmental impact	Medium	Supervision; Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					Competent & qualified person; Safe work and operating procedures; Lockout & Tag; Personal Protective Equipment & Clothing
7.	Storage of flammable material and liquids	Fuel storage; gas bottles; Smoking; spark	Fire; explosion; damage to property; Environmental impact	Medium	Management & Control of exposure; Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safety Symbolic signs (Information, Warning & Prohibition); Safe work and operating procedures; Personal Protective Equipment & Clothing
8.	Temporary Electrical Installation	Electricity	Electrocution; Fire; explosion damage to property	Low	Supervision; Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent & qualified person; Safe work and operating procedures; Lockout & Tag; Personal Protective Equipment & Clothing
9.	Bulk Earthworks (surface works) and stockpile including excavations deeper than 1.5 metres	Underground Services; Plant, Equipment Machinery; Excavation; workers and environment	Injury; Electrocution; damage to property; ground collapse & Environmental impact	Medium	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Rescue plan Personal Protective

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					Equipment & Clothing
	Bulk Earthworks (excavations) and excavations deeper than 1.5 metres	Underground Services; Plant, Equipment Machinery; Excavation; workers and environment	Injury; Electrocutation; damage to property; ground collapse & Environmental impact	Medium	Locating of underground services; Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Rescue plan Personal Protective Equipment & Clothing
10.	Mobile plant and construction equipment	Plant, Equipment Machinery; workers and environment	Injury; damage to property & Environmental impact	Medium	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Personal Protective Equipment & Clothing
11.	Demolition work	Wall, concrete slab, Steel work	Injury; damage to property & Environmental impact	Medium	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Rescue plan Personal Protective Equipment & Clothing
12.	Temporary works (Formwork and support work) including reinforcement and shutters.	Scaffolding; Shatters; Beams; Reinforcement; Concrete works	Injury; damage to property & Environmental impact	Low	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Fall protection;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					Rescue plan Personal Protective Equipment & Clothing
13.	Bulk mixing plant (Batch plant)	Cement; sand; fly ash; concrete stone; pumps	Injury; damage to property & Environmental impact	Low	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Dust suppression; Personal Protective Equipment & Clothing
14.	Working close to water	Reservoirs; Wastewater dams; Pits and water channels	Injury; damage to property & Environmental impact	Low	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Rescue plan Personal Protective Equipment & Clothing
15.	Confined space	Manholes, channels; Silos	Injury; damage to property & Environmental impact	Low	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Rescue plan; Personal Protective Equipment & Clothing
16.	Electrical Equipment and hand tools	Jack hammers; grinders; impact drillers; concrete cutter etc.	Injury; damage to property & Environmental impact	Medium	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					Fall protection; Rescue plan Personal Protective Equipment & Clothing
17.	Working at heights	Lifting Equipment; Crane; Scaffold; Ladder; Rope access work	Falling; Injury; damage to property & Environmental impact	Medium	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Fall protection; Rescue plan Personal Protective Equipment & Clothing
18.	Pressure Equipment	Compressor air	Injury; damage to property & Environmental impact	Medium	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Personal Protective Equipment & Clothing
19.	Enabling & Builders work	Concrete work; Brick work; Joinery; plumbing; Drainage	Injury; damage to property & Environmental impact	Medium	Prevent exposure; Substitution; Engineering controls; Training; Inspection of equipment; Competent person; Safe work and operating procedures; Fall protection; Personal Protective Equipment & Clothing
20.	Covid-19	Hazardous biological agents (Contaminated areas, surfaces & equipment, tools); (Contaminated Personal Protective Equipment & Clothing)	Injury; damage to property & Environmental impact	Medium	Prevent exposure; Decontaminating; Sanitisation; Screening & testing; Isolating and quarantining; Engineering controls; Training & information;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					Safety symbolic signs; Provision of hand washing facilities & soap; Inspection of equipment; Competent person; Safe work and operating procedures; Personal Protective Equipment & Clothing

9. INCIDENT MANAGEMENT

Under this section the contractor must provide a clear description on how he intends to manage all types of incidents that may occur during the works based on the scope of work.

It shall furthermore include the reporting of all reportable incidents in accordance with Section 24 of the Occupational Health and Safety Act.

The contractor shall also provide for the investigation of incidents and/or accidents and how similar incidents/accidents shall be avoided.

10. RESOURCES

10.1 General

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 1993, Regulation 6 for Hazardous Biological Agents read with COVID-19 OHS Directives and all its Regulations and related incorporated standards with regards to the resources and facilities intended for use on the temporary and permanent Works.

10.2 Employees

10.2.1 Inspectors, supervisors and Issuers

The Contractor shall provide in his Health and Safety Plan his intended Staffing Organogram for the Works. The organogram should include those inspectors, supervisors and issuers as envisaged in the Construction Regulations, 2014 required for the Works and any additional supervisory staff members as the Contractor (having taken the scope of the Works into account) considers necessary.

Copies of the supervisory staffs' curriculum vitae or portfolio of evidence and their appointment letters should be appended to the Contractor's Health and Safety Plan.

The Contractor's Health and Safety Plan should in addition cover at least the following aspects:

- The number of unskilled, semi-skilled and skilled (including Foreman, Charge hands, Artisans, Operators, Drivers, Clerks, Storeman and Team Leaders) employees he intends employing on the Works,
- The health and safety training to be provided to the Contractor's employees,
- The programme of the health and safety training,
- Systems for the review of the effectiveness of the training provided, and
- Systems to determine further training requirements throughout the construction period.

In preparing his Health and Safety Plan, the Contractor shall ensure compliance with Clause PS 22 in Section 4.2 of the Project Specifications.

Pro-forma letters of appointment for the various inspectors, supervisors and issuers as contemplated in the Construction Regulations, 2014 are included in Annexure 1 to this specification for use by the Contractor. The Contractor shall ensure that he includes in his Health and Safety Plan the appointment letters for all his inspectors, supervisors and issuers appointed for the Works.

10.2.2 Subcontractors

The Contractor shall with reference to the use of subcontractors on the Works and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- The steps intended to ensure that his Subcontractors prepare, implement and maintain Health and Safety Plans,
- How health and safety information will be made available to his Subcontractors when changes are brought about to the design,
- How he intends determining that his Subcontractors are registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works,
- How he intends determining if his Subcontractors have made provision in their tenders for the cost of health and safety measures during the construction of the Works,
- How he intends satisfying himself on the competencies and resources of Subcontractors he intends appointing, and
- How he intends ensuring that his Subcontractors perform risk assessments prior to commencing their respective portions of the Works.

10.2.3 Competencies

The Contractor shall establish if a person is competent to perform a certain duty or be appointed in a certain capacity by requesting all candidates to supply the required certificates of competency. Where certificates of competencies cannot be delivered, the Contractor shall request a portfolio of evidence from the respective candidates.

Contractors should do enquiries at the South African Qualifications Authority (SAQUA) relating to the qualifications required for appointment of competent persons.

10.2.4 Physical and Psychological Fitness

Were required by the Occupational Health & Safety Act and its regulations the contractor shall ensure that his employees are in possession of a valid medical certificate of fitness to work in such an environment.

In terms of Section 7(8) of the Construction Regulations 2014 - A contractor must ensure that all his or her employees have a valid medical certificate of fitness specific to the construction work to be performed and issued by an occupational health practitioner in the form of Annexure 3.

10.3 Plant, Vehicles and Equipment

10.3.1 Suspended platform

The Contractor shall with reference to Section 17: Suspended platforms of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends complying with SABS 1808 and SABS 1903,
- What systems he intends using to ensure the safety of all suspended platforms,
- What tests will be performed to establish the safety of suspended platforms,
- How he intends maintaining suspended platforms being used, and
- How he will document the design, testing, maintenance and inspections of the suspended platforms.

10.3.2 Rope Access Work

The Contractor shall with reference to Section 18: Rope Access Work of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Explain what systems he intends using to ensure the safety of employees,
- Explain how he intends maintaining the different types of equipment to be use,
- What tests will be performed to establish the durability and safety of the equipment, and
- How he will document the design, testing, maintenance and inspections of all rope access works.

10.3.3 Material hoists

The Contractor shall with reference to Section 19: Materials Hoist, of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends confirming the construction stability of the material hoists,
- What systems he intends using to ensure the safety of all material hoists,
- What tests will be performed to establish the safety of all material hoists,
- How he intends maintaining the material hoists being used, and
- How he will document the design, testing, maintenance and inspections of all material hoists and
- What safety procedures and precautions are envisaged to ensure safe operation of the materials hoists.

10.3.4 *Batch Plants/Bulk Mixing Plants*

The Contractor shall with reference to Section 20: Bulk Mixing Plant of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- What systems he intends using to ensure the safety of all batch plants,
- How he intends maintaining the batch plants in use, and
- How he will document the design, testing, maintenance and inspections of batch plants in use.

10.3.5 *Explosive Actuated Fastening Devices*

The Contractor shall with reference to Section 21: Explosive actuated fastening devices, of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends controlling the issuing of explosive powered tools,
- How he intends implementing safety procedures prior to use of explosive powered tools, and
- What safety measures will be required during the use of explosive powered tools.

10.3.6 *Cranes*

This section of the specification shall be read in conjunction with the provisions of the Driven Machinery Regulations, 1988.

The Contractor shall with reference to Section 22: Cranes, of the Construction Regulations, 2014 and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How will environmental factors be considered in respect to the use of cranes,
- What systems he intends using to ensure the safety of all cranes in use,
- How he intends maintaining cranes in use,
- What tests will be performed to establish the safety of all cranes in use,
- What safety procedures and precautions are envisaged to ensure the safe operation of all cranes in use,
- How he will document the design, testing, maintenance and inspections of all cranes in use, and

- The contractor shall proof compliance of the Driven Machinery Regulation, 1988, with reference to the lifting machinery and tackle being used.

10.3.7 Construction vehicles and mobile plant

The Contractor shall with reference to Section 23: Construction vehicles and mobile plant of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends ensuring that construction vehicles and mobile plant are:
 - Of acceptable design and construction,
 - Maintained and in good working order,
 - Used according to design specifications, and
 - Are protected from falling into excavations, water or areas lower than the working surfaces,
- How he intends ensuring that workers are trained, authorised and physically fit to operate construction vehicles and mobile plant,
- What traffic arrangements and safety precautions will be implemented to ensure safe operation of construction vehicles and mobile plant on the Works, and
- How he intends safeguarding employees against construction vehicles and mobile plant moving on the construction site.

10.3.8 Electrical Installation and Machinery on construction sites

This section of the specification shall be read in conjunction with the provisions contained in the Electrical Installation Regulations, 2009.

The Contractor shall with reference to Section 24: Electrical Installation and machinery on construction sites of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends safeguarding employees against electrical cables or apparatus under, over or on site, and
- How he will ensure that electrical installations are of adequate strength to withstand working conditions on a construction site.

10.3.9 Ladders

The Contractor shall with reference to Section 13A of the General Safety Regulations and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends ensuring that ladders used are safe and constructed of materials approved for its intended use, and
- What precaution will be made to ensure the stability of ladders in use.

11. MEDICAL FITNESS OF EMPLOYEES

In this section the contractor shall with reference to Section 7(8) of the Construction Regulations, 2014, be required to describe the procedures by which employee's status of their health is determined (Entry Medicals).

The contractor shall also provide in detail the procedures by which the health of employees is monitored through a Medical Surveillance procedure.

The contractor must also provide for exit medicals in order to determine if the health of an employee have deteriorated during his/her duration of employment.

12. EMPLOYEE FACILITIES

In this section the contractor shall with reference to the Facilities Regulations 2004, as well as Section 30 of the Construction Regulations 2014, be required to provide employees with the required facilities.

The contractor shall indicate exactly what facilities shall be provided.

The contractor shall also indicate how the facilities shall be maintained (cleaning and sanitizing)

Emphasis must be placed on the provisioning of toilet facilities, the maintenance services thereof and the provisioning of drinking water

13. MATERIALS

13.1 General

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 1993 and all its regulations and related incorporated standards with regards to the design, supply, storage and erection of materials used for the temporary and permanent Works.

13.2 Fall Protection Equipment

The Contractor shall with reference to Section 10: Fall Protection Equipment of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Compilation of a fall protection plan,
- How the fall protection plan will be implemented and maintained,
- How employees will be screened and declared medically fit to work in areas where fall protection equipment is needed,

- How the safeguarding of persons, plant, vehicles, equipment and facilities on the construction site is contemplated,
- Training of staff working at heights and in the use of fall protection equipment,
- How a continuous assessment of the situation will be executed,
- How fall protection equipment will be inspected for safety, and
- How corrective actions will be implemented
- Emergency plans and procedures for treatment of incidents relating to falls from height.

13.3 Scaffolding

The Contractor shall with reference to Section 16: Scaffolding of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How compliance with SABS 085 will be ensured,
- How scaffolding in use will be maintained,
- What systems are intended to ensure the safety of scaffolding used, and
- What tests will be performed to establish the safety of scaffolding used
- Training plan for scaffold erectors and inspectors.

13.4 Use and temporary storage of flammable liquids on construction sites

This section of the specification shall be read in conjunction with the provisions for the use and storage of flammable goods as determined in the General Safety Regulations.

The Contractor shall with reference to Section 25: Use and temporary storage of flammable liquids on construction sites of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How flammable liquids will be stored to minimize the risk of fire or explosions,
- How the contractor will identify a flammable store
- What safety precautions will be employed if ventilation of the flammable store is not possible,
- How access to flammable stores will be controlled,
- How empty vessels used for the storage of flammable liquids will be disposed of,
- What quantity of flammable liquids will be stored on the construction site,
- What systems are intended to ensure the safe storage of flammable liquids, and
- What retaining methods will be used to prevent the spreading of any spillage.

13.5 Stacking and storage

This section of the specification shall be read in conjunction with the provisions for the stacking of articles contained in the General Safety Regulations.

The Contractor shall with reference to Section 28 Stacking and storage on construction sites of the Construction Regulations, 2014, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Who will supervise the stacking and storage of materials on site, and
- What systems are intended to ensure the safe stacking and storage of materials on the site

13.6 Personnel Safety Equipment and Facilities

The Contractor shall comply with Section 2 of the General Safety Regulations and shall in particular provide all necessary personnel protective equipment for his personnel for the duration of the construction period. To this end the Contractor shall without limiting his obligations indicate in his Health and Safety Plan:

- Identify training requirements in the Contractors Training plan in the use and maintenance of personal protective equipment,
- The type of personnel safety equipment he will provide,
- How he intends issuing it to his employees, and
- How he will maintain the personnel safety equipment issued.

13.7 First Aid, Emergency Equipment and Procedures

The Contractor shall comply with Section 3 of the General Safety Regulations regarding first aid, emergency equipment and procedures.

14. CATEGORIES OF WORK

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 1993 and all its regulations and related incorporated standards with regards to the execution of the following categories of work.

14.1 General

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

14.1.1 Construction welfare facilities

Contractors will be required to adhere to Section 30: Construction welfare facilities of the Construction Regulations, 2014.

This regulation must be read in conjunction with the provisions of the Facilities Regulations, 2004 (as amended) and SANS 0400.

The Contractor must discuss the following in detail in his safety plan:

- How will the Contractor establish the amount of facilities required for employees to shower, change, eat and attend to sanitary needs
- What measures will the employer take to house employees on site who lives far from their residences or for the provision of transport

14.1.2 *Environmental regulations for workplaces*

The Contractor shall comply with the Environmental Regulations for Workplaces, 1987, and shall address the following aspects as described in the regulations in his Health and Safety plan:

- Thermal requirements,
- Lighting,
- Windows,
- Ventilation,
- Housekeeping,
- Noise and hearing conservation,
- Precautions against flooding, and
- Fire precautions and means of egress.

14.1.3 *Housekeeping on construction sites*

Contractors will be required to adhere to Section 27: Housekeeping on construction sites, of the Construction Regulations, 2014.

This regulation must be read in conjunction with the provisions of the Environmental Regulations for Workplaces, 1987 (as amended).

The Contractor must discuss the following in detail in his safety plan:

- How will contractors ensure the neatness of construction sites
- What measures does the Contractor envisage to
 - Store and/or stack materials,
 - Remove debris from site,
 - Prevent unauthorized entrance to the site
 - Protect employees or passers-by from falling objects

14.1.4 *Fire precaution on construction sites*

Contractors will be required to adhere to Section 29: Fire precautions on construction sites, of the Construction Regulations, 2014.

This regulation must be read in conjunction with the provisions of the Environmental Regulations for Workplaces, 1987 (as amended).

The Contractor must discuss the following in detail in his safety plan:

- How the Contractor will minimize the risk of fire on the site
- How the Contractor will identify potential fire hazards
- What prohibitions the Contractor will implement to manage risk areas
- How many employees the Contractor will train in fire fighting
- What organization the Contractor envisage to combat fires on sites
- What precautions and procedures will be followed to evacuate employees in the case of a fire

14.1.5 *Water Environments*

The Contractor will be required to adhere to Section 26: Water Environments, of the Construction Regulations, 2014.

The Contractor must discuss the following in detail in his safety plan:

- What precautions will the Contractor take to identify dangers where employees may fall into water
- What safety procedures and equipment will the Contractor implement to safeguard employees working at water environments

14.1.6 *Structures*

The Contractor will be required to adhere to Section 11: Structures, of the Construction Regulations, 2014.

The Contractor must discuss the following in detail in his safety plan:

- Explain what controls, test or precautions will be made to prevent structures from collapsing during construction,
- The Contractor shall indicate what steps will be taken and implemented to ensure that structures or parts thereof will not be loaded in such a manner that it may collapse, and
- What procedures does the Contractor envisage to implement in order to obtain all relevant data on structures before commencement of construction work.

14.1.7 *Hazardous Chemical Substances*

The Contractor will be required to adhere to the Regulations for Hazardous Chemical Substances 1995 as amended in the handling and storage cement of and other hazardous chemical substances.

The Contractor must discuss the following in detail in his safety plan in respect of each hazardous chemical substance that will be used in the works:

- Storage of substance
- Handling of substance
- Protective clothing and other devices to be used while handling the substance
- Medical surveillance.

14.1.8 Hazardous biological agents (Contaminated areas, surfaces & equipment, tools); (Contaminated Personal Protective Equipment & Clothing)

The Contractor will be required to adhere to Regulations for Hazardous Biological Agents read with COVID-19 OHS Directives.

The Contractor must discuss the following in detail in his safety plan in respect of each hazardous biological agents:

- Prevent exposure
- Decontaminating
- Sanitisation;
- Screening & testing;
- Isolating and quarantining;
- Engineering controls;
- Training & information;
- Safety symbolic signs;
- Provision of hand washing facilities & soap;
- Inspection of equipment;
- Competent person;
- Safe work and operating procedures;
- Personal Protective Equipment & Clothing

14.2 Site Clearance

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

14.2.1 Demolition work

Contractors will be required to adhere to Section 14: Demolition work, of the Construction Regulations, 2014.

The Contractor shall discuss the following in detail in his safety plan:

- Briefly explain how he will safeguard people and property during and after demolition works
- Briefly explain how he will protect staff from dangerous situations
- Discuss the methods proposed to safeguard the public and property against harm during demolition works
- Discuss what type of equipment he envisages to use during demolition work
- How will the Contractor ensure the safety of equipment used during demolition work
- What steps will the Contractor deem necessary to take where hazardous materials is encountered
- Dust control measures

- Noise control measures

14.3 Earthworks

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

14.3.1 Excavation work

Contractors will be required to adhere to Construction Regulation 13: Excavation work, of the Construction Regulations, 2014.

The Contractor must discuss the following in detail in his safety plan:

- How will the Contractor establish the stability of ground prior to excavations,
- What steps will the Contractor follow to ensure that bolstering, shoring and bracing is sufficient to ensure the safety of the excavation, and
- What steps will the Contractor follow to ensure the equipment used to safeguard an excavation is sufficient and safe.

14.4 Concrete

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

14.5 Welding, flame cutting, grinding, soldering or similar operations

The Contractor shall comply with Section 9 of the General Safety Regulations, with regards to the welding, flame cutting, grinding, soldering or similar operations associated with pipework.

15. IMPLEMENTATION OF CONTRACTOR'S HEALTH AND SAFETY PLAN

15.1 General

The Contractor shall describe in his Health and Safety Plan how he intends implementing his plan.

The Contractor shall indicate the methods he intends using to ensure accurate record keeping of all critical elements identified in his risk assessment and covered in his Health and Safety Plan.

The Contractor shall indicate how internal audits will be carried out, how shortcomings will be addressed, how he intends to review the safety plans, how he would train staff and how he would implement the findings and recommendations of internal audits or inputs of employees.

15.2 Administrative Systems

The Contractor's administrative system shall without limiting his obligations, cover the following:

- Up-keep of a safety file on site,
- Maintenance of his Health and Safety plan,
- Procedures to follow for the appointment of competent persons,
- Application of construction work permits or Notification of construction work
- Submit the Notification of Construction to the provincial director
- Provide a valid Letter of Good Standing
- Procedures to follow for notifications,
- Injury on duty [IOD] administration,
- Recording of minutes of safety meetings,
- Recording of checklists,
- Safe keeping of checklists, and
- Internal audits.

The Contractor shall in particular ensure that a copy of the Occupational Health and Safety Act, 1993 and its Regulations is available on the site and is easily accessible by employees.

15.3 Reporting Systems

The Contractor shall comply with Section 9 of the General Administrative Regulations, 2003 and shall in particular (in accordance with section 12) furnish an inspector with information relating to health and safety on the construction site, when requested to do so.

The Contractor shall notify the Employer of any investigations, complaint or criminal charge which may arise as a consequence of the provision of the Occupational Health and Safety Act, (Act 85 of 1993) and its Regulations, pursuant to work performed in terms of this Contract.

15.4 Training

The Contractor shall train all his employees in accordance with the requirements of section 13 of the Occupational Health and Safety Act, 1993. The Contractor shall ensure that every employee is informed of the following:

- The hazards of any work he must perform or plant machinery or equipment he is permitted to use, and
- The precautionary measures which should be taken regarding the above.

The Contractor shall, without limiting his obligations, indicate in his Health and Safety Plan how he intends:

- Identifying the training needs of the personnel he intends employing, and
- Implementing the training identified

- What proof of induction training will be carried by his employees (e.g., laminated type identification card)?

15.5 Safety Meetings

The Contractor shall conduct at least one formal safety meeting per month with his employees to ensure safety awareness and shall maintain appropriate records of attendance and meeting content. Such records shall be made available to the Employers Safety Agent. Such meetings shall address at least the following:

- Accident / safety incidents
- Hazardous conditions
- Hazardous biological agents
- Hazardous materials / substances
- Job or work projections
- Work procedures
- Protective clothing / equipment
- Housekeeping
- General safety topics

15.6 Inspections and Monitoring

The Contractor shall be required to inspect each workplace prior to works commencing to ensure that all protective equipment is in place and that by entering the workplace no person will be exposed to any hazard which could affect his health or safety. The Contractor shall without limiting his obligations, indicate the following in his Health and Safety Plan:

- The inspection and monitoring procedures he intends employing to determine the safety of workplaces, and
- Who will be responsible for the checking of each workplace at the commencement of each shift.

The Contractor shall include in his Health and safety Plan all the checklists he intends using during the inspection and monitoring of the implementation of his Health and Safety Plan.

The Contractor can expect inspections of the works by any of the following parties:

- The Employer or his Safety Agent,
- The Employer's Occupational Safety Officer, or
- The designated officer serving in the Department of Manpower and appointed by the Minister as Chief Inspector or his representative.

In addition to site inspections performed by the Employer or his safety agent they shall also do audits and assess the safety situation at the works and investigate incidents. Follow-up inspections will be performed to ensure compliance to recommendations done.

The Employer, his Safety Agent or his Occupational Safety Officer may stop the work at any time under the following conditions:

- If the Contractor is not compliant with his Health and Safety Plan
- Imminent threat to the health and safety of any person on site
- Continuous non-conformance to corrective action requests.

Inspections by the Chief Inspector or his representative will be by appointment and the purpose would be to investigate complaints received by the Inspector or to investigate serious incidents.

The Chief Inspector or his representative may issue prohibition notices to stop the activities at the works until the situation investigated has been resolved or he may issue an improvement notice whereby the Contractor will have a period to rectify any hazard identified by the inspector.

16. AUDITING

16.1 Internal Audits

CR

The audits contemplated in CR 5(1)(o) of the Construction Regulations, 2014 will be carried out by the Employer or his appointed Safety Agent.

The intervals for the audits shall be agreed between the Contractor and the Employer or his Safety Agent during the preparation of the Contractor's Health and Safety Plan, but shall be carried out at least once every month or at such shorter interval that an inspector may require. The Employer or his Safety Agent shall provide at least 7 calendar days' notice prior to the conducting of an audit.

The findings of each audit will be made known to the Contractor and the Employer in a report prepared by the Employer or his Safety Agent and will be submitted to all parties within seven working days of the respective audit being completed. Any shortfalls identified will be documented in the audit report together with the Contractor's proposals to rectify the same. All audit reports will be filed in the Health and Safety File.

A date for a follow up audit will be negotiated with the Contractor to verify the implementation of all actions to rectify shortfalls as identified in the audit report.

The Contractor will ensure that the same arrangement detailed above be implemented with his Contractors to ensure his compliance with the Construction Regulations as contemplated in Section 7

16.2 Audits by Employer or Safety Agent

The Employer or Safety Agent will be entitled to carry out additional audits or follow-up audits, as the case may be, at any time during the construction period provided that:

- i) The audit or follow-up audit are carried out during ordinary working hours, and

- ii) The Employer or Safety Agent gives the Contractor at least 24 hours' notice of his intention to carry out such audits.

The Contractor's employees will be present during any audit carried out by the Employer or his Safety Agent.

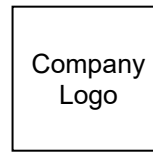
17. MEASUREMENT AND PAYMENT

17.1 Measurement and Payment

- 17.1.1 The scheduled items for health and safety will be as specified in clause 31 of section 001 of the Standard Specifications.
- 17.1.2 The Contractor shall price all items scheduled in this section of the schedule of quantities to enable the Employer to comply with clause 4.1.(h) of the contract. Failure by the Contractor to price these items will force the Employer to reject the Contractor's tender in terms of clause 4.(4) of the contract.

ANNEXURE 1

APPOINTMENT LETTERS



Company Name
Company Address
Company Address
Code

Attention: (**Assistant Construction Supervisor's Name**)

APPOINTMENT OF THE ASSISTANT CONSTRUCTION SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 8(8)

I, (**contractor's name**) hereby appoint (**assistant construction supervisor's name**) as the assistant supervisor responsible for (**site address**) to carry out the construction work of (**description of construction work and area of responsibility**).

In terms of this appointment you are required to ensure that all construction work performed under your supervision is carried out as follows:

1. By persons suitably trained and competent to do such work;
2. That all persons are aware and understand the hazards attached to the work being carried out;
3. That the required risk assessments are carried out;
4. That precautionary measures are identified and implemented;
5. That discipline is enforced at the construction site at all times;
6. That all identified statutory requirements are met; and
7. That any other interest in terms of health and safety with respect to the responsible area is met.
8. You will accept the duties of the Construction Supervisor in his absence.

You are required to report any deviations of the above-mentioned instruction to (**construction supervisor's name**) and in his absence to the contractor's representative.

This appointment is valid from (**date**) to the completion of the stipulated construction work.

You shall submit a written weekly report any non-compliance with the construction Regulations, 2014.

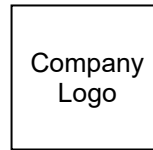
Contractor's Representative full name Signature Date

.....

Kindly confirm your acceptance of this appointment by completing the following:

I, (**assistant construction supervisor**) understand the implications of the appointment as detailed above and confirm my acceptance.

Assistant construction supervisor's full name Signature Date



Company Name
Company Address
Company Address
Code

Attention: (**Safety Officer's Name**)

APPOINTMENT OF THE CONSTRUCTION HEALTH AND SAFETY OFFICER IN TERMS OF CONSTRUCTION REGULATION 8(5)

I, (**contractor's name**) hereby appoint (**safety officer's name**) as the Construction Health and Safety Officer responsible for (**site address**) to manage all the health and safety issues as required in terms of the Act by establishing a health and safety program with elected health and safety Representatives.

You shall ensure that all the requirements in terms of the Act and in particular in terms of the Construction Regulations, 2014 are met. You shall also ensure that all appointed sub-contractors comply with the requirements as stipulated in the Construction Regulations, 2014.

You shall further ensure that all records, registers and required lists are maintained and shall stop construction work upon identifying any non-compliance by any contractor; this includes stopping any work should the competency of the person carrying out such work be questionable.

This appointment is valid from (**date**) to the completion of the stipulated construction work.

Contractor's Representative full name Signature Date

.....
Kindly confirm your acceptance of this appointment by completing the following:

I, (**construction health and safety officer's name**) understand the implications of the appointment as detailed above and confirm my acceptance.

Construction Health & Safety Officer's full name Signature Date



Company Name
Company Address
Company Address
Code

Attention: **(Construction Vehicle and Mobile Plant Inspector)**

APPOINTMENT OF THE CONSTRUCTION VEHICLE AND MOBILE PLANT INSPECTOR IN TERMS OF CONSTRUCTION REGULATION 23(1)(k)

I, **(contractor's name)** hereby appoint **(construction vehicles and mobile plant inspector's name)** as the construction vehicles and mobile plant inspector responsible for **(site address)** to inspect on a daily basis all construction vehicles and mobile plant, as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to construction vehicles and mobile plant that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2014 are at all times met.

This appointment is valid from **(date)** to the completion of the stipulated construction work.

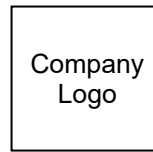
Contractor's Representative full name Signature Date

.....

Kindly confirm your acceptance of this appointment by completing the following:

I, **(construction vehicles and mobile plant inspector's full name)** understand the implications of the appointment as detailed above and confirm my acceptance.

Construction vehicles and mobile plant Signature Date
inspector's full name



Company Name
Company Address
Company Address
Code

Attention: (**Sub-Contractor's Name**)

APPOINTMENT OF SUB-CONTRACTOR IN TERMS OF THE CONSTRUCTION REGULATION 7(1)(c)(v)

I, (**contractor's name**) hereby appoint (**sub-contractor's name**) as the sub-contractor responsible for (**site address**) to carry out the construction work of (**description of construction work**).

You shall ensure that you meet all the requirements in terms of the Act and in particular in terms of the section 37(2) agreement and the Construction Regulations, 2014. You shall also ensure that all contractors appointed by yourself and reporting to you comply with the requirements as stipulated in the Construction Regulations, 2014.

You shall also ensure that all the information and specifications to ensure that the construction work is carried out in a safe manner are carried over to all contractors appointed and reporting to you.

You shall further ensure that all records, registers and required lists are maintained and that all persons appointed to carry out tasks as stipulated by these regulations are competent and have the necessary resources to complete their tasks effectively in such a manner that health and safety is not in any manner compromised.

This appointment is valid from (**date**) to the completion of the stipulated construction work.

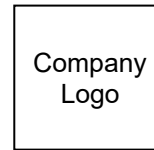
You shall submit a written weekly report on all shortfalls that have not been met in terms of these regulations.

Contractor's Representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, (**sub-contractor's name**) understand the implications of the appointment as detailed above and confirm my acceptance.

Sub-Contractor's Representative full name Signature Date



Company Name
Company Address
Company Address
Code

Attention: **(Construction Supervisor's Name)**

APPOINTMENT OF THE CONSTRUCTION SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 8(7)

I, **(contractor's name)** hereby appoint **(construction supervisor's name)** as the Supervisor responsible for **(site address)** to carry out the construction work of **(description of construction work and area of responsibility)**.

In terms of this appointment you are required to ensure that all construction work performed under your supervision is carried out as follows:

1. By persons suitably trained and competent to do such work;
2. That all statutory appointments have been completed;
3. That, where required, health and safety committees are established and that meetings are accordingly held;
4. That all persons are aware and understand the hazards attached to the work being carried out;
5. That the required risk assessments are carried out;
6. That precautionary measures are identified and implemented;
7. That discipline is enforced at the construction site at all times;
8. That all identified statutory requirements are met; and
9. That any other interests in terms of health and safety with respect to the responsible area is met.
10. You will in writing delegate your duties to the Assistant Construction Supervisor while absent from site.

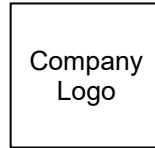
You are required to report any deviations of the above-mentioned instructions to **(contractor's name)**. This appointment is valid from **(date)** to the completion of the stipulated construction work. You shall submit a written weekly report on all shortfalls that have not been met in terms of these regulations.

Contractor's Representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(construction supervisor)** understand the implications of the appointment as detailed above and confirm my acceptance.

Construction Supervisor's full name Signature Date



Company Name
Company Address
Company Address
Code

Attention: (**Excavation Work Supervisor's Name**)

APPOINTMENT OF THE EXCAVATION WORK SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 13(1)(a)

I, (**contractor's name**) hereby appoint (**excavation work supervisor's name**) as the excavation work supervisor responsible for (**site address**) to supervise and carry out all the necessary inspections in terms of all excavation work as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to excavation work that that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations are at all times met.

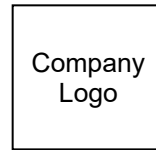
This appointment is valid from (**date**) to the completion of the stipulated construction work.

Contractor's representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, (**excavation work supervisor's full name**) understand the implications of the appointment as detailed above and confirm my acceptance.

Excavation Work Supervisor full name Signature Date



Company Name
Company Address
Company Address
Code

Attention: (**Ladder Inspector's Name**)

APPOINTMENT OF THE LADDER INSPECTOR IN TERMS OF GENERAL SAFETY REGULATIONS 13A(1)

I, (**contractor's name**) hereby appoint (**ladder inspector's name**) as the ladder inspector responsible for (**site address**) to manage ladders on site. You should inspect the ladders as per the checklist at least once a week.

You shall ensure that when becoming aware of any health and safety hazards in respect to ladders that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2014 are at all times met.

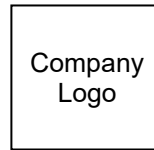
This appointment is valid from (**date**) to the completion of the stipulated construction work.

Contractor's representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, (**ladder inspector's full name**) understand the implications of the appointment as detailed above and confirm my acceptance.

Ladder inspector's full name Signature Date



Company Name
Company Address
Company Address
Code

Attention: **(Risk Assessor's Name)**

APPOINTMENT OF THE CONSTRUCTION SITE RISK ASSESSOR IN TERMS OF CONSTRUCTION REGULATION 9(1)

I, **(contractor's name)** hereby appoint **(risk assessor's name)** as the construction site risk assessor responsible for **(site address)** to carry out risk assessments prior to the commencement of construction work and any other risk assessment that may be required for the duration of the construction work.

You shall ensure that all risks are identified and analyzed and that safe working procedures are drafted and implemented to reduce, mitigate or controls the hazards that were identified.

You will at least use the risk evaluation program with the provided checklists.

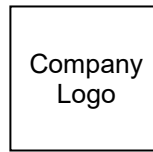
This appointment is valid from **(date)** to the completion of the stipulated construction work.

Contractor's representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(construction site risk assessor's name)** understand the implications of the appointment as detailed above and confirm my acceptance.

Construction site Risk Assessor's full name Signature Date



Company Name
Company Address
Company Address
Code

Attention: **(Scaffolding Supervisor's Name)**

APPOINTMENT OF THE SCAFFOLDING SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 16(1)

I, **(contractor's name)** hereby appoint **(scaffolding supervisor's name)** as the scaffolding supervisor responsible for **(site address)** to supervise and carry out all the necessary inspections in terms of all scaffolding work. (Whether newly erected, altered or moved as per the provided checklist)

You shall ensure that when becoming aware of any health and safety hazards in respect to scaffolding work that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2014 are at all times met.

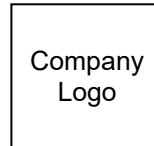
This appointment is valid from **(date)** to the completion of the stipulated construction work.

Contractor's Representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(scaffolding supervisor's full name)** understand the implications of the appointment as detailed above and confirm my acceptance.

Scaffolding Supervisor's full name Signature Date



Company Name
Company Address
Company Address
Code

Attention: **(Stacking and Storage Supervisor's Name)**

APPOINTMENT OF THE STACKING AND STORAGE SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 28(a)

I, **(contractor's name)** hereby appoint **(stacking and storage supervisor's name)** as the stacking and storage supervisor responsible for **(site address)** to manage all stacking and storage on site.

You shall inspect all new stacking and there after as often as needed according to the checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to stacking and storage that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations are at all times met. On identifying any shortfalls or hazards convey such information in writing to the construction supervisor.

This appointment is valid from **(date)** to the completion of the stipulated construction work.

Contractor's Representative full name Supervisor Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(stacking and storage supervisor's full name)** understand the implications of the appointment as detailed above and confirm my acceptance.

Stacking and Storage Supervisor's full name Signature Date

ANNEXURE 2

NOTIFICATION TEMPLATES



Company Name
Company Address
Company Address
Code

Attention: The Provincial Director
The Department of Labour
[Postal Address*]

**NOTIFICATION OF CONSTRUCTION WORK ON CONTRACT [NUMBER]
[CONTRACT DESCRIPTION]**

In terms of regulation 4. (1) of the Construction Regulations, 2014 promulgated on 07 February 2014 in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), we hereby notify you of our intention to commence construction works on the abovementioned contract, which:

- Includes the demolition of a structure exceeding a height of 3 meters,
- Includes the use of explosives to perform the construction work,
- Includes the dismantling of fixed plant at a height greater than 3 meters,
- Will exceed 30 days or will involve more than 300-person days of construction,
- Includes excavation work deeper than 1 meter, or
- Includes working at a height greater than 3 meters above ground or a landing.

1. Parties involved on the Contract

1.1 The Principal Contractor is: [Contractor's Name]
[Contractor's postal address]
[Contractor's postal address]
Att: [Contractor's contact person and telephone number]

1.2 The Client (Employer) is: [Employer's Name]
[Employer's postal address]
Att: [Employer's contact person and telephone number]

1.3 The Client's Safety Agent is: [Safety Agent's Name]
[Safety Agent's postal address]
Att: [Safety Agent's contact person and telephone number]

1.4 The Contractor's Construction Supervisor is: [Contractor's Construction Supervisor's name and telephone number]

2. Details of the construction works

- 2.1 The physical address of the works is: [Physical address of works]
[Physical address of works]
- 2.2 The nature of the construction works is: [Provide a description of the works].
- 2.3 The expected commencement date of the Works is : [Insert expected commencement date]
- 2.4 The expected completion date of the works is : [Insert expected completion date]
- 2.5 The estimated maximum number of persons on the construction site:
- 2.6 A total of _____ contractors will be accountable to the Principal Contractor on the construction site during the execution of the Works. The names of the contractors already chosen are as follows: [Provide a list of the Contractor's subcontractors already appointed]

3. Other details

- 3.1 The Principal Contractor's compensation registration number is: _____
- 3.2 Keep a copy of this notification of construction on site for inspection.

We trust the above is in order.

Yours faithfully,

Signature

Date

* Postal Address of Provincial Director as indicated in regulation 1 of the General Administrative Regulations, 1996.

ANNEXURE 3

IDENTIFIED HEALTH AND SAFETY HAZARDS

ANNEXURE 3: IDENTIFIED HEALTH AND SAFETY HAZARDS

In terms of Regulation 9(1) (b) of the Construction Regulations 2014 the following hazards anticipated with the scope of work have been identified.

NOTE: The list of potential hazards is by no means intended to be all inclusive and is not limited to this list, and it remains the responsibility of the Contractor to identify all possible hazards with regards to his scope of work and to put measures in place to mitigate, reduce or control these hazards.

Potential Hazards

1. Commissioning of new installations
2. Confined space entry
3. Demolition/breaking into existing structures
4. Excavation shoring / brazing
5. Excavations been flooded during rainy season
6. Explosives
7. Hazardous material handling / storage / management
8. Heat stress
9. Loading and offloading vehicles
10. Manual handling of materials
11. Plant and equipment integrity
12. Public and traffic safety
13. Requirements for plant isolations
14. Safe usage and storage of Oxygen, Acetylene and LPG cylinders
15. Scaffolding
16. Stacking and storage of equipment / materials
17. Tie-ins into existing equipment
18. Usage of compressed air and equipment
19. Work involving radioactive sources
20. Working in operational areas
21. Working on live electrical installations / sub-stations / MCC rooms
22. Working on moving equipment.
23. Contaminated areas, surfaces & equipment, tools; Contaminated Personal Protective Equipment & Clothing

Contract No: HHS 02-2023/24 Tender for the appointment of a contractor for the construction of water and sewer reticulation services in Andeon Extension 37 for a period of 36 months.
Part C3: Scope of Work
References to the Scope of Works in Terms of the Environmental Management plan

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF WATER AND SEWER RETICULATION SERVICES IN ANDEON EXTENSION 37

C3.9 REFERENCES TO THE SCOPE OF WORKS IN TERMS OF THE ENVIRONMENTAL MANAGEMENT PLAN

C3.9 REFERENCES TO THE SCOPE OF WORKS IN TERMS OF THE ENVIRONMENTAL MANAGEMENT PLAN

1. INTRODUCTION

The EMP will address the environmental impacts during the design, construction and operational phases of a project. Due regard must be given to environmental protection during the entire project. 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 project in order to:

Minimize 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 Engineer 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 THE 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 minimizing 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 project. The nominated representative of the Contractor will therefore be responsible for ensuring that the provisions of the EMP are complied with. The Engineer 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 Engineer 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 project types the City of Tshwane Metropolitan Municipality need to submit to DEAT for approval and those project 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 minimizing degradation to the area. The following project 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 minimized.

6.1 Establishment of site offices

6.1.1 Site plan

The Contractor shall provide the Engineer 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 Engineer in writing, may be sawn off/removed.

The project 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 Specifications Sections 001, 002 and 104.

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 Specifications 104.

6.3 Waste management

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

6.3.1 Litter

No littering by construction workers are 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 Specifications Sections 001 and 002.

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 archaeological sites, artifacts or graves

6.5.1 Archaeological site

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 Engineer of such discovery. The National Monuments Council must be contacted who will appoint an archaeological consultant. Work may only resume once clearance is given in writing by the archaeologist. Read with General Conditions of Contract.

6.5.2 Graves

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

6.6 Stockpiled material

The Contractor shall so plan his activities that materials excavated from borrow pits and cuttings, in so far as possible, can be transported direct to and placed at the point where it is to be used. However, should temporary stockpiling become necessary, the areas for the

stockpiling of excavated and imported material must be indicated and demarcated on the site plan and approved in writing by the engineer.

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

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

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

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

Read with Series 2: Earthworks – Section 203.

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 must be stored in a bunded area with adequate containment (at least 1,5 times the volume of the fuel) for potential spills and leaks.

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 considerations

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
<i>Establishment of site offices</i>	<i>Siting of offices</i>	<i>Preferred areas would be flat areas along the route. Avoid steep areas as soil erosion could increase. Avoid water courses</i>	<i>001 002.02.01</i>

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
	<i>Site Plan</i>	<i>Contractor will provide engineer detail of layout of site facilities within two weeks of moving to the site ie 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.</i>	001 002
<i>Site rehabilitation</i>	<i>Cleanup</i>	<i>All construction material is to be removed from the site on completion of the contract.</i>	001 002 104
<i>Vegetation</i>	<i>On site</i>	<i>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</i>	104
	<i>Weeds</i>	<i>Clearance of weeds must be done by hand before seeding.</i>	104
	<i>Grass cover</i>	<i>The grass cover surrounding the construction site is to be left as in tact as possible or restored to its original condition.</i>	104
<i>Water</i>	<i>Available for human consumption</i>	<i>Water for human consumption must be tested and treated in accordance with recommendations.</i>	
<i>Soil management</i>	<i>Topsoil</i>	<i>The topsoil (\pm 300 mm) of any excavation shall be removed and stockpiled separately from underlying material in an appointment area</i>	203 104
	<i>Borrow material</i>	<i>EMPR's for borrow pits to be submitted to the Department of Mineral and Energy Affairs for approval</i>	201 203
<i>Archaeological & Cultural sites</i>	<i>Discover of archaeological sites of artefacts</i>	<i>If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately and an archaeological consultant must</i>	GCC

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
		<i>be contacted. Work may only resume once clearance is given in writing by the archaeologist.</i>	
Graves	<i>Discovery of graves</i>	<i>If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker should be contacted</i>	GCC
Waste management	<i>Solid & Construction waste</i>	<i>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.</i>	
	<i>Litter</i>	<i>The site is to be kept free of litter</i>	001
Sewage treatment	<i>Toilet facilities</i>	<i>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.</i>	001 002
Fuel, diesel & hazardous materials	<i>Hazardous Materials</i>	<i>All hazardous materials ie 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.</i>	
	<i>Fuels</i>	<i>All fuel tanks will be stored in an appointed area. Leakage will be avoided.</i>	
	<i>Cooking fuel</i>	<i>The Contractor should ensure that sufficient fuel is available for heating and cooking purposes should this be necessary.</i>	
	<i>Oil, grease</i>	<i>Oil, grease and cleaning materials from maintenance of vehicles shall be collected in a sump and sent back to supplier.</i>	

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
	<i>Spillages</i>	<i>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.</i>	
<i>General considerations</i>	<i>Lines of authority</i>	<i>A nominated representative of the contractor will be the designated environmental officer for the site.</i>	RELEVANT SECTION IN SPECIFICATIONS
	<i>Reports</i>	<i>The environmental officer will submit monthly reports to the Engineer who will verify the information</i>	
	<i>Complaints</i>	<i>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</i>	

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS 02-2023/24

**TENDER FOR THE APPOINTMENT OF A CONTRACTOR
FOR THE CONSTRUCTION OF WATER AND SEWER
RETICULATION SERVICES IN ANDEON EXTENSION 37
FOR A PERIOD OF 36 MONTHS**

C4 SITE INFORMATION

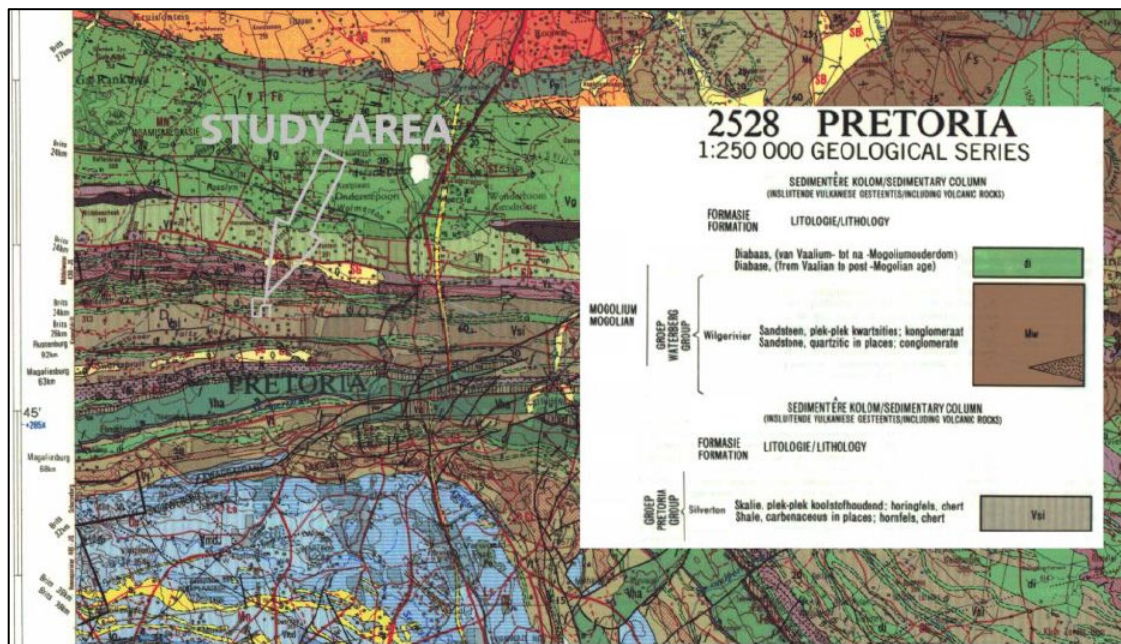


Figure 2 – Geological Map

C4.3 EXISTING INFRASTRUCTURE

There are no structures of any form built, such as modular homes, schools, shopping centre, etc, within the area. No electrical and sanitation infrastructure has been constructed to date, however, there is a Randwater line that runs through the area under study.

Most of the actual site's natural vegetation fairly is undisturbed with a combination of thick bush and plantation, light bushes, isolated trees, tree shrubs and grass lands.

There are surfaced roads running parallel on the eastern boundary (Renet Avenue and Holtman Avenue) and southern boundary (Kenneth Street). Photos 1 to 6 illustrate the existing site conditions under Figure 2. The existing services may cause construction constraints for the infrastructure developments. Wayleaves from all servitude occupants will be handed over to the Contractor prior any commencement of works/excavation to acquire consent and exact depths of wayleaves from the Service Owners, to avoid services interruption.

The wayleaves are also to be utilised to identify clashes of services with the sewer and water reticulation design. City of Tshwane Wayleaves Central was used to attain the wayleaves. Wayleaves attained to date are shown on below Table 1.

Table 1: Services Information

Name of Institution	Type of Service
Eskom / Internal Distribution	Electricity
Telkom	Telecommunication
COTMM Municipality	Electricity
COTMM Municipality	Water and Sanitation
DFA	Fibre
Randwater	Water Pipes
Liquid Communication / Neotel	Fibre
Cell C	Fibre
COTMM Municipality	Environmental Services
COTMM Municipality	Roads and Stormwater
Frog Foot	Fibre
Extrix Pty Ltd T/A SAS Networks	Fibre

Link Africa	Fibre
Metro Fibre	Fibre
MTN	Fibre
Sasol	Gas Pipes
Transnet	Pipe Lines
Tshwane Broad Band	Fibre
Vodacom	Fibre
VumaTel	Fibre

Attaining the above information will also assist in knowledge of future developments planned (if any), to avoid clashing of development or infrastructure related to the proposed water and sewer reticulations.



Photo 1 – Renet Avenue (Eastern Boundary of Site / Study Area)



Photo 2 – Cnr Holtman Avenue and Kenneth Street (Southern Boundary of Site / Study Area)



Photo 3 – Flat Grass Lands



Photo 4 – Bushy Grass Land Area

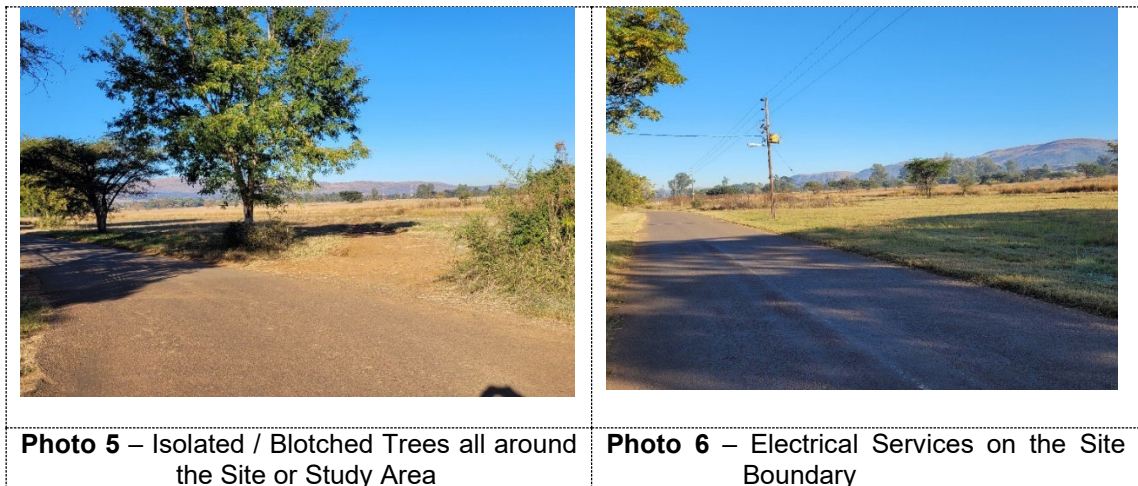


Figure 3 – Site Description Photos

C4.4 CLIMATE AND HYDROLOGY

According to Meteoblue weather information by location, Andeon, Pretoria West normally receives about 426 mm of rain per year, with most rainfall occurring during summer. It receives the lowest rainfall (1mm) in July and the highest (81mm) in January. The average midday temperatures for Andeon, Pretoria West range from 24°C in June and July to 35°C in January. The region is the coldest during July when the mercury drops to -5°C on average during the night. Figure 4 below indicates the monthly variation of average minimum daily temperatures.

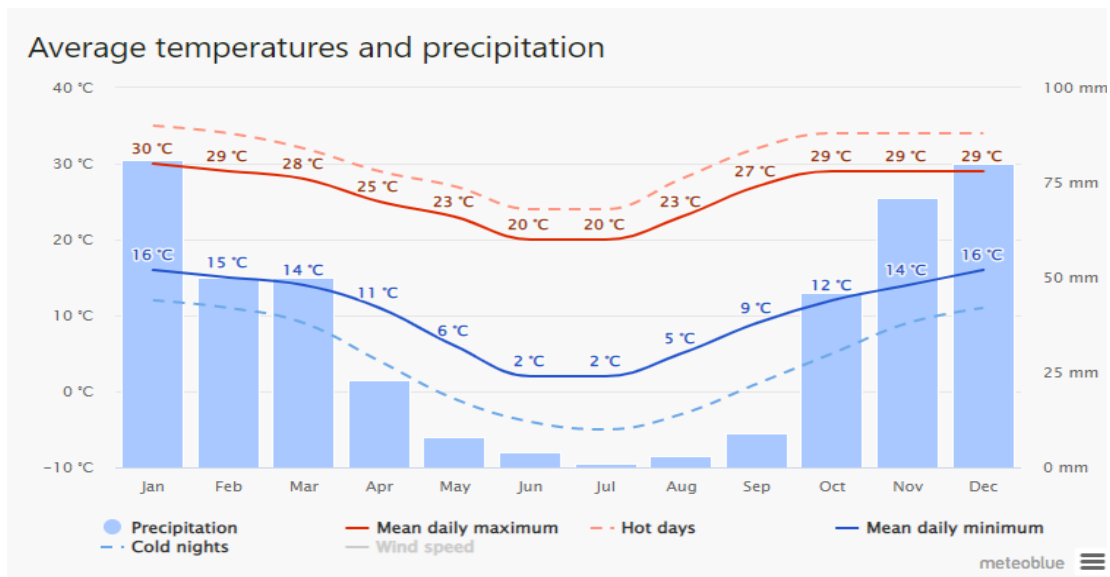


Figure 4: Climate of Pretoria West

Climate also determines the mode or weathering and rate of weathering. The effect of climate on the weathering process (i.e., soil information) is determined by the climatic N-value defined by Weinert.

Table 1: Weinert N Value

Climate Zone	Arid	Semi-Arid	Sub Humid	Humid
Weinert N-Value	>10	5-10	2-5	<2
Mean Annual Rainfall (mm)	< 250	250-500	500-800	800

The N-value for the Andeon, Pretoria West is between 2 & 5, which implies a moderate climate, and is an indication that both chemical decomposition and mechanical disintegration can occur as the rock weathering mode though chemical decomposition predominates.

‘These materials tend to have relatively high plasticity and are moisture sensitive. Basic igneous rocks are often not durable and prone to degradation in service. Careful attention should be paid to the internal and external drainage of pavement’. LVSR Guidelines

Climate Data indicates that construction would be better suited between the months of May and September, as there is less rain which can hamper a construction program. The months of June, July and August are in particular favourable as there is very little or no rain.

C4.5 TOPOGRAPHY AND DRAINAGE PATTERN

The study area is gently sloping from the northern towards the southern direction, with average slopes of 2.4% throughout the study. The highest elevation is at the northern portion of the study area at 1343 m above mean sea level while the lowest point is at the southern portion of the study area at 1296 m above mean sea level.

See Figure 5– Topography Elevations

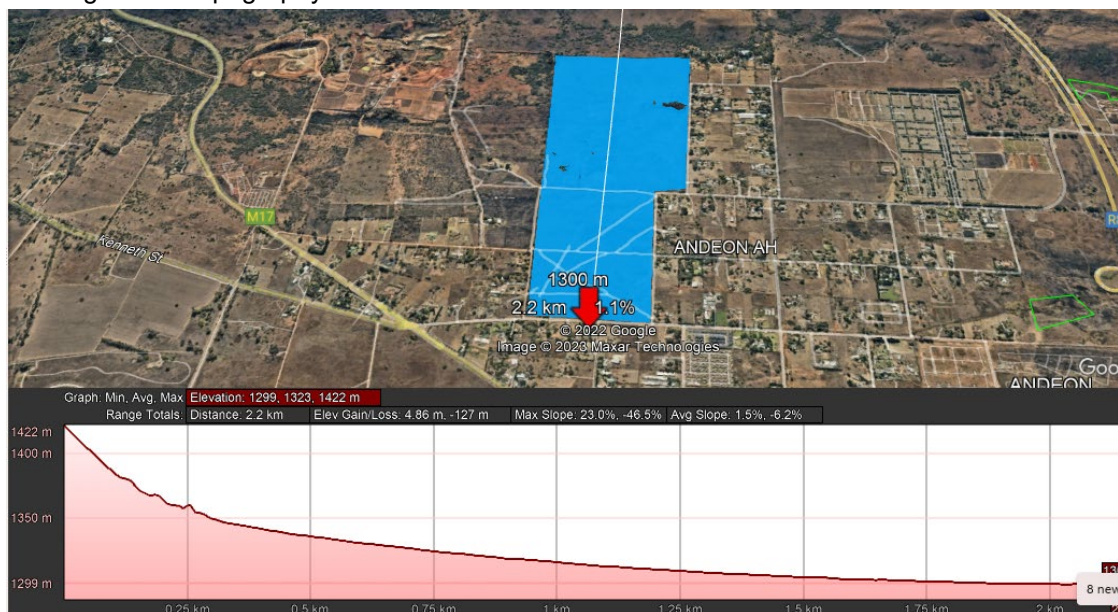


Figure 5– Topography Elevations

C4.6 NEW INFRASTRUCTURE

LIST OF DRAWINGS

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Construction of sewer services in Andeon Ext 37: Sewer Layout Sheet 1 of 8	2022-AND-S-04U01

DRAWING DESCRIPTION	DRAWING NUMBER
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Construction of sewer services in Andeon Ext 37: Sewer Layout Sheet 3 of 8	2022-AND-S-04U03
Construction of sewer services in Andeon Ext 37: Sewer Layout Sheet 4 of 8	2022-AND-S-04U04
Construction of sewer services in Andeon Ext 37: Sewer Layout Sheet 5 of 8	2022-AND-S-04U04
Construction of sewer services in Andeon Ext 37: Sewer Layout Sheet 6 of 8	2022-AND-S-04U06
Construction of sewer services in Andeon Ext 37: Sewer Layout Sheet 7 of 8	2022-AND-S-04U07
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