

HUMAN SETTLEMENTS

TENDER REFERENCE: HHS01-2022/23



APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

VOLUME 1



EXPANDED PUBLIC WORKS PROGRAMME

A Tender for Category **7CE** CIDB Registered Contractors

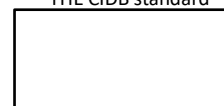
ISSUED BY:	PREPARED BY:
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Registered Name of Tenderer :	
Trading Name of Tenderer :	
Registration No. of Entity :	
Postal Address of Tenderer :	
Contact Person :	CoT Vendor No :
Tel. No :	E-mail Address :
Cell No :	Fax No :
CIDB CRS Number(s) :	
Offer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

Only bidders registered on the Central Supplier Database and with CSD Number will be considered for this tender as it is a requirement from National Treasury.



In compliance with
THE CIDB standard



CITY OF TSHWANE
HUMAN SETTLEMENTS

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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CITY OF TSHWANE
HUMAN SETTLEMENTS

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

PORTION 1 : TENDERING PROCEDURES

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T1 TENDERING PROCEDURES

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CITY OF TSHWANE
HUMAN SETTLEMENTS

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

PORTION 1 : TENDERING PROCEDURES

PART T1.2 : TENDER DATA

T1.1 TENDER NOTICE AND INVITATION TO TENDER

**CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT**



HHS 01-2022/23: APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF THE SEWER PIPELINE AT ZITHOBENI

Tenders are hereby invited for the above services.

Tenderers should have a Construction Industry Development Board (CIDB) contractor grading designation **Level 7 Civil Engineering (CE) or higher**.

Tenders will be evaluated on the basis of awarding points for price and Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution. The 80/20 Preference Point System will be applied to this Tender. Only locally produced goods or locally manufactured goods, meeting the stipulated minimum threshold for local production and content will be considered.

The tender documents will be obtainable for download on tshwane.gov.za or **www.etender.gov.za** from **25 July 2022**.

A COMPULSORY CLARIFICATION MEETING with a representative of the Employer will take place at : Zithobeni Community Hall, Mothibe Drive, Zithobeni Ext 1, Bronkhorstspuit
Date: 16 August 2022 Time: 13H00

The lowest or any tender will not necessarily be accepted, and the Municipality reserves the right to accept a tender as a whole or in part.

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 City reserves the right to extend the validity period after consultation with the concerned parties.

The closing time for receipt of tenders is 07 September 2022 at 10:00. 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 CHIEF FINANCIAL OFFICER: FINANCIAL SERVICES DEPARTMENT, SUPPLY CHAIN MANAGEMENT, PRETORIA, and must be submitted in the tender box situated at the Tshwane House (at the entrance to Tshwane House Building), City of Tshwane Headoffice, 320 Madiba Street, Pretoria, 0001. Tenders will be opened in public at the latter address at the time indicated.

TECHNICAL ENQUIRIES:	Employer's Agent: E mail:	Mr Osvaldo Simba osvaldo@aseda.co.za
SUPPLY CHAIN EQUIRIES:	Employer's Agent: Telephone: E mail:	Mr. Kgomoiso Makgale 012 358 5478 KgomoisoMAKG@Tshwane.gov.za

**Ms.M. MUTLANENG
CITY MANAGER
NOTICE of 2022**

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in Annex C of the Construction Industry Development Board's (CIDB) Board Notice 423 of 2019 (contained in Government Gazette No. 42622 of 08 August 2019), bound into section T1.3.

The Standard Conditions of Tender makes several references to the Tender Data. The Tender Data also contains project-specific amendments to the Standard Conditions of Tender applicable to this document. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

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

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender
C.1.1	Actions	The Employer is THE CITY OF TSHWANE . The term "bid" in the context of this standard is synonymous with the term "tender".
C.1.2	Tender documents	<p><u>Volume 1: General Clauses, Tender Procedures, Contract Data, Pricing Data, Schedule of Quantities and Scope of Works,</u></p> <p>This document in which are bound the Tender Procedures, Returnable Documents, Agreements and Contract Data</p> <p><u>Volume 2: Construction Specifications and Drawings</u></p> <p>This document in which are bound the Project Specifications and Drawings</p>
C.1.3 C.1.3.2	Interpretation	<p><i>Replace this sub-clause with the following:</i></p> <p>These Conditions of Tender, the Tender Data, List of Returnable Documents and Returnable Schedules which are required for tender evaluation purposes, shall form part of the Contract arising from the invitation to tender.</p>
C.1.3	Interpretation	<p>Add the following new clauses:</p> <p>"1.3.4 The Tender documents have been drafted in English. The contract arising from the invitation of tender shall be interpreted and construed in English."</p> <p>"1.3.5 The following words will have the same meaning:</p> <p><i>CITY OF TSHWANE, COT or CTMM</i>"</p>
C.1.4	Communication and Employer's Agent	<p>Agent: Oswaldo Simba Tel: 011 312 4070 Fax: 011 312 2689 E-mail address: osvaldo@aseda.co.za</p>
C.2.1	Eligibility	C.2.1.1 Only those Tenderers who are registered with the CIDB, or are capable of being registered prior to the evaluation of submissions, in a contractor grading designation equal to or higher than a contractor grading

Reference to relevant clauses in Standard Conditions of Tender	Addition or Variation to Standard Condition of Tender
	<p>designation determined in accordance with the sum tendered or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations, for a Level 7 Civil Engineering (CE) or higher Class of construction work, are eligible to have their tenders evaluated.</p> <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 2. The lead partner has a contractor grading designation in the 6 CE or higher Class of construction work; not lower than one level below the required grading designation in the class of works construction works under consideration and possess the required recognition status; and 3. The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor designation determined in accordance with the sum tendered for an 7 CE or higher Class of construction work, or a value determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry Development Regulations <p>C.2.1.1only tenderers who meet the mandatory requirements as follows:</p> <p>Project Contract Director Qualification: BSc or B-Tech in civil engineering or National Diploma or higher in civil engineering Professional registration with ECSA as Engineer or Technologist or Technician (attach copy of qualifications and proof of professional registration)</p> <p>Project Site Agent Qualifications: Minimum National Diploma in civil engineering or higher qualification in civil engineering (attach copy of qualifications)</p> <p>Foreman Artisan qualification as plumber and Red Seal certificate (attach copy of qualifications)</p> <p>Safety Officer Relevant safety qualification as prescribed by the Construction regulations 2019 and South African Council for the Project and Construction Management Professions 2000 (attach qualifications and proof of registration with SACPCMP)</p>

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender
C.2.2	Cost of tendering	<p>Add the following to the sub-clause C2.2.1:</p> <p>“Accept that the Employer will not compensate the tenderer for any costs incurred in attending interviews in the office of the Employer or the Employer’s Agent (if required).”</p>
C2.5	Reference Documents	<p>Add the following:</p> <p>The following standards and conditions of contract will be applicable under this Contract:</p> <ul style="list-style-type: none"> The document “<i>Standard Specifications for Municipal Civil Engineering Works</i>”, <i>Third Edition, 2005</i>” issued by the General Manager: Water and Sanitation of the City of Tshwane. <p>THE DOCUMENT IS DOWNLOADABLE ON THE TSHWANE WEBSITE (www.tshwane.gov.za) or E-tender PORTAL</p> <ul style="list-style-type: none"> The document “<i>General Conditions of Contract for Construction Works, Third Edition, 2015</i>”; <p>Tenderers, Contractors and Sub-contractors shall purchase thier own copy of the GCC 2015, available from:</p> <p>South African Institution of Civil Engineering Private Bag X200 Halfway House 1685 South Africa</p> <p>Tel +27 (0)11 805 5947</p> <p>All international standard specifications and codes listed and referenced in the Project and Particular Specifications.</p>
C.2.7	Clarification meeting	<p>Where applicable, details of the compulsory clarification meeting with a representative of the Employer are stated in the Tender Notice and Invitation to Tender (Section T1.1 of the document).</p> <p>Confirmation of attendance will be recorded on site in the attendance register to be signed by all tenderers and in the Site Inspection Certificate included in Section T2.2 of the Document.</p> <p>Tender documents will not be made available at the site visit and/or clarification meeting. Detail relating to the collection of tender documents is indicated in the Tender Notice and Invitation to Tender (Section T1.1 of the document).</p>

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender
C.2.8	Seek clarification	<p><u>Replace</u> the contents of the clause with the following:</p> <p>"Request clarification of the tender documents, if necessary, by notifying the Employer's Official or the Employer's Agent, indicated in the Tender Notice and Invitation to Tender, in writing at least seven working days before the closing time stated in the foregoing tender notice and clause C2.15."</p>
C.2.9	Insurance	<p><u>Add the following</u> to the clause</p> <p>"Accept that the submission of a Tender shall be construed as an acknowledgement by the Tenderer that he is satisfied with, where applicable, the insurance cover the Employer will affect under the contract."</p>
C2.10	Pricing the tender offer	<p><u>Add the following</u> 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><u>Add the following</u> to the clause:</p> <p><u>"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."</u></p> <p><u>No correction fluid may be used.</u> If correction fluid has been used, the tender as a whole will not be considered.</p> <p>The Municipality will reject the bid if corrections are not made in accordance with the above."</p>
C.2.12	Alternative tender offers	<p><u>Replace</u> sub-clause C2.12.1 with:</p> <p><u>"Alternative offers will only be considered if tenderer(s) have submitted a fully completed main offer. For alternative offers, a complete separate detailed activity, quantities and bill/price schedule must be submitted as a separate document."</u></p> <p>Tenderers must provide for each offer a typed copy on CD (Word and PDF format) of the above schedule with their offers."</p>
C.2.13 C.2.13.2	Submitting a Tender Offer	<p><u>Replace</u> 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.</p> <p>All volumes are to be left intact in its original format and no pages shall be removed or re-arranged."</p>

Reference to relevant clauses in Standard Conditions of Tender	Addition or Variation to Standard Condition of Tender
	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."
C2.13.3	<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>
C.2.13.4	<p>Add the following to the clause:</p> <p>"Only authorised signatories may sign the original and all copies of the tender offer where required in terms of C.2.13.3</p> <p>In the case of a ONE-PERSON CONCERN submitting a tender, this shall be clearly stated.</p> <p>In 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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>In cases where the Tenderer has not submitted proof of authorisation with the Tender, the Employer reserves the right to, at any time after the closure of the Tender, but before the award of the Tender, request the Tenderer to provide proof of authorisation within 7 (seven) calendar days from date of notification.</p> <p><u>Accept that failure to submit proof of authorisation to sign the tender shall result in a Tender Offer being regarded as non-responsive.</u></p>
C.2.13.5	<p>The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are as follows:</p> <p>Reference no. : HHS01-2022/23 Tender description :</p>

Reference to relevant clauses in Standard Conditions of Tender	Addition or Variation to Standard Condition of Tender
	<p>Tender for the APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF THE SEWER PIPELINE AT ZITHOBENI</p> <p>Correct closing time : 10H00 Correct due date : 7 September 2022</p> <p>Each tender shall be enclosed in a sealed envelope, bearing the correct identification details and shall be placed in the tender box located at:</p> <p>PROCUREMENT ADVICE CENTRE (TENDER BOX AT THE ENTRANCE TSHWANE HOUSE)</p> <p>320 Madiba Street, PRETORIA cCENTRAL 0001</p> <p>This address is 24 hours available for delivery of Tender offers.</p> <p>The name and address of the tender shall be entered on the back of the envelope.</p>
C.2.13.6	A two-envelope procedure will not be followed.
C.2.13.10	<p>Add the following new sub-clause 2.13.10:</p> <p>Accept that all conditions, which are printed or written upon any stationary used by the Tenderer for the purpose of or in connection with the submission of a tender offer for this Contract, which is in conflict with the conditions laid down in this document shall be waived, renounced and abandoned.</p>
C.2.14	<p>Information and Data to be completed in all respects</p> <p>Add the following to the clause:</p> <p>"The Tenderer is required to enter information in the following sections of the document:</p> <p>Section T2.2 : Returnable Schedules Section T2.3 : Technical Schedules Section C1.1 : Form of Offer and Acceptance Section C1.2 : Contract Data (Part 2) Section C2.2 : Bill of Quantities</p> <p>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.</p> <p>The Tenderer shall complete and sign the Form of Offer prior to the submission of a Tender Offer.</p> <p>The Schedule of Deviations (if applicable) shall be signed by the successful Tenderer after acceptance by the Employer of the Tender Offer.</p>

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender
		<p>Accept that the Employer shall in the evaluation of tenders take due account of the Tenderer's past performance in executing for similar building 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.</p> <p>Satisfy the Employer and Engineer as to his ability to perform and complete the Works timeously, safely and with satisfactory quality, by furnishing details in Part T2 – Returnable Documents.</p> <p><u>Accept that failure to provide the information and data required in the Returnable Documents, including the Technical Schedules shall result in a Tender Offer being regarded as non-responsive.</u></p> <p>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.</p>
C.2.15	Closing Time	
C.2.15.1		Details of the closing time for submission of tender offers are stated in the Tender Notice and Invitation to tender (Section T.1.1 of the document).
C.2.16	Tender Offer validity	The Tender Offer validity period is 90 days .
C.2.16.1		<p><u>Add the following</u> to the Clause</p> <p>"If the tender validity expires on a Saturday, Sunday or public holiday, the Tender Offer shall remain valid and open for acceptance until the closure of business on the following working day."</p>
C.2.16.5		<p><u>Add the following</u> new clause:</p> <p>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</p>

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender
		well as any other amounts the Employer may have to pay to have the Works completed.
C.2.18 C.2.18.1	Provide other material	<p><u>Add the following</u> 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 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.”</p>
C.2.19	Inspections, tests and analysis	<p>Add the following at the end of the clause:</p> <p>“...or upon written request.”.</p>
C2.22	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: Returnable Documents for a list of documents that are to be returned with the tender.
Add the following new clause: “C.2.24”	Canvassing and obtaining of additional information by tenderer	<p>“Accept that no Tenderer shall make any attempt either directly or indirectly to canvass any of the Employers officials or the Employer’s agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon.”</p> <p>“No Tenderer shall make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.”</p>
Add the following new clause: “C.2.25”	Prohibitions on awards to persons in service of the state	<p>“Accept that the Employer is prohibited to award a tender to a person</p> <ul style="list-style-type: none"> a) who is in the service of the state; or b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or c) a person who is an advisor or consultant contracted with the municipality <u>or</u> municipal entity. <p>“In the service of the state” means to be –</p> <ul style="list-style-type: none"> a) a member of – <ul style="list-style-type: none"> • any municipal council;

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender
		<ul style="list-style-type: none"> any provincial legislature; or the National Assembly or the National Council of Provinces; <p>b) a member of the board of directors of any municipal entity;</p> <p>c) an official of any municipality or municipal entity;</p> <p>d) an employee of any national or provincial department;</p> <p>e) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);</p> <p>f) a member of the accounting authority of any national or provincial public entity; or</p> <p>g) an employee of Parliament or a provincial legislature.”</p> <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 – Returnable Documents must be completed.”</p>
Add the following new clause: “C.2.26”	Awards to close family members of persons in the service of the state	<p>“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 the state (defined in clause 2.25), or has been in the service of the state in the previous twelve months, including –</p> <p>a) the name of that person;</p> <p>b) the capacity in which that person is in the service of the state; and</p> <p>c) the amount of the award.</p> <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 – Returnable Documents must be completed in full and signed.”</p>
Add the following new clause: “C.2.27”	Vendor registration	<p>“Accept that each contractor is required to register as a supplier / service provider on the City of Tshwane’s vendor register before any payment can be done. Accept that 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.</p> <p>Vendor registration documents are available from the Procurement Advice Centre or can be downloaded from https://vendorportal.tshwane.gov.za/</p> <p>Accept that all parties of a joint venture or consortium submitting a tender shall comply with the requirements of this clause”</p>
Add the following new clause: “C.2.28”	Tax Clearance Certificate	<p>“In the case of a Joint Venture/Consortium the tax clearance certificate must be for the Joint Venture/Consortium or individual valid tax clearance certificates for all the members of the Joint Venture/Consortium.”</p>
C.3.1	Respond to requests from tenderer	

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender
C.3.1.1		<p>Replace the contents of the clause with the following:</p> <p>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 procurement documents within two (2) working days of the same date.</p>
C.3.4 C.3.4.1	Opening of Tender submissions	The time and location for the tender submissions and details of the tender opening are stated in the Tender Notice and Invitation to Tender (Section T1.1 of the document).
C.3.5	Two-envelope system	A two-envelope procedure will not be followed.
C.3.8 C.3.8.1	Test for responsiveness	<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>
C3.9	Arithmetical errors, omissions and discrepancies	<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> <ol style="list-style-type: none"> 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. 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. 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>Notify a tenderer upon written request received after the closing date of tenders of all arithmetical errors made by that particular tenderer.</p>

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender
C.3.11	Evaluation of Tenders	<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>where the Points scored for Price is:</p> <p>in accordance with Clause 3.11.4 where the financial value inclusive of VAT of one or more responsive tender offers equals or is less than R50 000 000; or</p>
<p>Add the following new clause:</p> <p>C.3.11.3</p>	Functionality will be evaluated based on the tender's ability to prove with supporting documentation experience and capacity to implement a bulk sewer project	<p>Method 2: Functionality, Price and Preference</p> <p>In the case of functionality, price and preference:</p> <ol style="list-style-type: none"> 1) Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality as stated in the Tender Data. 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>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 and C3.11.5 below.</p>
<p>Add the following new clause:</p> <p>C.3.11.4</p>		<p>The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million will apply.</p> <p>(4)(a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price quotation) with a rand value equal to, or above R 30 000 and up to Rand value of R50 000 000 (all applicable taxes included):</p> $P_s = 80 \left[1 - \frac{P_t - P_{min}}{P_{min}} \right]$ <p><i>Where</i></p> <p><i>P_s</i> = Points scored for comparative price of tender or offer under consideration;</p> <p><i>P_t</i> = Comparative price of tender or offer under consideration;</p> <p>and</p> <p><i>P_{min}</i> = Comparative price of lowest acceptable tender or offer.</p> <p>(4)(a)(ii) An employer of state may apply the formula in paragraph (i) for price quotations with a value less than R30 000, if and when appropriate:</p>

Reference to relevant clauses in Standard Conditions of Tender		Addition or Variation to Standard Condition of Tender																				
		<p>(4)(b) Subject to subparagraph (4)(c), points must be awarded to a tender for attaining the B-BBEE status level of contributor in accordance with the table below:</p> <table><tr><th>B-BBEE status level of</th><th>Number of points</th></tr><tr><td>1</td><td>20</td></tr><tr><td>2</td><td>18</td></tr><tr><td>3</td><td>14</td></tr><tr><td>4</td><td>12</td></tr><tr><td>5</td><td>8</td></tr><tr><td>6</td><td>6</td></tr><tr><td>7</td><td>4</td></tr><tr><td>8</td><td>2</td></tr><tr><td>Non-compliant contributor</td><td>0</td></tr></table> <p>(4)(c) A maximum of 20 points may be allocated in accordance with subparagraph (4)(b)</p> <p>(4)(d) The points scored by tender in respect of B-BBEE contribution contemplated in subparagraph (4)(b) must be added to the points scored for the price as calculated in accordance with subparagraph (4)(a).</p> <p>(4)(e) Subject to paragraph 3.13 the contract must be awarded to the tender who scores the highest total number of points.</p>	B-BBEE status level of	Number of points	1	20	2	18	3	14	4	12	5	8	6	6	7	4	8	2	Non-compliant contributor	0
B-BBEE status level of	Number of points																					
1	20																					
2	18																					
3	14																					
4	12																					
5	8																					
6	6																					
7	4																					
8	2																					
Non-compliant contributor	0																					
<p>Add the following new clause:</p> <p>C.3.11.6</p>	<p>Scoring Functionality and Quality</p> <p>Refer to Forms below table below</p>	<p>A minimum of 70 points out of 100 must be scored to move to the next evaluation level</p> <p>Points allocation</p> <p>Company experience – 40 points</p> <p>Key personnel experience – 45 points</p> <p>Local economic participation - 15</p>																				
C.3.16	Registration of the award	<p>Add the following to the clause:</p> <p>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.</p>																				
C.3.17	Provide Copies of Contract	<p>One signed copy of the contract shall be provided by the Employer to the successful Tenderer.</p>																				

FUNCTIONALITY EVALUATION

No.	Functionality and Quality Criteria – Tender Rating Matrix		A	B	C
			Tenderer rating (Score 0-5)	Weighting	Tenderer Score =(A x B)
1	Company work experience as per FORM RDC 1	Tendering Firm's experience of successfully completed contracts involving the construction of large diameter pipelines ≥ 300mm in diameter and >1km in length. (attach completion certificates as proof).		8	
		Successfully completed 5 projects or more	5		
		Successfully completed 4 projects	4		
		Successfully completed 3 projects	3		
		Successfully completed 2 projects	2		
		Successfully completed 1 projects	1		
2.1	Key Project Personnel as per Form RDD 3 Contracts Director	Project Contract Director Minimum 3 years relevant experience Specific Experience: Attach a CV detailing your Experience in the position of Contract Project Manager on contracts for the construction of large diameter pipelines ≥ 300mm in diameter and >1km in length from start to full completion and hand over:		4	
		More than 3 Years experience	5		
		3 Years experience	4		
		Less than 3 Years experience	3		
2.2	Key Project Personnel as per Form RDD 3 Project Site Agent	Project Site Agent Minimum 3 years relevant experience Specific Experience: Attach a CV detailing your Experience in the position of Contract Site Agent on civil engineering projects		3	
		More than 3 Years experience	5		
		3 Years experience	3		
		Less than 3 Years experience	0		
2.3	Key Project Personnel as per Form RDD 3 Foreman	Foreman Attach a CV detailing your Experience in the position of Foreman (Minimum 2 years relevant experience) on contracts involving the civils pipe laying construction		2	
		More than 2 Years experience	5		
		2 Years experience	3		
		Less than 2 Years experience	0		

No.	Functionality and Quality Criteria – Tender Rating Matrix		A	B	C
			Tenderer rating (Score 0-5)	Weighting	Tenderer Score =(A x B)
3	Local economic Participation as per Form RDB 1	Local Economic Participation will be allocated maximum 15 points for Tshwane participants, 10 points for Gauteng participants and 5 points for National participants. The maximum limit on Local Content is therefore 15 points		5	
		City of Tshwane	3		
		Gauteng Province	2		
		National participant	1		
TOTAL SCORE (%)					

T1.3 STANDARD CONDITIONS OF TENDER

CIDB STANDARD CONDITIONS OF TENDER

(August 2019 Edition)

(As contained in Annexure C of the CIDB Standard for Uniformity in Construction Procurement – August 2019)

C.1 General

C.1.1 Actions

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

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

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

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

C.1.1.3 The employer shall not seek and a tenderer shall not submit a tender without having a firm intention and the capacity to proceed with the contract.

C.1.2 Tender Documents

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

C.1.3 Interpretation

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

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

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

a) **conflict of interest** means any situation in which:

- i) someone in a position of trust has competing professional or personal interests which make it difficult to fulfil his or her duties impartially;
- ii) an individual or tenderer is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
- iii) incompatibility or contradictory interests exist between an employee and the tenderer who employs that employee.

- b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;
- c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;
- d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;

C.1.4 Communication and employer's agent

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

C.1.5 Cancellation and Re-Invitation of Tenders

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

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

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

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

C.1.6 Procurement procedures

C.1.6.1 General

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

C.1.6.2 Competitive negotiation procedure

C.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of C.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of C.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

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

Notwithstanding the provisions of C.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

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

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

C.1.6.3 Proposal procedure using the two stage-system

C.1.6.3.1 Option 1

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

C.1.6.3.2 Option 2

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

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

C.2 Tenderer's obligations

C.2.1 Eligibility

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

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

C.2.2 Cost of tendering

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

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

C.2.3 Check documents

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

C.2.4 Confidentiality and copyright of documents

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

C.2.5 Reference documents

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

C.2.6 Acknowledge addenda

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

C.2.7 Clarification meeting

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

C.2.8 Seek clarification

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

C.2.9 Insurance

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

C.2.10 Pricing the tender offer

- C.2.10.1 Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable fourteen (14) days before the closing time stated in the tender data.
- C.2.10.2 Show VAT payable by the employer separately as an addition to the tendered total of the prices.
- C.2.10.3 Provide rates and prices that are fixed for the duration of the contract and not subject to adjustment except as provided for in the conditions of contract identified in the contract data.
- C.2.10.4 State the rates and prices in Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

C.2.11 Alterations to documents

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

C.2.12 Alternative tender offers

- C.2.12.1 Unless otherwise stated in the tender data, submit alternative tender offers only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted as well as a schedule that compares the requirements of the tender documents with the alternative requirements that are proposed.
- C.2.12.2 Accept that an alternative tender offer must be based only on the criteria stated in the tender data or criteria otherwise acceptable to the employer.
- C.2.12.3 An alternative tender offer must only be considered if the main tender offer is the winning tender.

C.2.13 Submitting a tender offer

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

- C.2.13.2 Return all returnable documents to the employer after completing them in their entirety, either electronically (if they were issued in electronic format) or by writing legibly in non-erasable ink.
- C.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.
- C.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.
- C.2.13.5 Seal the original and each copy of the tender offer as separate packages marking the packages as "ORIGINAL" and "COPY". Each package shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- C.2.13.6 Where a two-envelope system is required in terms of the tender data, place and seal the returnable documents listed in the tender data in an envelope marked "financial proposal" and place the remaining returnable documents in an envelope marked "technical proposal". Each envelope shall state on the outside the employer's address and identification details stated in the tender data, as well as the tenderer's name and contact address.
- C.2.13.7 Seal the original tender offer and copy packages together in an outer package that states on the outside only the employer's address and identification details as stated in the tender data.
- C.2.13.8 Accept that the employer will not assume any responsibility for the misplacement or premature opening of the tender offer if the outer package is not sealed and marked as stated.
- C.2.13.9 Accept that tender offers submitted by facsimile or e-mail will be rejected by the employer, unless stated otherwise in the tender data.

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

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

C.2.15 Closing time

- C.2.15.1 Ensure that the employer receives the tender offer at the address specified in the tender data not later than the closing time stated in the tender data. Accept that proof of posting shall not be accepted as proof of delivery.
- C.2.15.2 Accept that, if the employer extends the closing time stated in the tender data for any reason, the requirements of these conditions of tender apply equally to the extended deadline.

C.2.16 Tender offer validity

- C.2.16.1 Hold the tender offer(s) valid for acceptance by the employer at any time during the validity period stated in the tender data after the closing time stated in the tender data.
- C.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period with or without any conditions attached to such extension.
- C.2.16.3 Accept that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).
- C.2.16.4 Where a tender submission is to be substituted, a tenderer must submit a substitute tender in accordance with the requirements of C.2.13 with the packages clearly marked as "SUBSTITUTE".

C.2.17 Clarification of tender offer after submission

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

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

C.2.18 Provide other material

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

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

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

C.2.19 Inspections, tests and analysis

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

C.2.20 Submit securities, bonds and policies

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

C.2.21 Check final draft

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

C.2.22 Return of other tender documents

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

C.2.23 Certificates

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

C.3 The employer's undertakings

C.3.1 Respond to requests from the tenderer

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

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

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

- b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or
- c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

C.3.2 Issue Addenda

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

C.3.3 Return late tender offers

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

C.3.4 Opening of tender submissions

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

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

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

C.3.5 Two-envelope system

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

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

C.3.6 Non-disclosure

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

C.3.7 Grounds for rejection and disqualification

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

C.3.8 Test for responsiveness

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

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

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

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

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

C.3.9 Arithmetical errors, omissions and discrepancies

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

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

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

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

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

- a) If bills of quantities or pricing schedules apply and there is an error in the line item total resulting from the product of the unit rate and the quantity, the line item total shall govern and the rate shall be corrected. Where there is an obviously gross misplacement of the decimal point in the unit rate, the line item total as quoted shall govern, and the unit rate shall be corrected.
- b) Where there is an error in the total of the prices either as a result of other corrections required by this checking process or in the tenderer's addition of prices, the total of the prices shall govern and the tenderer will be asked to revise selected item prices (and their rates if bills of quantities apply) to achieve the tendered total of the prices.

C.3.10 Clarification of a tender offer

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

C.3.11 Evaluation of tender offers

The 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.

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

C.3.12 Insurance provided by the employer

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

C.3.13 Acceptance of tender offer

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

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

C.3.14 Prepare contract documents

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

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

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

C.3.15 Complete adjudicator's contract

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

C.3.16 Registration of the award

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

C.3.17 Provide copies of the contracts

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

C.3.18 Provide written reasons for actions taken

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

CITY OF TSHWANE
HUMAN SETTLEMENTS

CONTRACT NO: HHS01-2022/23

**APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER
PIPELINE AT ZITHOBENI**

PORTION 1 : TENDER

PART T2 : RETURNABLE DOCUMENTS

T2.1 LIST OF RETURNABLE DOCUMENTS

CONTENTS

RD.A RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: *Failure to submit the applicable documents will result in the tender offer being disqualified from further consideration.*

Document Name	Reference	Confirmation of Document Included <i>(Tenderers may use this column to confirm documents have been completed and included in the tender)</i>
Invitation to Tender (MBD 1)	Form RDA 1	
Form of Offer and Acceptance	Section C1.1	
Declaration of Interest in tender of persons in service of state	Form RDA 2	
Declaration of Tenderer's past supply chain management practises	Form RDA 3	
Declaration Certificate for Local Production and Content for Designated Sectors (MBD 6.2)	Form RDA4	
Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E)	Form RDA5	

RD.B RETURNABLE DOCUMENTS REQUIRED FOR PREFERENTIAL PROCUREMENT EVALUATION PURPOSES

Note: *Failure to submit the applicable documents will result in the tender offer being awarded with 0 (zero) preference points.*

Document Name	Reference	Confirmation of Document Included <i>(Tenderers may use this column to confirm documents have been completed and included in the tender)</i>
Preference Points claim form in terms of the Preferential procurement regulations 2017 (90/10 version)	Form RDB1	

RD.C ADDITIONAL RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

Note: Failure to submit the applicable document 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 [See also clause 2.18 of the Standard Conditions of Tender]

Document Name	Reference	Confirmation of Document Included
Valid Tax Clearance Certificate	-	
Schedule of Tenderer's experience	Form RDC1	
Schedule of Proposed Subcontractors	Form RDC2	
Schedule of Plant and Equipment	Form RDC3	
Compliance with Occupational Health and Safety Act (OHSA)(Act 85 of 1993)	Form RDC4	
Record of services provided to organs of state	Form RDC5	
Company information for tenders greater than R 10 million	Form RDC6	
Classification of Business	Form RDC7	
Certificate of Authority of Signatory	Form RDC8	
Municipal Accounts of the Business as well as each Registered Director of Business	-	
Status of Concern Submitting Tender	Form RDC9	
Proof of Registration with the CIDB in the applicable category or higher	-	
Certificate of independent bid determination	Form RDC10	
Bank Rating Report	Form RDC11	

RD.D ADDITIONAL RETURNABLE DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

Note: *Failure to submit the applicable document 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 [See also clause 2.18 of the Standard Conditions of Tender]*

Document name	Reference	Confirmation of Document Included
First Programme and Method Statements	Form RDD1	
Estimated Monthly Expenditure on Contract Works by Tenderer	Form RDD2	
Key-Personnel / Management and Supervisory Staff	Form RDD3	
Quality Management Systems	Form RDD4	

RD.E OTHER DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

Document Name	Reference	Confirmation of Document Included
Record of Addenda to Tender Documents	Form RDE 1	
Proposed Amendments	Form RDE 2	
Cost Price Adjustment (CPA) – Imported Content (FOREX)	Form RDE 4	
Form of Offer and Acceptance	Section C1.1	
Contract data (Part 2: Data provided by the Contractors)	Section C1.2	
Activity Schedules / Bills of Quantities	Section C2	

Note: *Failure to submit the applicable documents will result in the tender offer being disqualified from further consideration.*

CITY OF TSHWANE
HUMAN SETTLEMENTS

CONTRACT NO: HHS01-2022/23

**APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER
PIPELINE AT ZITHOBENI**

T2.2 RETURNABLE SCHEDULES

RDA 1

MBD 1

PART A- INVITATION TO TENDER

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE CITY OF TSHWANE METROPOLITAN MUNICIPLAITY					
BID NUMBER:	HHS01-2022/23	CLOSING DATE:	XXXX	CLOSING TIME:	XXXXX
DESCRIPTION:	APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT CLIENT'S SCM OFFICES (AS PER THE TENDER ADVERT-T1.1)					
SUPPLIER INFORMATION					
NAME OF BIDDER:					
POSTAL ADDRESS:					
STREET ADDRESS:					
TELEPHONE NUMBER:	CODE		NUMBER		
CELLPHONE NUMBER:					
FACSIMILE NUMBER:	CODE		NUMBER		
E-MAIL ADDRESS:					
VAT REGISTRATION NUMBER:	TCS PIN:		OR	CSD No:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK THE APPLICABLE BOX]	<input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSER PART B.3]	
TOTAL NUMBER OF ITEMS OFFERED			TOTAL BID PRICE	R	
SIGNATURE OF BIDDER			DATE		
CAPACITY UNDER WHICH THIS BID IS SIGNED					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			TECHNICAL INFORMATION MAY BE DIRECTED TO:		
DEPARTMENT			CONTACT PERSON		
CONTACT PERSON			TELEPHONE NUMBER		
TELEPHONE NUMBER			FACSIMILE NUMBER		
FACSIMILE NUMBER			E-MAIL ADDRESS		
E-MAIL ADDRESS					
1. BID SUBMISSION:					

1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.	
1.2. ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR ONLINE	
1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.	
2. TAX COMPLIANCE REQUIREMENTS	
2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.	
2.2 BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VIEW THE TAXPAYER'S PROFILE AND TAX STATUS.	
2.3 APPLICATION FOR THE TAX COMPLIANCE STATUS (TCS) CERTIFICATE OR PIN MAY ALSO BE MADE VIA E-FILING. IN ORDER TO USE THIS PROVISION, TAXPAYERS WILL NEED TO REGISTER WITH SARS AS E-FILERS THROUGH THE WEBSITE WWW.SARS.GOV.ZA .	
2.4 FOREIGN SUPPLIERS MUST COMPLETE THE PRE-AWARD QUESTIONNAIRE IN PART B:3.	
2.5 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.	
2.6 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.	
2.7 WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.	
3. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS	
3.1. IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	<input type="checkbox"/> Yes <input type="checkbox"/> No
IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 ABOVE.	

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

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

RDA 2

DECLARATION OF INTEREST IN TENDER OF PERSONS IN SERVICE OF STATE

THIS FORM MUST BE COMPLETED IN FULL AND SIGNED. FAILURE TO COMPLY WILL RESULT IN THE TENDER BEING DISQUALIFIED.

(Refer to Clauses 2.25 and 2.26 in the Tender Data)

- 1.** Is the employer/owner of the bidder in the service of the state? **YES / NO (INDICATE)**

If so, state particulars:

.....

- 2.** If the provider is not a natural person, whether any of its directors, managers, principal shareholders or stakeholder is in the service of the state, or has been in the service of the state in the previous twelve months: **YES / NO (INDICATE)**

If so, state particulars:

.....

- 3.** Whether a spouse, child or parent of the provider or of a director, manager, shareholder or stakeholder referred to in subparagraph 2 is in the service of the state, or has been in the service of the state in the previous twelve months: **YES / NO (INDICATE)**

If so, state particulars:

.....

- 4.** Is an employer / owner of the bidder a person who is an advisor or consultant contracted with the municipality or municipal entity: **YES / NO (INDICATE)**

If so, state particulars:

.....

- 5.** Are the Tenderer or any of the members of the tendering entity involved in another entity for this particular tender: **YES / NO (INDICATE)**

If so, state 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.

Person Authorized to sign Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

RDA 3

DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

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, this form must be completed in full and signed. Failure to comply will result in the tender being disqualified. The following questionnaire must be completed and submitted with the tender:

ITEM	QUESTION	RESPONSE	
4.1	<p>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)</p>	Yes	No
	If so, furnish particulars:		
4.2	<p>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)? (To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number 012-326-5445)</p>	Yes	No
	If so, furnish particulars:		
4.3	<p>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?</p>	Yes	No
	If so, furnish particulars:		
4.4	<p>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?</p>	Yes	No
	If so, furnish particulars:		
4.5	<p>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?</p>	Yes	No

	If so, furnish particulars:
--	-----------------------------

<p><i>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></p> <p>Person Authorized to sign Tender:</p> <p>FULL NAME (BLOCK LETTERS):</p> <p>SIGNATURE:</p> <p>DATE:</p>

FORM RDB 1

MBD6.1: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

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

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

1. GENERAL CONDITIONS

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

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (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 The value of this bid is estimated to exceed R50 000 000 (all applicable taxes included) and therefore the 90/10 preference point system shall be applicable;

1.3 Points for this bid shall be awarded for:

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

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

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

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

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

2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;

- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
 - 1) B-BBEE Status level certificate issued by an authorized body or person;
 - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
 - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

3.1 THE 80/20 PREFERENCE POINT SYSTEMS

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

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

Where

P_s	=	Points scored for price of bid under consideration
P_t	=	Price of bid under consideration
P_{min}	=	Price of lowest acceptable bid

4. POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

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

B-BBEE Status Level of Contributor	Number of Points
1	10
2	9
3	6
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

5. BID DECLARATION

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

6. B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

6.1 B-BBEE Status Level of Contributor: . = (maximum of 10 points)

Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

7. SUB-CONTRACTING

7.1 Will any portion of the contract be sub-contracted?

(Tick applicable box)

YES		NO	
-----	--	----	--

7.1.1 If yes, indicate:

- i) What percentage of the contract will be subcontracted.....%
- ii) The name of the sub-contractor.....
- iii) The B-BBEE status level of the sub-contractor.....
- iv) Whether the sub-contractor is an EME or QSE

(Tick applicable box)

YES		NO	
-----	--	----	--

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

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

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1 Name of company/firm:.....

8.2 VAT registration number:.....

8.3 Company registration number:.....

8.4 TYPE OF COMPANY/ FIRM☐ Partnership/Joint Venture / Consortium☐ One person business/sole propriety☐ Close corporation☐ Company☐ (Pty) Limited

[TICK APPLICABLE BOX]

8.5 DESCRIBE PRINCIPAL BUSINESS ACTIVITIES

.....

.....

.....

.....

8.6 COMPANY CLASSIFICATION☐ Manufacturer☐ Supplier☐ Professional service provider☐ Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.7 MUNICIPAL INFORMATION**Municipality where business is situated:****Registered Account Number:**

Stand Number:

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

8.9 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we 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 6.1, the contractor
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding 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 bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES

- 1.
- 2.

.....
SIGNATURE(S) OF BIDDERS(S)

DATE:

ADDRESS:

RDA 4

MBD 6.2: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

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

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2017 (Regulation 8) make provision for the promotion of local production and content.
- 1.2. Regulation 8.(2) prescribes that in the case of designated sectors, organs of state must advertise such tenders with the specific bidding condition that only locally produced or manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Where necessary, for tenders referred to in paragraph 1.2 above, a two stage bidding process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.4. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.5. The local content (LC) expressed as a percentage of the bid price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 2011 as follows:

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

Where

x is the imported content in Rand

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

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) on the date of advertisement of the bid as indicated in paragraph 3.1 below.

The SABS approved technical specification number SATS 1286:2011 is accessible on [http://www.thedti.gov.za/industrial development/ip.jsp](http://www.thedti.gov.za/industrial%20development/ip.jsp) at no cost.

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

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

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
Plastic Pipes	100% [TOTAL]
Polyvinyl chloride (PVC) pipes	100%
High density polyethylene (HDPE) pipes	100%

Steel Pipes Fittings and Specials

Bare	100%
Galvanised	100%
Galvansied and Coated	80%
Forged Fittings (Flanges)	100%

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

YES		NO	
-----	--	----	--

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

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

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

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

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

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

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)	
IN RESPECT OF BID NO.	
ISSUED BY: (Procurement Authority / Name of Institution):	
NB	
1	The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
2	Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thedti.gov.za/industrial_development/ip.jsp . Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below. Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),
do hereby declare, in my capacity as
of(name of bidder entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
- (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

Bid price, excluding VAT (y)	R
Imported content (x), as calculated in terms of SATS 1286:2011	R
Stipulated minimum threshold for local content (paragraph 3 above)	
Local content %, as calculated in terms of SATS 1286:2011	

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

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 3.1 above and the information contained in Declaration D and E.

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

SIGNATURE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

RDA 5

MBD 6.3: Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E)

FORM RDC 1 SCHEDULE OF TENDERER'S EXPERIENCE

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

EMPLOYER, CONTACT PERSON AND TELEPHONE NUMBER.	DESCRIPTION OF CONTRACT	VALUE OF WORK INCLUSIVE OF VAT (RAND)	DATE COMPLETED
1. _____ (Name) (Telephone Number)	_____ _____ _____	_____ _____ _____	_____ _____ _____
2. _____ (Name) (Telephone Number)	_____ _____ _____	_____ _____ _____	_____ _____ _____
3. _____ (Name) (Telephone Number)	_____ _____ _____	_____ _____ _____	_____ _____ _____
4. _____ (Name) (Telephone Number)	_____ _____ _____	_____ _____ _____	_____ _____ _____
5. _____ (Name) (Telephone Number)	_____ _____ _____	_____ _____ _____	_____ _____ _____

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

Person Authorized to sign Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDC 2 SCHEDULE OF PROPOSED SUBCONTRACTORS

You, the client, are hereby notified that it is our intention to employ the following Subcontractors for work on this contract.

If we are awarded a contract, we agree that this notification does not change the requirement for us to submit the names of proposed Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

	NAME AND ADDRESS OF PROPOSED SUBCONTRACTOR	NATURE AND EXTENT OF WORK
1.		
2.		
3.		
4.		
5.		

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDC 3 SCHEDULE OF PLANT AND EQUIPMENT

The following are lists of major items of relevant equipment that I/we presently own or lease and will have available for this contract or will acquire or hire for this contract if my/our tender is accepted.

1. Details of major equipment that is owned by and immediately available for this contract.

QUANTITY	DESCRIPTION, SIZE, CAPACITY, ETC.

(Attach additional pages if more space is required)

2. Details of major equipment that will be hired, or acquired for this contract if my/our tender is acceptable.

QUANTITY	DESCRIPTION, SIZE, CAPACITY, ETC.

(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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDC 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.

1. Is your company familiar with the OHSA (ACT 85 of 1993) and its Regulations <u>and</u> do you have a copy available?	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. Does 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 to prove such communication	YES	NO
5. Does your company keep record of safety aspects of each site where work is performed? If YES, what records are kept?	YES	NO
6. Does your company conduct monthly safety meetings? If YES, provide copies of the Minutes of the last 2 meetings held.	YES	NO
7. Does your company have a safety officer in its employment, responsible for overall safety of your company? If YES, explain his/her duties and provide a copy of his/her CV (<i>only if not the same person as in question 2 above</i>) If NO, indicate who will be appointed as safety officer for this project and provide a copy of his/her CV.	YES	NO
8. Indicate the total number of employees in the Company.	.....
9. Does your company have trained first aid employees? If YES, indicate who.	YES	NO
10. Does your company have a safety induction training programme in place? If YES, provide a summary of topics covered in such induction training programme	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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDC 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 the contract 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.				
9.				

(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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDC 6

COMPANY INFORMATION FOR TENDERS GREATER THAN R10 MILLION

1. The tenderer is required by law to prepare annual financial statements for auditing and is therefore requested to provide audited annual financial statements:

- for the past three years; or
- since their 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. Have 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 out 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 out 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.

Person Authorized to sign Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDC 7 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 THE SMALL BUSINESSES

a. **Indicate** whether the company/entity is defined as a **small, medium or micro** enterprise by the National Small Business Act, 1996 (Act 102 of 1996). **YES / NO**

b. If the response to paragraph 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.)

The tenderer should substantiate the information provided above by submitting the following documentation:

- c. A letter from the tenderer's auditor or an affidavit from the South African Police Services confirming the correctness of the abovementioned information,
- d. Company profile indicating the tenderer's staff compliment, and
- e. 3-year financial statement or since their establishment if established during the past 3 years.

"SCHEDULE" (See definition of 'small businesses' in section)

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

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDC 8 CERTIFICATE OF AUTHORITY OF SIGNATORY

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

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

Held at (place)

On (date)

RESOLVED that:

1. The Enterprise submits a Bid / Tender to the City of Tshwane in respect of the following project:

.....
.....

(Project description as per Bid / Tender Document)

Bid / Tender Number: (Bid/Tender No as per Bid/Tender Document)

2. Mr/Mrs/Ms:

In *his/her capacity as: (Position in the Enterprise)

And who will sign as follows:

be, and is hereby, authorised to sign the Bid/Tender, and any and all other documents and/or correspondence in connection with and relating to the Bid/Tender to the Enterprise mentioned above.

	NAME	CAPACITY	SIGNATURE
1			
2			
3			
4			
5			
6			
7			
8			

NOTE:

- *Delete which is not applicable
- NB: This resolution must be signed by all the Directors/Members/Partners of the Bidding 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

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

CERTIFICATE OF AUTHORITY FOR JOINT VENTURES AND CONSORTIA

This Returnable Schedule is to be completed by joint ventures.
(Attach additional pages if more space is required.)

We, the undersigned, are submitting this tender offer in a Joint Venture / Consortium and hereby authorise Mr/Ms authorised signatory of the company acting in the capacity of lead partner, to sign all documents in connection with the tender offer and any contract resulting from it on our behalf.

Registered Name Of Firm	Reg. Number	% Of Contract Value	Address	Duly Authorized Signatory	Mark (x) Lead Partner

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDC 9

STATUS OF CONCERN SUBMITTING TENDER

1. General

State whether the tenderer is a company, a closed corporation, a partnership, a sole practitioner or a joint venture:

(Mark the appropriate option below)

Public Company

Private Company

Closed Corporation

Partnership

Sole Proprietary

Joint Venture

Co-operative

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 (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))	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.
3	<u>Private Company</u> incorporated with share capital, under the companies Act, 1973, Act 61 of 1973 in which any, or all, <u>shares are held by another</u> Closed Corporation or company with, or without, share capital.	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. Copy of CM 29
5	Sole Proprietary or a Partnership	Copy of the Identity Document of: a) such Sole Proprietary, or b) Each of the Partners in the Partnership Certified copy of the Partnership agreement.

If the Tendering Entity is a:		Documentation to be submitted with the tender
6	Co-operative	CIPRO CR2 - Copies of Company registration document. (The percentage of work to be done by each partner must clearly be indicated on Form RDB1 (or RDB2 as applicable) of the tender document: MBD6.1 Preference Points Claim Form in terms of the Preferential Procurement Regulations 2001)
7	Joint Venture	All the documents (as described above) as applicable to each partner in the JV as well as a certified copy of the Joint Venture agreement. (The percentage of work to be done by each partner of the joint venture must clearly be indicated in the Joint Venture 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, must be provided.
- 2.) Include a copy of the Certificate of Change of Name (CM9) if applicable.

3. Registered for Vat Purposes in Terms of The Value-Added Tax Act, (Act Nr. 89 of 1991)

(Make an X in the appropriate space below)

Yes

☐

No

☐

REGISTRATION 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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

RDC10

INDEPENDENT BID DETERMINATION

1. This Municipal Bidding Document (MBD) must form part of all bids¹ invited.
2. Section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging) ². Collusive bidding is a *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 bid of any bidder if that bidder or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. Cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the bidding process or the execution of the contract.
4. This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid-rigging.
5. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid.

¹ Includes price quotations, advertised competitive bids, limited bids and proposals.

² Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices of 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 BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

(Bid Number and Description)

In response to the invitation for the bid made by:

(Name of Municipality/Municipal Entity)

Do hereby make the following statement that I certify to be true a complete in every respect:

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and understand the contents of this Certificate;
2. I understand that the accompanying bid will be disqualified if this Certificate is found not to be true and compete in every respect;
3. I am authorised by the bidder to sign this Certificate, and to submit the accompanying bid, on behalf of the bidder;
4. Each person whose signature appears on the accompanying bid has been authorised by the bidder to determine the terms of, and to sign, the bid, on behalf of the bidder;
5. For the purposes of this Certificate and the accompanying bid, I understand that the word "competitor" shall include any individual or organization, other than the bidder, whether or not affiliated with the bidder who:
 - a. Has been requested to submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - b. Could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and provides the same goods and services as the bidder and/or is in the same line of business as the bidder.
6. The bidder has arrived at the accompanying bid independently form, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium³ will not be construed as collusive bidding.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - a. Prices;
 - b. Geographical area where product or 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 bid;
 - e. The submission of a bid which does not meet the specifications and conditions of the bid; or
 - f. Bidding with the intention not to win the bid.

8. In addition, there have been no consultations, communications, agreements or arrangement with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this bid invitation relates.
9. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or 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 bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted 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.

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

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

RDC11
BANK RATING REPORT

Banking Details:

Bank: _____

Branch: _____

Name of Account: _____

Account No: _____

Type of Account: _____

The Tenderer shall affix a Bank Rating Report, stamped and verified by the bank, to this page.

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

RDD 1
FIRST PROGRAMME AND METHOD STATEMENTS

Attach as part of your tender submission a first programme with supporting method statements.

Note:

1. If the NEC3 Engineering and Construction Contract applies to the contract, the programme should include all the requirements of a programme submitted for acceptance per clause 31.2, together with any other information requested in the Scope of Work.

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDD 2

ESTIMATED MONTHLY EXPENDITURE ON CONTRACT WORKS BY TENDERER

The tenderer shall, in the table below, state the estimated cash flow on the contract based on his preliminary programme, his tendered unit rates and his submission of payment certificates to the Employer. Amounts for Contract Price Adjustment shall not be included.

Payment Certificate No.	Amount (VAT Included)					
	a	b	a-b			Cumulative cash flow
	Payments Received	Expenditure		Net cash flow		
1	None		d		j=d	
2			e		k=j+e	
3			f		l=k+f	
4			g		m=l+g	
5			h		n=m+h	
6			etc		etc	
7						
8						
9						
10						
11						
12						
13						
14						
etc						
Maximum negative cash flow: take the largest negative number in the last column and write it here						

From what sources will you fund the above amount (e.g. funds internally available, bank overdraft, loan, partner (his source), etc.)

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDD 3

KEY PERSONNEL / MANAGEMENT AND SUPERVISORY STAFF

The Tenderer shall insert in the spaces below, the name of key personnel to be engaged on the Contract.

	NAME	CATEGORY *	QUALIFICATION	E (YEARS RELEVANT)	LOCAL OR NON – LOCAL
1.		CONTRACT'S MANAGER			
2.		CIVIL SITE AGENT			
3.		FOREMAN			
4.		HEALTH AND SAFETY OFFICER			
5.					
6.					
7.					
8.					
9.					

(Attach additional pages if more space is required.)

* The Contractor shall fill in the various categories, e.g. Foreman, Trainers, Plant Operators, Clerks, Technicians, Laboratory Assistants, etc as required.

Note: Failure to comply with the requirements of a full time site agent as noted under item C3.3.5 will result in disqualification of your tender.

Note: Please ensure that a CV for all the key personnel entered in the table above is attached on submission of your tender document.

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDD 4 QUALITY MANAGEMENT SYSTEMS

Briefly describe the construction quality system incorporated by the tenderer in his organisation and which will be applicable to this Contract.

	Internal	External	Name of responsible Company /or Person (In case of Person, give years of experience and qualification)
Survey: Setting out of the works and control			
Testing Laboratory			
Additional quality systems			

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

FORM RDE 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	TITLE OR REFERENCE
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 Tender:

FULL NAME (BLOCK LETTERS):

.....

SIGNATURE:

.....

DATE:

.....

FORM RDE 2 PROPOSED AMENDMENTS

The Tenderer should record any deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such deviations and qualifications in **a covering letter to his tender and reference such letter in this schedule.**

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

PAGE	CLAUSE OR ITEM	PROPOSAL

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 Tender:

FULL NAME (BLOCK LETTERS):

.....

SIGNATURE:

.....

DATE:

.....

FORM RDE 4
COST PRICE ADJUSTMENT (CPA)
IMPORTED CONTENT (FOREX)

Is/Are the tender price/s firm until the end of contract period? (YES/NO)

If not:

IMPORTED CONTENT:

When the price/s is/are subject to the rate of exchange, submit the price basis on which the exchange rate will be based (e.g. F.O.B. value, fixed value in respect of foreign exchange, etc.)

(i) exchange rate upon which the bid price is based

.....

.....

.....

.....

(ii) What portion of the bid price (percentage or amount) will be affected by variations in the exchange rate?

.....

.....

.....

.....

NB: *Tenderers are also required to submit a bank statement or an auditor's report regarding the actual exchange rate in respect of the transaction value paid to the overseas supplier.*

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 Tender:

FULL NAME (BLOCK LETTERS):

SIGNATURE:

DATE:

CITY OF TSHWANE
HUMAN SETTLEMENTS

CONTRACT NO: HHS01-2022/23

**APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF
SEWER PIPELINE AT ZITHOBENI**

PORTION 1: CONTRACT

PART C1: AGREEMENTS AND CONTRACT DATA

CONTENTS

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C1.1 FORM OF OFFER AND ACCEPTANCE

OFFER

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

STAMP

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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 THE 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): (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.

ACCEPTANCE

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

The terms of the contract, are contained in

Part C1	Agreements and Contract Data, (which includes this Agreement)
Part C2	Pricing Data
Part C3	Scope of Work
Part C4	Locality Plan

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

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.

Not with standing 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.

NAME(s): (BLOCK LETTERS)

CAPACITY of authorized agents:

SIGNATURE(s) of authorized agents:

SIGNED at..... on thisday 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

C1.2.1 GENERAL CONDITIONS OF CONTRACT

The Conditions of Contract are

- the “General Conditions of Contract”
 - o as they appear in the commercially-available publication “General Conditions of Contract for Construction Works, Third Edition, 2015;
 - o together with each subsequent corrigendum and erratum thereto, as issued by their publisher up to the Base Date of this Contract; (collectively hereinafter referred to as GCC 2015); and amendments to the GCC 2015 as contained in this Contract Data.

Each party to the Contract shall purchase its own copy of the GCC 2015, available from:

South African Institution of Civil Engineering
Private Bag X200
Halfway House 1685
South Africa

Tel +27 (0)11 805 5947

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

Certain pro-forma forms and pro-forma agreements contained in the GCC 2015 have been adapted for this particular contract. Those pro-forma forms and pro-forma agreements contained in the GCC 2015 do not apply where replaced by similar pro-forma forms and pro-forma agreements in this procurement document.

C1.2.2 Contract-specific Data

The following contract-specific data, referring to the General Conditions of Contract, are applicable to this Contract :

Clause	Data
1.1.1.13	The Defects Liability Period is 365 Days
1.1.1.14	The time for achieving Practical Completion is 6 Months
1.1.1.15	The name of the Employer is City of Tshwane, represented by the Divisional Head Human Settlements Division, and / or any other person or persons duly authorised thereto by the Employer in writing.
1.1.1.16	The name of the Employer's Agent is: Aseda Consulting Engineers (Pty) Ltd , acting through a principal or an official authorised thereto in writing. The principal representing the Employer's Agent is Mr Thabo Msimanga .
1.1.1.26	<i>The pricing strategy of a re-measurement Contract shall apply</i>
1.2.1.2	<div> <div> The address of the Employer is: Physical address: Human Settlements Division 2nd floor Tshwane House 320 Madiba Street Pretoria 0002 e-mail address: witnessm@tshwane.gov.za </div> <div> Postal address: P O Box 440 PRETORIA 0001 Contact numbers: Telephone: 012 358 3976 Fax: 012 358 1112 </div> </div>
3.2.3	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.
5.3.1	The documentation required before commencement with Works execution are : <ul style="list-style-type: none"> • Health and Safety Plan including COVID-19 Plan (Refer to Clause 4.3) • 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. • 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). • Initial programme (Refer to Clause 5.6) • Security (Refer to Clause 6.2) • Insurance (Refer to Clause 8.6)
5.3.2	The time to submit the documentation required before commencement with Works execution is 21 days .

5.4.2.1	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.
5.5.1	The estimated construction period is 6 months based on the engineer's estimates.
5.8.1	<p>The non-working days are Saturdays and Sundays</p> <p>The special non-working Days are:</p> <p style="padding-left: 40px;">Statutory public holidays; and</p> <p style="padding-left: 40px;">All annual year-end shutdown periods as recommended by the South African Federation of Civil Engineering Contractors, and which commence before the Completion Date.</p>
5.13.1	The penalty for failing to complete the Works is R 10 000.00 per day.
5.16.3	The latent defect period is 10 years , commencing on the day after the date of certification of Practical Completion
6.2.1	<p>The form of Security for this Contract will be a Performance Guarantee.</p> <p>This Performance Guarantee is to be 10% of the Contract Value.</p>
6.5.1.2.3	The percentage allowance to cover overhead charges is 10 per cent .
6.8.2	<p>The values of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values:</p> <p>The values of the coefficients are:</p> <p style="padding-left: 40px;">a = 0.25</p> <p style="padding-left: 40px;">b = 0.15</p> <p style="padding-left: 40px;">c = 0.55</p> <p style="padding-left: 40px;">d = 0.05</p> <p>The site or largest part thereof shall be deemed to be located in the national province of Gauteng</p> <p>The applicable industry for the Producer Price index is for the Civil Engineering Material as published by Statistics South Africa</p> <p>The area for the Producer Price Index for fuel is Witwatersrand.</p> <p>The base month is the month before the month in which the tenders close. CPA will only be applicable on month 7 of the project duration.</p>
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%. Proof of ownership is required.
6.10.3	The percentage retention money is 10 % of the Certificate Value.

6.10.3	The limit of retention money is 5% of the Contract Sum.
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is R 100 000,00.
8.6.1.3	The limit of indemnity for liability insurance is R 1 000 000,00 for any single claim. The number of claims during the construction and Defects Liability Periods shall be unlimited.
10.5.3	The number of Adjudication Committee to be appointed is one.
10.7.1	The determination of disputes shall be by arbitration

C1.2.3 Additional clauses to the General Conditions of Contract (2015) applicable to this contract

Clause	Data
1.1	<p>Definitions</p> <p><i>Add the following at the end of Sub-Clause 1.1.1:</i></p> <p>1.1.1.35 “Client”, as used in the Occupational Health and Safety Act - Construction Regulations 2014, means Employer.</p> <p>1.1.1.36 “Principal Contractor”, as used in the Occupational Health and Safety Act - Construction Regulations 2014, means Contractor.</p> <p>1.1.1.37 “Designer”, as used in the Occupational Health and Safety Act - Construction Regulations 2014, means Engineer.</p>
4.12	<p>Contractor’s superintendence</p> <p><i>Add the following at the end of Sub-Clause 4.12:</i></p> <p>4.12.4 Health & Safety Officer</p> <p>“It is a requirement of this Contract that the Contractor provides a Health & Safety Officer (HSO) on the project. The duties and qualifications of the HSO are described in the Scope of Work (Part C3.7). The CV and credentials shall be submitted for approval by the Employer’s Health & Safety agent.</p> <p>Failure by the Contractor to provide a suitable HSO shall be deemed to be a reason justifying termination by the Employer under Sub-Clause 9.2.1, with specific reference to Clause 9.2.1.3.5.”</p>
6.2	<p>Security</p> <p><i>Add the following at the end of Sub-Clause 6.2:</i></p> <p>6.2.4 “The Guarantee shall have the same wording as the document included as C1.4 under this Part C.1 of the document.</p> <p>The amount of the Guarantee is to be 10% of the Contract Price.</p> <p>The Guarantee is to be delivered within 14 Days after the signing of the Form of Offer and Acceptance. Failure by the Contractor to provide a suitable Guarantee within this timeframe shall be deemed to be a reason justifying termination by the Employer under Sub-Clause 9.2.1, with specific reference to Clause 9.2.1.3.5.”</p>

Clause	Data
8.6	<p>Insurances</p> <p><u>Replace</u> Clause 8.6. with the following new Clause 8.6.:</p> <p>8.6.1 Without limiting the Contractor's/Sub-contractor's obligation in terms of the Contract, the Employer will effect and maintain for the duration of the Contract until the issuing of the Defects Certificate or the end of the Maintenance Period, the following insurances in the name of the Contractor (including all Subcontractors whether nominated or otherwise):</p> <p>8.6.1.1 The Employer's insurer will indemnify the Contractor/Sub-contractor against physical loss of or damage to any part of the Property Insured not exceeding the maximum contract value or the final contract value estimated at inception including free issue materials were applicable as stated in the Contract Data:</p> <ul style="list-style-type: none"> a) Whilst in transit including loading and unloading whilst temporarily stored at any premises en route to or from the Contract Site within the Territorial Limits. a) From the time of unloading, dismantling or preparation at the Contract Site and thereafter until the Property Insured has been officially accepted by the Employer and becomes his responsibility by means of a notice of completion certificate or similar evidence of legal transfer of risk. b) During the contractual defects liability or Maintenance Period which shall not exceed the period reflected in the Schedule but only so far as the Contractors and/or Sub-Contractors may be liable for such loss or damage under the defects liability or maintenance condition/s of the Insured Contract. c) Removal of debris; d) Surrounding property; e) Work Away; f) Off Site Storage; g) Temporary repairs; h) Contribution Clause – Marine; i) Escalation during Contract Period; j) Post Loss Escalation; k) Automatic Reinstatement; l) Principals Maintenance; m) Property taken over; n) Beneficial Occupation; o) Escalation due to Currency fluctuation; p) Manufacturers Guarantees

Clause	Data
<p>11</p> <p>11.1</p>	<p>8.6.1.2 The Employer's insurer will indemnify the Contractor/Sub-contractor against all sums for which the Contractor/Sub-contractor shall become legally liable towards third party claimants to pay for and in consequence of:</p> <p>a) Accidental death of or bodily injury to or illness or disease contracted by any person (excluding employees of the Contractor/Sub-contractor);</p> <p>b) Accidental physical loss or damage to tangible property occurring during the Period of Insurance and arising out of or in connection with the performance of the Insured Contract at the Contract Site as defined in the Schedule. The minimum limit of indemnity for any one event is R10-million in respect of contracts with a contract value of up to R50-million (excluding VAT).</p> <p>8.6.2 <u>Insurance Premium payable</u></p> <p>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.</p> <p>8.6.3 <u>Additional insurance by the Employer</u></p> <p>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.</p> <p>8.6.4 <u>Additional insurance by Contractor/Sub-contractor</u></p> <p>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 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.</p> <p>8.6.5 <u>Contractor satisfied with insurance</u></p> <p>The submission of a tender shall be construed as acknowledgement by the Contractor that he is satisfied with the insurance cover affected by the Employer.</p> <p>8.6.6 <u>Contractor to observe conditions</u></p> <p>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.</p> <p>8.6.7 <u>Contractor to Insure</u></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 at an insurance company within 14 (fourteen) days of the notification of acceptance of the tender and must pay all premiums and supply proof thereof to the relevant 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>

- a) All Risk Insurance cover with regard to all Plant and Materials and Equipment, owned, leased or hired by the Contractor that are used in the execution of the contract for the full replacement value thereof.
- b) Motor Vehicle and Liability Insurance cover indicating the registration numbers of the vehicles owned, leased or hired by the Contractor that are used in the execution of the contract to the amount of at least R10-million per claim with the number of claims unlimited.
- c) SASRIA cover for motor vehicles and Plant and Materials and Equipment owned, leased or hired by the Contractor that are used in the execution of the contract for the full replacement value thereof.
- d) In respect of Plant and Materials and Equipment and Motor Vehicles brought onto the Site by or on behalf of Subcontractors, the Contractor shall be deemed to have 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.
- e) Proof must also be submitted that the Contractor complies with the conditions of the following legislation:
 - i. Compensation for Occupational Injuries and diseases, 1993.
 - ii. Unemployment Insurance Act, 1996.
 - iii. 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.
- f) 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.
- g) 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.
- h) 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 might repudiate the loss if it is found that the insurers rights have been compromised as a result of the late reporting.
- i) The following documentation must be included with the claim documentation:
 - a. Photos of damages caused or suffered as proof or substantiation of the claims.
- j) 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.

Clause	Data
	<p>k) 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.</p> <p>8.6.8 <u>Reporting of catastrophic incidents</u></p> <p>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:</p> <ul style="list-style-type: none"> <li>a) In addition to any statutory obligations and/or requirements contained in the General Conditions of Contract, the Contractor shall notify the Employer and the Project Manager of every occurrence within 24 (twenty-four) hours giving the circumstances, nature and an estimate of the loss or damage. <li>b) The Project Manager must notify the Section: Insurance and Risk Management on the same day that the Contractor/Sub-contractor has notified the Project Manager of the incident. <li>c) The Section: Insurance and Risk Management will notify the Employer's insurer of the incident. The Contractor/Sub-contractor shall afford all reasonable access to the Site to the Employer, the Project Manager, the Employer's insurers and/or representatives for the purpose of assessment of any loss or damage <li>d) 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 Strategic Executive Officer motivating the reason(s) for the late reporting of the incident. Should the relevant claim documentation not be submitted within 30 (thirty) days, the claim will be repudiated. <p>8.6.9 <u>Reporting of crime related incidents</u></p> <p>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.</p>

Clause	Data
	<p>8.6.10 <u>Claim documentation</u></p> <p>The Project Manager must obtain all relevant information from the Contractor/Sub-contractor and complete the Contractor Claim Form, included in this report as Annexure B that is available on the Intranet. The project number must be stated on the Contractor Claim Form.</p> <p>The Project Manager must submit with the Contractor Claim Form a detailed cost sheet indicating the estimate of the loss or damage.</p> <p>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</p> <p>8.6.11 <u>Authorization of claim forms</u></p> <p>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 Strategic Executive Officer 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.</p> <p>8.6.12 <u>Contractor to pay deductibles</u></p> <p>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.</p> <p>8.6.13 <u>Settlement of claims</u></p> <p>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.</p> <p>The Contractor <u>shall negotiate</u> 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.</p> <p>Should action for the settlement of any such claim to the satisfaction of the Project Manager not be taken by the Contractor/sub-contractor within 30 (thirty) days after receipt of such claim by the Contractor/sub-contractor, the Employer or the Employer's insurer may settle any such claim, after giving the Contractor notice of its intention to do so; provided that no such claim shall be settled by the Employer or the Employer's insurer without first consulting the Contractor/sub-contractor.</p> <p>The foregoing provisions of this Sub-Clause shall apply mutatis mutandis to any such claim received by the Contractor directly</p>

Clause	Data
	<p>Add the following Clause :</p> <p>Pricing of Standing Time</p> <p>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.</p> <p>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.</p> <p>Contractor's Plant :</p> <p>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.</p> <p>Contractor's Labour :</p> <p>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.</p>
11.2	<p>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.</p> <p>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.</p>
11.3	<p>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 'Contractor's claim'.</p>

C1.2.4 DATA PROVIDED BY THE CONTRACTOR

The Contractor is advised to read the General Conditions of Contract, as specified in Part 1, in order to understand the implications of this Data which is required to be completed.

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

Clause	Data
1.1.1.9	The Name of the Contractor is:
1.2.1.2	<p>The address of the Contractor is:</p> <p>Physical address:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>Postal address:</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>e-mail address:</p> <p>.....</p> <p>Contact numbers:</p> <p>Corporate:</p> <p>Direct:</p> <p>Mobile:</p> <p>Fax:</p>

C1.3 FORM OF GUARANTEE

WHEREAS

THE CITY OF TSHWANE

(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. This 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 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.

NAME(s): (BLOCK LETTERS)		.....	.....
CAPACITY of authorized agents:		.....	.....
SIGNATURE(s) of authorized agents:		.....	.....
SIGNED at	.....	on this	..... day of
WITNESSE(s): (Full name – in block letters – and signature)			
1.	.....	.....	.....
2.	.....	.....	.....

ANNEXURE A

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

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

C1.4 GUARANTEE (CASH DEPOSIT)

Contract No.:

Employer: **CITY OF TSHWANE**

Contractor:

Description of Contract:

I/We, the undersigned,
(Contractor)

deposit herewith cash "a bank certified cheque", in the amount of
.....
.....,

as surety for the due performance of the Contract by the abovementioned Contractor, and for all losses, damages and expenses that may be suffered or incurred by the Employer as a result of non-performance of the Contract by the Contractor, renouncing all benefits from the legal exceptions *ordinis seu excussions et divisions* no value received and all other exceptions which might or could be pleaded against the surrender of this deposit.

The deposit shall be returned to the Contractor on the issue of the Completion Certificate in terms of the Contract, unless the Contractor is advised in writing by the Employer before issue of the said Certificate of his intention to institute claims and the particulars thereof, in which event this deposit shall remain in force until all such claims are paid or settled.

FOR AND ON BEHALF OF (Contractor)

NAME(s): (BLOCK LETTERS)

CAPACITY of authorized agents:

SIGNATURE(s) of authorized agents:

SIGNED at on this day of

WITNESS(s): (Full name – BLOCK LETTERS – and signature)

1.

2.

C1.5: HEALTH AND SAFETY AGREEMENT

MANDATORY OF AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL SAFETY ACT,
1993 BETWEEN

THE CITY OF TSHWANE

(Hereinafter referred to as the "EMPLOYER")

AND

.....
.....
.....
.....

Compensation Fund/FEM

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

..... Contract number

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

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

NOW THEREFORE the parties agree as follows:

- a) The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the
CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms
thereof.
- b) The CONTRACTOR undertakes that all relevant duties, obligations and prohibitions imposed in
terms of the ACT and Regulations will be fully complied with. Provided that should the
EMPLOYER prescribe certain arrangements and procedures, that same shall be observed and
adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear
the onus of acquainting himself/herself/itself with such arrangements and procedures.
- c) The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant
duties, obligations, prohibitions, arrangements and procedure, if any, imposed by the ACT and

Regulations and the EMPLOYER expressly absolves the EMPLOYER from itself being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedure as the case may be.

- d) The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has complied with the undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to inspect any appropriate records held by the CONTRACTOR or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.
- e) The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigations, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such an investigation, complaint or criminal charge as the case may be.

FOR AND ON BEHALF OF THE **EMPLOYER**:

NAME(s): (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 **CONTRACTOR**:

NAME(s): (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.

CITY OF TSHWANE
HUMAN SETTLEMENTS

CONTRACT NO: HHS01-2022/23

**APPOINTMENT OF A CONTRACTOR FOR THE
UPGRADING OF SEWER PIPELINE AT ZITHOBENI**

PORTION 2: CONTRACT

PART C2 PRICING DATA

PRICING DATA

INDEX

Section	Description	Page No
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C2.2	BILL OF QUANTITIES	C2.2

CITY OF TSHWANE
HUMAN SETTLEMENTS

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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 has to be completed in 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

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

C2.2 BILL OF QUANTITIES AND PRICING SCHEDULE

SIGNATURE OF PERSON AUTHORISED TO SIGN TENDER:

DATE :

PARTICULARS OF PERSON AUTHORISED TO SIGN THE TENDER:

Name: _____

Tel no: _____

ID no: _____

BANK PARTICULARS:

Account holder: _____

Account no: _____

Bank: _____

Branch code: _____

I hereby authorise the City of Tshwane to obtain a bank code with respect to the abovementioned bank account through ABSA Bank as intermediary.

SIGNED: _____

TENDERER: _____

CITY OF TSHWANE		
CONTRACT NO : HHS01-2022/23		
APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI		
Summary : Schedule of Quantities		
DESCRIPTION		AMOUNT
SECTION 001: GENERAL REQUIREMENTS AND CHARGES		
SECTION 002: ENGINEER'S ACCOMMODATION		
B SECTION 003: DAYWORKS		
SECTION 101: SITE CLEANING AND GRUBBING		
SECTION 102: ACCOMMODATION OF TRAFFIC		
SECTION 103: OVERHAUL		
SECTION 104 : LANDSCAPING AND GRASSING		
SECTION 105: FENCING		
SECTION 106: SERVICE DUCTS		
SECTION 202: TRENCHING		
SECTION 302: CONSTRUCTION		
SECTION 303: TESTING		
SECTION 501: SUBSURFACE DRAINS AND DRAINAGE BLANKET		
SECTION 804: PIPE JACKING AND BORING		
SECTION 903: TESTING		
SECTION B1000: MECHANICAL AND ELECTRICAL WORKS		
SECTION B1100: PUMP ROOM VENTILATION		
Sub Total		
ADD 10% Contingencies		
Sub Total		
Add 5% Contract Price Adjustment		
Sub Total		
Add: 15% VAT		
TOTAL CONTRACT AMOUNT (All inclusive)		

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CTMM CIVIL SPECIFICATIONS		SERIES 0: GENERAL				
		SECTION 001: GENERAL REQUIREMENTS AND CHARGES				
001.01		<u>Preliminary and general charges</u>				
001.01.01		Fixed charges	Lump Sum	1		
001.01.02		Time related charges	Months	6		
001.02		<u>Locating existing services</u>				
		Full compensation for the supply or hiring of specialized detecting equipment, for the use of such equipment and for drawing up plans of the located services as specified. Alternatively an approved specialist firm may be employed to carry out the work.				
		(a) Supply or hire of specialist equipment for the detection of particular services	Lump Sum	1		
001.03	LI	<u>Excavate by hand to expose existing services, and backfill</u>	m ³	600		
B'001.04		<u>Compliance with the Occupational Health and Safety Act and applicable regulations</u>				
B001.04.01		Provision of Health and Safety plan	Lump Sum	1		
B001.04.03		Provision of a safety officer (Full time)	Lump Sum	1		
B001.04.04		Provision of personal protective clothing and equipment	Lump Sum	1		
B001.04.05		Provision of safety fences, signs and barricades	Lump Sum	1		
B001.04.05		Training Requirements				
B001.04.05.01		Provision for training of targeted labourers for EPWP	Prov Sum	1	R150,000.00	R150,000.00
B001.04.05.02		Charge or Prov Sum	%	R150,000.00		
B001.04.05.03		Generic and Management skills for SMME'S	Prov Sum	1	R75,000.00	R75,000.00
B001.04.05.04		Charge or Prov Sum	%	R75,000.00		
B001.05		Other obligations				
B001.05.01		Community liaison officer To be appointed in line with Task Grade 5	Months	6	R20,000.00	R120,000.00
B001.05.02		Contractor's handling costs, profit and all ther charges in respect of subitem 001.05	%	R120,000.00		
B001.05.03		Compensation of Project Steering Committee for transport for attending meetings and refreshments	Prov Sum	1	R40,000.00	R40,000.00
B001.05.04		Contractor's handling costs, profit and all ther charges in respect of subitem '001.06	%	R40,000.00		
B001.05.05		Compliance with Environmental Management Plan	Lump Sum	1		
B001.05.06		Appointment of Local Security Company	Lump Sum	1		
B001.09		Contract notice boards	No	2		
B001.10		Protection of existing services that intersect or adjoin the pipe trench				
B001.10.1	LI	Electric, fibre and Telkom cables	No	8		
B001.10.2	LI	Water and sewer lines	No	10		
B001.10.3	LI	Stormwater pipes	No	3		
B001.11	LI	Alteration to and relocating of existing services as well as point repairs	Prov Sum	1		
SECTION 001: GENERAL REQUIREMENTS AND CHARGES - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CTMM CIVIL SPECIFICATIONS		SERIES 0: GENERAL				
		SECTION 002: ENGINEER'S ACCOMMODATION				
002.01		<u>Services</u>				
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		<u>Treatment and maintenance of areas surrounding offices and laboratories</u>				
		The treatment and maintenance of access and other roads and parking areas surrounding offices and laboratories and of footpaths providing access to all buildings, all as specified in subclause 02.05 of this section	Lump Sum	1		
002.03		<u>Office and laboratory accommodation</u>				
		Office and laboratory accommodation, including fittings, furniture and equipment and car all as specified in the Project Specifications.	Lump Sum	1		
002.04		<u>Provision of survey equipment and assistants</u>				
		The tendered lump sum shall include full compensation for the provision and maintenance of survey equipment and for making available at least two survey assistants as specified.	Lump Sum	1		
B002.05		<u>Specialist services</u>				
B002.05.01		Payment of geologists and social facilitator	Prov Sum	1	R850,000.00	R850,000.00
B002.05.02		Overheads, charges and profit on the above	%	R850,000.00		
SECTION 002: ENGINEER'S ACCOMMODATION - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CTMM CIVIL SPECIFICATIONS		SERIES 0: GENERAL				
		B SECTION 003: DAYWORKS				
B003.01		<u>Personnel during normal working hours:</u>				
B003.01.01	LI	Unskilled labour	hour	50		
B003.01.02		Semi-skilled labour	hour	75		
B003.01.03		Skilled labour	hour	40		
B'003.01.04		Ganger	hour	65		
B'003.01.05	LI	Flagman	hour	100		
B003.02		<u>Equipment:</u>				
B003.02.01		TLB tractor fitted with backactor and loader:				
B003.02.01.01		Model Power 55 kW	hour	10		
B003.02.01.02		Model Power 70 kW	hour	10		
B003.02.02		Vibrating roller (self-propelled):				
B003.02.02.01		Model mass 2 t width 0,9 m	hour	15		
B003.02.02.02		Model mass 10 t width 2,2 m	hour	5		
B003.02.04		Grader (CAT 140G or equivalent)	hour	8		
B003.02.05		Water truck (9000 litres)	hour	10		
B'003.03		<u>Materials:</u>				
B003.03.01		Procurement of materials	Prov Sum	1		
B003.03.02		Contractor's handling costs, profit and all charges in respect of subitem 003.03.01	%		10%	
B'003.04		<u>Transport</u>				
B003.04.01		LDV	km	100		
B003.04.02		Flatbed (8 ton)	km	10		
B003.04.03		Tipper truck (6 m³)	km	50		
B003.04.04		Tipper truck (10 m³)	km	25		
B003.04.05		Minibus (20 seater) for use during site inspections	day	6		
SECTION 003: DAYWORKS - Carried over to Summary						R 0.00

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CTBBI CIVIL SPECIFICATION 4th		SERIES 1: ANCILLARY WORK				
		SECTION 101: SITE CLEANING AND GRUBBING				
101.01		Clearing and grubbing				
101.01.01		Areas				
		Clear and grub for area where the pipeline is to be constructed	m²	3,089		
B101.02		Cutting and removing large trees				
B101.02.01		Removing and grubbing of large tree and tree stumps up to 1,5m girth (Including the removal of stumps and roots)	No	3		
B101.02.02		Exceeding 2m and up to and including 3m (Including the removal of stumps and roots)	No	1		
101.04		Clearing areas (only on the written instruction of the Engineer)				
101.04.02		Road reserve	m²	30		
101.05		Removal and disposal of specific elements at a spoil site provided by the Contractor				
101.05.02		Concrete or brick elements				
B101.05.02.01		01. Un-reinforced concrete - mass concrete blocks	m³	15		
B101.05.02.02		02. Reinforced concrete - mass concrete blocks	m³	5		
101.06		Brickwork				
B101.06.01		01. Brick wall up to 230mm wide	m³	5		
SECTION 101: SITE CLEANING AND GRUBBING - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CIVIL SPECIFICATIO N 02		SERIES 1: ANCILLARY WORK				
		SECTION 102 : ACCOMMODATION OF TRAFFIC				
	B102.01	<u>Accommodation of traffic and maintenance of bypasses</u>	km	0.5		
	102.14	<u>Temporary traffic-control facilities</u>				
	B102.14.01	LI Flagmen	man-day	160		
	102.14.02	Portable STOP and GO-RY signs	No	4		
	102.14.03	Amber flicker lights	No	2		
	102.14.04	Road signs, R- and TR-series, in diameter 1200 mm or 900 mm x 675 mm if rectangular	No			Rate only
	102.14.05	Road signs, TW-series, 1524 mm sides	No	12		
	102.14.06	Road signs, TG-series, 1200 mm sides	m²			Rate only
	102.14.07	Danger plates and delineators	No	20		
	102.14.08	Movable barricades (chevron and ROAD CLOSED types)	No	20		
	102.14.09	Traffic cones	No	30		
	102.14.10	Plastic New Jersey Barriers	No	6		
SECTION 102: ACCOMMODATION OF TRAFFIC - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
103.01		SERIES 1: ANCILLARY WORK				
		SECTION 103 : OVERHAUL				
		Overhaul on material hauled outside the defined free-haul boundaries of 5km	m³ · km	337		

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CIVIL SPECIFICATION		SERIES 1: ANCILLARY WORK				
		SECTION 104 : LANDSCAPING AND GRASSING				
104.01		Trimming				
104.01.02	LI	Hand Trimming	m²	2610		
104.02		Using machines for trimming or shaping (alternative to subitem 104.01.01)				
104.02.01		Bulldozer	hour	50		
104.02.02		Motor grader	hour	50		
104.03		Preparing areas for grassing and ground covers				
104.03.02		Topsolling on the Site with -				
104.03.02.01	LI	Topsoll obtained from the Site or borrow areas provided by the Employer	m³	783		
104.03.02.02		Topsoll provided by the Contractor from other sources (including all haul)	m³	32		
104.03.04	LI	Supplying and applying chemical fertilizers				
104.03.04.02	LI	Superphosphate	t	0.035		
104.03.04.04	LI	2.3:2(22)	t	0.025		
104.03.05		Stockpiling of Topsoll	m³	783		
104.04		Grassing				
104.04.02	LI	Sodding	m²	1300		
SECTION 103: OVERHAUL - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CTBBI CIVIL SPECIFICATION 415		SERIES 1: ANCILLARY WORK				
		SECTION 105 : FENCING				
105.01		Supply and erection of new fencing material				
105.01.01		315 x 2.5mm Barbed wire	m			Rate only
105.01.02		4mm diameter straining smooth wire	m			Rate only
105.01.04		50 x 2.5mm diamond mesh	m²			Rate only
105.01.06		1.2m high, 100mm diameter corner, end, straining and gate posts, including anchors at 2m C	No			Rate only
105.01.07		2m high, 2.5kg/m standard at 15m C/C.	No			Rate only
105.01.08		1.5m high standard droppers at 3m C/C	No			Rate only
105.02		New gates				
105.02.01		5m wide Single leaf gate	No			Rate only
105.02.02		5m wide Double leaf gate	No			Rate only
105.03		Moving of existing fences and gate				
105.03.01.01		Ordinary fences	m			Rate only
105.03.01.02		Security fences	m			Rate only
105.03.02		Gates	No			Rate only
105.04		Dismantling of existing fences				
105.03.01.01	LI	Dismantling of existing fencing, including gates taken down and dismantled	m			Rate only
105.06		Provision of temporary fencing				
105.06.01		Ordinary fences	m			Rate only
105.06.02		Security fences	m			Rate only
SECTION 105: FENCING - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
OTMM CABLE SPECIFICATION N/A		<u>SERIES 1: ANCILLARY WORK</u>				
		<u>SECTION 106 : SERVICE DUCTS</u>				
106.01		<u>Bedding and backfilling up to 300mm above pipes</u>				
106.01.01		Using selected excavated material	m³	17		
106.01.02		Using imported material	m³	9		
106.01.03		Using imported non-cohesive material	m³	17		
106.01.04		Using 9mm crushed stone	m³	7		
106.01.05		Using stabilized material	m³	9		
SECTION 106: SERVICE DUCT - Carried over to Summary						8.000

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
B202.01		SERIES 2: EARTHWORKS				
		SECTION 202 : TRENCHING				
		Trench Excavations				
B202.01.01		Up to 1m wide Up to 1m wide including 1.5m wide clearing and grubbing along the pipe route				
B202.01.01.01		Not exceeding 1,0m deep	m³			Rate only
B202.01.01.02		Exceeding 1,0m and up to 1.5m deep	m³	2		
B202.01.01.03		Exceeding 1.5m and up to 2,0m deep	m³	589		
B202.01.02		Over 1,0m and up to 2,0m wide including clearing and grubbing along the pipe route				
B202.01.02.01		Exceeding 2,0m and up to 2,5m deep	m³	1,225		
B202.01.02.02		Exceeding 2,5m and up to 3,5m deep	m³	1,952		
B202.01.02.03		Exceeding 3,5m and up to 4,5m deep	m³	718		
B202.01.02.04		Exceeding 4,5m and up to 5,0m deep	m³	9		
202.02		Extra over Items 202.01 , 202.03 , 202.04 and 202.09 for excavating in -				
202.02.01		Intermediate material	m³	453		
202.02.02		Hard material	m³	462		
202.03		Excavations outside the normal trench profile	m³	596		
202.04	LI	Hand excavation (Extra over Item 202.01)	m³	398		
202.06		The backfilling of trenches (excluding backfill around pipe barrel) with material obtained from excavations	m³	2,804		
202.07		Extra over Items 202.06 and 202.13 for using backfill material obtained -				
202.07.02		Sources provided by the Contractor	m³	165		
B202.08		Backfilling additional excavations in trench floor, using -				
B202.08.01		Concrete 15Mpa/19mm	m³	350		
B202.08.01		9mm Crushed stone	m³	350		
202.11		Timbering and shoring left in excavation	m²	363		
SECTION 202: TRENCHING - Carried Forward						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
		Brought forward				
202.12		Extra over item 202.06 for additional compaction of backfill to 93% of modified AASHTO density in road reserves	m³	7		
202.13		Backfilling trenches with soilcrete	m³	25		
202.14		Stone packing				
202.14.01	LI	In bolsters	m³	6		
202.14.02	LI	In tunnels	m³	292		
202.15		Reinstatement of bitumen surfaced roads	m²	11		
SECTION 202: TRENCHING - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
		SERIES 3: SEWERS				
		SECTION 302 - CONSTRUCTION				
B302.01		Supplying, laying and jointing of sewer pipes irrespective of depth or width of trench.				
B302.01.01	LI	400mm diameter HDPE pipe type PE100, PN16, SDR11 butt-welding joint to ISO 4427	m	130		
B302.01.02	LI	500mm diameter HDPE pipe type PE100, PN16, SDR11 butt-welding joint to ISO 4427	m	1,415		
302.02		Constructing of pipe beddings				
302.02.01		Class B bedding				
302.02.01.01	LI	400mm diameter	m	130		
302.02.01.02	LI	500mm diameter	m	1,415		
B302.02.02		Supply from commercial source and constructed 20mm crusher stones or washer bedding	m³	596		
302.03		Concrete encasing	m³	8		
302.04		Extra over item 302.01 for supplying, installing and jointing with an approved method of coupling the following pipe fittings in the 500mm diameter main sewer line.				
302.04.03		Stoppers:				
302.04.03.01	LI	400mm diameter stoppers	No	4		
302.04.03.02	LI	500mm diameter stoppers	No	25		
302.06		Construction of vertical house connections				
302.06.01		Type C house connections:				
302.06.01.03	LI	Exceeding 2,0m in depth but not exceeding 3,5m	No	4		
302.08		Marker blocks	No	6		
B302.09		Construction of manholes, up to 4,5m deep				
B302.09.02.01	LI	Precast concrete manholes to SANS 1294 complete for 400mm diameter pipe as per drawing	No	5		
B302.09.02.02	LI	Precast concrete manholes to SANS 1294 complete for 500mm diameter pipe as per drawing	No	31		
302.11		Construction of culverts adjoining manholes				
302.11.01		400mm diameter pipe	m	9		
302.11.02		500mm diameter pipe	m	62		
302.12		Supplying and installing manhole covers and frames				
302.12.03		Precast concrete cover with type 2A CI frame	No	36		
302.13		Extra over item 302.09 for the construction of house connections from manholes				
302.13.01	LI	One-house connections	No	3		
SECTION 302: CONSTRUCTION - Carried Forward						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
		Brought Forward				
302.14		Supplying and placing selected backfill material around and up to 300mm above pipe barrels using				
302.14.01		Excavated material	m³	350		
302.14.02		Imported material	m³	210		
302.15		Extra over subitem 302.14.01 for screening material	m³	210		
302.16		Connection to existing manholes				
302.16.01	LI	400mm, HDPE type PE100 PN16	No	2		
302.16.02	LI	500mm, HDPE type PE100 PN16	No	2		
302.17		Construction of anchor blocks on steep grades	m³	10		
302.18		Raising or lowering of existing manholes:				
302.18.01		Precast concrete manhole				
302.18.01.01		Raised/lowered up to 0.5m	No	3		
302.18.01.02		Raised/lowered exceeding 0.5m but not exceeding 1.0m	No	3		
302.20		Preliminary work prior to the construction of a manhole on an existing pipeline				
302.20.01		300mm diameter PVC-U	No	2		
302.20.02		550mm diameter PVC-U	No	2		
302.21		Extra over subitem 302.14.02 for using material obtained from sources provided by the contractor	m³	125		
SECTION 302: CONSTRUCTION - Carried over to summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
		SERIES 3: SEWERS				
		SECTION 303 : TESTING				
303.01		Testing of manholes	No	36		
303.02		Air testing of sewers				
303.02.01		400mm diameter	m	130		
303.02.02		500mm diameter	m	1,415		
303.03		CCTV Camera inspection				
303.03.01		400mm diameter	m	130		
303.03.02		500mm diameter	m	1,415		
SECTION 303: TESTING - Carried over to summary						R 0.00

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
		SERIES 8: SPECIFIC WORKS				
		SECTION 804 : PIPE JACKING AND BORING				
		Establishment on Site for:				
804.01						
804.01.01		Pipe jacking	Lump sum	1		
804.02		Access to and from the thrust and reception pits	Lump sum	1		
804.03		Excavating in soft material for:				
804.03.01		Thrust and reception pits	Lump sum	1		
804.04		Extra over Item 804.03 for excavating hard material	m³	19		
804.05		Backfilling the				
804.05.01		Thrust and reception pits with				
804.05.01.01		Excavated material	m³	32		
804.05.01.02		Imported material	m³	10		
804.06		Supply of pipes to be jacked: 600mm diameter concrete pipe class 100D	m	55		
804.07		Jacking of pipes through:				
804.07.01		Soft material	m³	13		
804.07.02		Hard material	m³	13		
804.1		The grouting of voids for pipe jacking				
804.10.01		Unforeseen and exposed during jacking	Kg	20		
804.10.02		Between pipeline and surrounding material after jacking has been completed				
804.10.02.01		600mm diameter	m	55		
804.12	LI	Timbering and shoring left temporarily in the thrust and reception pits	Week	2		
SECTION 804: PIPE JACKING AND BORING - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CT/BS/CIVIL SPECIFICATION B/E		SERIES 5: DRAINAGE AND EROSION PROTECTION				
		SECTION 501: SUBSURFACE DRAINS AND DRAINAGE BLANKETS				
		Geotextiles (Bidim A5 Geotextile Membrane Roll)				
501.04						
501.04.01		Supply and installation of geotextiles, as specified.	m ²	1854		
SECTION 501: SUBSURFACE DRAINS AND DRAINAGE BLANKET - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
CT188 CIVIL SPECIFICATION 4.6.1		SERIES 9: QUALITY CONTROL				
		SECTION 903: TESTING				
903.01		Provision of testing equipment				
903.03.01		Compressive strength tests on concrete cubes	No	15		
903.06		Other special tests and instructions requested/ordered by the Engineer				
B903.06.01		Cost of testing (including any necessary pre-construction tests requested by the engineer)	PC Sum	1		
B903.06.02		Charge on prime cost sum	%		10.00%	
SECTION 903: TESTING - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
		SECTION B1000 - MECHANICAL AND ELECTRICAL WORKS: PUMP STATION				
B1001		Supply, delivery, installation, commissioning and testing of a new sewer pump set.				
B1001.1		Inlets Works				
B1001.2		Manual use screen with bar spacing 14-20 mm. Screen shall be mounted at a 45° angle from horizontal. Manual bar screen dimension to be as per tender drawing and shall be completed with Drip tray, top rib section, Horizontal bar rib, bracket pieces. Material to be	item	2		
B1001.3		Mechanical Screen with bar spacing 10mm. Screen shall be mounted at a 75° angle from horizontal. Screen dimension to be as per tender drawing and shall be completed with 0.75kW motor, Chain link, Scraper arm, Blade assembly, Gearbox SEW, inspection plate, Front cover plate, Discharge chute plate, Mechanical overload, top discharge chute cover, Taper bar, Screen support gusset, Screen support, and Screen channel support plate.	item	2		
B1002		Flow Measurements				
B1002.1		Supply and install flow sensor DN200, PN16 c/w 1130m3/hr.durathane polyuthane liner - 10° to 70°, 316 S/S electrodes. Flanges to comply with SABS 1123.1600/3 and IP67	item	2		
B1002.2		Supply and install remote mount signal converter/display easily programmable with DC pulsed coil,rate & total displayed, isolated 4-20ma, 3 x digital pulse outputs. Enclosure with IP67, -10° to 70°.	item	2		
B1002.3		Supply and install beta signal cable (single cable), signal converter to flow sensor connection cable	m	20		
		Supply and install earthing/protection ring on a plastic or lined pipes or abrasive slurry applications.	item	1		
B1003		Supply, delivery, installation, commissioning and testing of a new sewer pump set.				
B1003.1		Full complete installation of new pumps, c/w 2-ward, service wiring, remote locking jacket and pump house with guide pin. Pumps shall be selected at 56. l/s Flow,45.1m head , patented self cleaning channel impeller, and 37kw/50hz/3PH/ 380-415V : 2 pole (	No	4		
B1003.2		Pump suction end pressure gauges Dia.150mm	No	4		
B1003.3		Pump discharge end pressure gauges Dia.80mm	No	4		
B1003.4		Pump discharge end isolation valves Dia.150mm	No	4		
B1003.5		Pump suction end isolation valves Dia.150mm	No	4		
B1003.6		Check valves at sumo discharge end.Dia.150mm	No	4		
B1003.7		Pump discharge end discharge manifold pipework Dia.200mm	m	8		
B1003.8		Pump suction end connecting pipework.	No	6		
B1003.9		Pump discharge end pipework	m	6		
B1003.10		IP54 Control Panel. Complete with wiring alarm	No	1		
B1003.11		Supply and install 45 KVA generator c/w self contained fuel tank.	No	1		
B1003.12		Supply and install level sensor to control 3 pumps (1 standby and 2 running in a flip flop configuration). The depth of the sump is 4m deep as per tender drawing and starting level to be 3.4m with a cut-off level of 0.5m. Level sensor c/w 110/220 v AC or 18 to 30 v DC, 4 to 20 ma isolated output, 5 x programmable relays, STD 10 day logger, transducer range of 0.3 to 6m and mounting bracket 150mm reach.	No	1		
B1003.13		Supply and install pepper spray 2 kg kit c/w remote controller, remote panic spray, pepper spray arming,siren only arming, status LED output, selectable spray times, maximum spray times 6 - 10 sec, selectable entry delay, times, 2kg s/s can, 2 nozzles, 18AH backup battery. The pepper spray shall be controlled by remote or cell communication.	No	1		
B1003.14		Frame assembly	No	4		
		Electrical Installations				
B1004		Transformers and Generator Units				
B1004.1		Inspect,test existing Transformers & RMU and issue report for further recommendation	sum	1		
B1004.2		Provide sum of replacing 500kVA existing transformers OPTIONAL depending on report recommendation	sum	2		
B1004.3		Inspect,test ,service existing 300kVA Generator Set and issue report for further recommendation	sum	1		
B1004.4		Provide sum of replacing 300kVA existing Generator OPTIONAL depending on report recommendation	sum	1		
B1005		Pump Station Installations				
B1005.1		Decommissioning of MCC Panel and other Electrical Installations	sum	1		
B1005.2		Supply and install new 600 MCC Panel Worksincluding controls,PLC and indicators etc for thePumps and Motors	sum	1		
B1005.3		Refurbish existing Distribution Boards,Local DBs & Gen Room	No	3		
B1005.4		Cable tracing , pressure test on 1000v mea test for the existino MV and LV cabline	sum	1		
B1005.5		Supply and install 70mm 4 core ECC cabling for the pumps	m	100		
B1005.6		Supply and install 6 mm 4 core ECC cabling for the Submissible Pump	m	80		
B1005.7		Supply and install 4 mm 3 core ECC cabling for the start stop buttons	m	30		
B1005.8		Termination and cable joints for above cabling	sum	1		
B1006		Lighting and Small Power				
B1006.1		Supply and install 2 x 28W LED Vapourline 1200mm Light fitting	No	16		
B1006.2		Supply and install 2 x 14W LED Bulkhead Light fitting	No	8		
B1006.3		Supply and install 60W LED Industrial Flood Light fitting	No	9		
B1006.4		Replace with new existing Industrial Sockets outlets	sum	14		
B1006.5		Replace with new existing Welding Sockets outlets	8			
B1006.6		Testino and Commissionino issuance of COCs	sum	1		
B1007		Testing and Commissioning				
B1007.1		Testino and Commissioning of all Wet Services Installations	Sum	1		
SECTION B1000: Mechanical and Electrical Works - Carried over to Summary						

Payment Reference	LIC	Description	Unit	Quantity	Rate	Amount
		SECTION B1100 - PUMP ROOM VENTILATION				
B1101		Supply, delivery, installation, commissioning and testing of a fresh air supply fan/ extraction fan				
B1101.1		Supply, delivery, installation, commissioning and testing of a 1,6kW (3~/50Hz/380V) 481L/s extraction fan	No	4		
B1101.2		Supply, delivery, installation, commissioning and testing of a 0,65kW (3~/50Hz/380V) 241L/s extraction fan	No	4		
B1101.3		Supply, delivery, installation of 750 x 750 (neck) weather louver for pump area extract fan	No	4		
B1101.4		Supply, delivery, installation of 600 x 600 (neck) weather louver for pump area extract fan	No	4		
B1102		Fan electrical connection - Supply and Install				
B1102.1		Electrical starter/isolator with overload protection, wired to fan and to isolator	No	8		
B1102.2		Electrical cabling and wiring of fans (all cabling and wiring measured as one item per fan)	Sum	8		
B1103		Supply, delivery, installation, commissioning and testing of a fresh air supply fan/ extraction Ducting				
B1103.1		Cableover 3 - (Lonoest side 750 to 1350 mm) - Supply and Install 700 x 700 Duct - Uninsulated	m	24		
		Extra Over for duct fittings including brackets supported from roof trusses .				
B1103.2		90° Bends - Supply and Install 700 x 700 Duct - Uninsulated	No	4		
B1104	TC	Testing and Commissioning				
B1104.1		Testing and Commissioning of all Wet Services Installations	Sum	1		
SECTION B1100: Pump Room Ventilation - Carried over to Summary						

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS01-2022/23

**APPOINTMENT OF A CONTRACTOR FOR THE
UPGRADING OF SEWER PIPELINE AT ZITHOBENI**

PORTION 2: CONTRACT

PART C3: SCOPE OF WORK

SCOPE OF WORK

INDEX

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**NOTE: ALL DRAWINGS REFERED TO UNDER THIS SECTION OF THE TENDER
DOCUMENT ARE INCLUDED UNDER VOLUME 2**

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

C3.1 DESCRIPTION OF THE WORKS

C3.1 DESCRIPTION OF THE WORKS

1.1 EMPLOYER'S OBJECTIVES

The contract entails the following:

- a) upgrading of an existing bulk sewer line from 250mm to 400 mm from Zithobeni Ext 8 and 9 and upgrading from 250mm to 500mm diameter towards Kommando pump station. The required material is HDPE pipe type PE100, PN16, SDR11 butt-welding joint to ISO 4427 or similar approved with fittings.
- b) Repairs and refurbishment of mechanical and electrical works at Kommando pump station. The works includes repairs and refurbishment of pump room ventilation, installation of transformer and generator.

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) 7CE.

1.2 OVERVIEW OF THE WORKS

The contract entails the upgrading of an existing bulk sewer line from 250mm to 400 mm from Zithobeni Ext 8 and 9 and from 250mm to 500mm diameter towards the Kommando pump station.

The extent of the works contained in 1.2.1 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 bidding purposes and is not indicative of the expected or estimated quantities.

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.

1.2.1 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 line comprising of 1545m pipe and 36 manholes; 3 sewer erf connections; Pipe jacking under railway crossing
- vii) Connection of the new sanitation system to existing manholes at four locations.
- viii) Air testing and CCTV inspection of the new system.
- ix) Mechanical fittings at Kommando pump station
- x) Electrical installations and repairs at Kommando pump station
- xi) Installation and/or repair of electrical transformer and generators.
- xii) Installation and/or repairs of electrical works at the pump room ventilation at Kommando pump station.
- xiii) Testing and commissioning of all mechanical and electrical works.

b) Particular Works

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

- The works includes the rail crossing which will require wayleave.
- Bidders shall prepare and submit the programme of works taking 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 re-located.
- A high level of superintendence is required.

1.2.2 PHASING OF THE WORKS

Various portions of the site will be constructed in phases based on the availability of funding throughout the Contract for construction of portions of the Works. The start and completion dates of the phased scope of works will be agreed with the contractor depending on available budget.

The Contractor will commence with each Portion of the Works depending on the availability of funds for the financial year. The contractor's performance on the preceding phase and based on the following Schedule:

Financial Year	Portion
2022/2023	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 for the succeeding phases 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
- Pipe jacking under the railway.

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 sewer line.
- 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 sewers;
- Backfilling of all new sewers 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 materials manager will be a National Diploma in Civil Engineering or a National Certificate (N6) 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.

1.3.2 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 is 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 Contractor 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 Contract, 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.

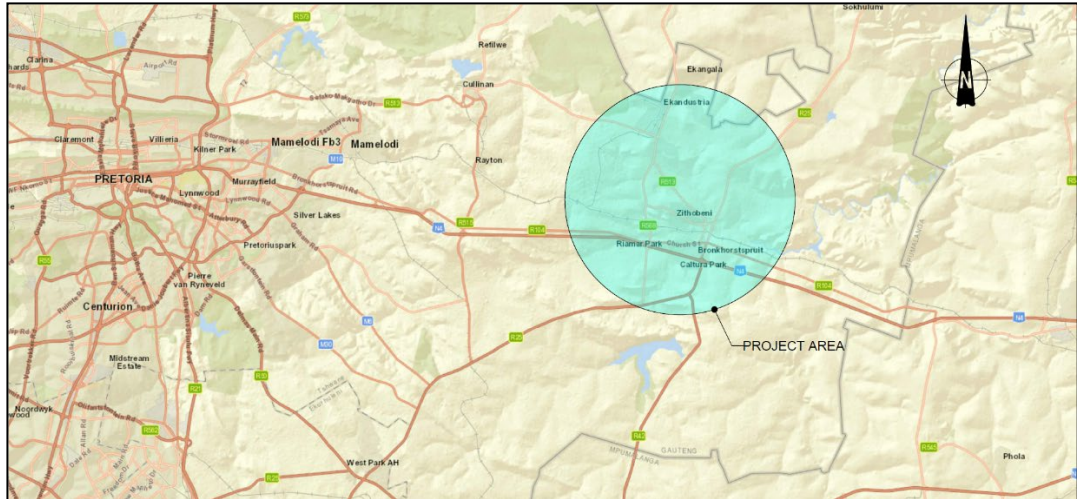
D. NON-SPECIALIST WORK LOCAL SUB-CONTRACTORS

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.

1.4 LOCATION OF SITE

Zithobeni Extension is located approximately 120km east of Pretoria which falls within the City of Tshwane Metropolitan Municipality (CoT) jurisdiction in Ward 102 of Region 7. The site can be accessed through N4, R104 to the south and R513 to the east.

GPS coordinates are 25°47'20.28"S, 28°44'6.88"E, please refer to **Figure 1** below:



1.4 TEMPORARY WORKS

No temporary works have been allowed for.

1.5 GEOTECHNICAL INFORMATION

1.5.1 Site Conditions

Geotechnical Investigations have been carried out by Roadlab for the works in April 2021.

A summary of the results of material investigations is given in table below:

Geotechnical Information Summary						
Test Pit		Depth (m)	Classification			Material Description
No	Co-ordinates		H. R. B	T.R.H 14	COLTO	
TP01 Sewerline	25°47'23.10 E28°44'80.30	1.1 - 2.2	A-4-4(0)	G9	G10	Dark Yellow Orange Silty Clayey Sand
TP02 Sewerline	S25°47'25.50 E28°44'10.70	0.3 - 1.1	A-2-5(0)	G8	G9	Light Orange Brown Silty Sandy
		1.1 - 2.0	A-5-1	G8	G10	Dark Yellow Orange Clayey Silt Gravelly Sand
TP07 Sewerline	S25°47'40.00 E28°44'20.20	0.7 - 1.4	A-1-b(0)	G7	G7	Light Red Orange Sandy Gravel
TP08 Sewerline	S25°47'41.10 E28°44'23.10	0.8 - 1.5	A-5(2)	G9	G10	Dark Yellow Orange Silty Sand
		1.5 - 2.8	A-5(1)	G8	G10	Light Olive Silty Gravelly Sand
TP09 Sewerline	S25°47'42.30 E28°44'23.80	0.6 - 2.9	A-5(6)	<G9	G10	Dark Yellow Orange Silty Sand

TP10 Sewerline	S25'47'42.50 E28'44'22.90	0.5 – 1.2	A-4(3)	G9	G10	Light Yellow Orange Clayey Silty Sand
TP11 Sewerline	S25'47'44.70 E28'44'27.90	0.7 - 2.0	A-5(4)	<G9	G10	Light Olive Grey Clayey Silty Sand
		2.0 - 2.6	A-4(4)	G9	G9	Light Grey Clayey Silty Sand
TP12 Sewerline	S25'47'43.80 E28'44'32.70	1.0 - 3.2	A-2-4(0))	G9	G10	Olive Light Grey Clayey Silty Sand

1.6 FEATURES REQUIRING SPECIAL ATTENTION

1.6.1 Existing Services

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

1.6.2 Surveying and Cadastral Beacons (including Stand pegs)

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

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

1.7 SUPPLYING OF MATERIALS

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

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

1.8 QUALITY CONTROL

It is the responsibility of the Contractor to deliver work of quality and accuracy that is in accordance with the specifications and drawings, and the Contractor shall at his own cost provide a quality control system and provide experienced Engineers, Foreman, Surveyors, Technicians and other Technical Personnel together with the necessary transport, instruments and plant to ensure that proper supervision and positive control be applied on the job at all times. This also includes work done by sub-contractors, including nominated sub-contractors for specialised work or otherwise.

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

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

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

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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 are 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	:	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**

C3.2.4: LIST OF DRAWINGS

DRAWING DESCRIPTION	DRAWING NUMBER
INDEX	
Locality Plan	GP20013-CIV-SWR-000
LAYOUT PLANS	
Proposed Sewer Layout Plan	GP20013-CIV-SWR-001
Longitudinal Section	
Proposed Sewer Long section	GP20013-CIV-SWR-100
STANDARD DRAWINGS	
Sewer details (manhole, bedding, house connection, pipe jacking sleeve)	GP20013-CIV-SWR-300
Sewer details (manhole cover and frame, roof slab)	GP20013-CIV-SWR-301
Name board drawing	GP20013-CIV-SWR-302
Proposed drop manhole details	GP20013-CIV-SWR-303
Services Layout: 13m – 25m Road Reserves	PLN001- 1 OF 4
Services Layout: 8m – 10m Road Reserves	PLN001 – 2 of 4
Services Layout: 32m Road Reserves	PLN001 – 3 of 4
Services Layout Applicable to South-Western Region of Tshwane	PLN001 – 4 of 4

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 SEWER STANDARD DETAILS REFER TO THE LATEST VERSION OF THE DRAWINGS OBTAINABLE FROM THE WATER AND SEWER DIVISION

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF THE SEWER PIPELINE AT ZITHOBENI

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

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 7

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: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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 Executive Director: 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, C de Wet Centre, 175 E'skia Mphahlele Drive, Pretoria West 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 pick	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40mm; can be molded by fingers with some pressure

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

04 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.

- to 90% Proctor density;
- 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
- 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 fortnightly.

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 2019 to 31 August 2020 (rate adjusted by 7.5%)	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
1	R 37.04	R 39.82	R 41.72
2	R 37.90	R 40.75	R 42.70
3	R 38.96	R 41.88	R 43.89
4	R 40.41	R 43.44	R 45.53
5	R 45.73	R 49.16	R 51.56
6	R 51.91	R 55.80	R 58.56
7	R 59.46	R 63.92	R 67.06
8	R 66.66	R 71.66	R 75.19
9	R 75.35	R 81.00	R 84.98

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 agreement with the ward Councillor/Ward Committee whereby the Ward Councillor shall provide to the Contractor the following if necessary:

- 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 happen 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, at his own expense.

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

C3.4.6.2 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 DEPARTMENTT

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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 42 of the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by providing more labour and plant on site, or by using the available labour and plant 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.

STATISTICAL INFORMATION: BRONKHORSTSPRUIT		
RAINFALL		
Month	Nn = Actual number of days during the calendar months in which a rainfall of more than Y-mm has been received	Rn = Average monthly rainfall
January	3.4	129
February	3.2	88
March	3.4	76
April	1.3	44
May	0.5	15
June	0.1	7
July	0.0	7
August	0.1	6
September	0.3	20
October	1.9	68
November	3.3	112
December	4.3	105
TOTAL	21.8	677

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.

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CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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

MEASUREMENT AND PAYMENT

Replace pay item 001.04 Compliance with the Occupational Health and Safety Act and applicable regulations with the following:

Item		Unit
B001.04	Compliance with the Occupational Health and Safety Act and applicable regulations	
B001.04.01	Provision of a Health and Safety Plan	Lump Sum

The 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.

Eighty per cent (80%) of the amount will be paid per establishment 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.

B001.04.04	Provision of a safety officer (Full time)	Lump Sum
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The unit of measurement shall be the Lump Sum of the specified duties of the safety officer are performed, irrespective of the number of safety officers employed in any 24-hour day.

The tendered rate shall include full compensation for the cost of the safety officer(s) to conduct the duties and includes the provision of the necessary resources such as cost of the cellular telephone and all other incidentals

related to the performance of his duties.

Payments shall be made in equal monthly payments, spread over the tendered completion period.

B001.04.05	Training Requirements	
B001.04.05.01	Provision for training of targeted labourers for EPWP	Prov Sum
B001.04.05.02	Generic and management skills for SMME's	Prov Sum
B001.04.05.03	Charge on prime cost sum	%

The Contractor shall only be reimbursed for the amounts actually paid by the Contractor to the selected service providers for training local labourers and emerging Contractors and as directed by the Employer, in execution of the Engineer's written instruction, plus a percentage as tendered to cover all his charges and profits.

No separate payment will be made (other than those on BOQ) for the provision of stationary, transport of trainees, tools equipment and teaching aids and remuneration of workers during training. Any additional training as viewed by the Contractor to be necessary shall be viewed to be included under pay item 001.01 and shall not be paid for separately.

Item 001.05: Community liaison officer

Amend pay item 001.05 Community liaison officer with the following:

Item		Unit
B001.05	Community Liaison Officer	Months
B001.05.01	Contractor's handling costs, profit and other charges in respect of sub item 001.05	percentage (%)

The Provisional Sum shall be paid in accordance with the client's remuneration guidelines for the services of the Community Liaison Officer.

Payment shall be made in monthly instalments, upon proof of payment to the Community Liaison Officer.

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 Community Liaison Officer the specified remuneration, but shall not be reimbursed.

Add the following pay items:

Item		Unit
B001.07	Compliance with Environmental Management Plan	Lump Sum

The tendered rate for this sub item shall include full compensation for all his obligations in respect of environmental management plan. The Contractor will be paid this amount monthly in equal payments once he has met all obligations which include monthly audits, appointment of competent staff to do the audits, etc. Payments shall be made in equal

monthly payments, spread over the tendered completion period.

B001.08 Appointment of Local Security Company Lump Sum

The tendered rate for this sub item shall include full compensation for all his obligations in respect of the security of the site. Payments shall be made in equal monthly payments, spread over the tendered completion period.

Item	Unit
B001.09 Contract Notice Boards	No(number)

The unit of measurement shall be the number of sign boards supplied and erected on the site.
The tendered rate shall include full compensation for furnishing and erection of the sign boards as detailed on the drawings, complete with supports and the dismantling and removal thereof on completion of the contract.'

B001.08 Protection of services that intersect or adjoin a pipe trench

Item	Unit
B001.08.01 Services that intersect and adjoin a trench	
a) Electric, fibre and Telkom cables	Number (No)
b) Water and sewer mains	Number (No)
c) Stormwater pipes	Number (No)

The listed services that intersects and/or adjoin a trench (parallel to or at an angle between centrelines) °and lie within a plane which lies at an angle of 45° from the edge of the specified base width of the trench will be measured under this item. The unit refers to one service but where they are so grouped that they can be contained within a horizontal distance of 200mm at right angles to the axis of the service will be measured as one service. Only the services listed is measurable and payable as all other services is deemed to be included in rates elsewhere.

The rates for Items B001.08.01 above shall cover the cost of extra care in excavating the trench, protecting and maintaining the service during the period when the trench is open and any repairs necessitated by damage caused by the Contractor.

B001.09.03 Alterations to and re-locating of existing services Provisional Sum

as well as point repairs

Where existing services, either “known” or discovered in the course of investigations are found to require alteration or re-location, the Contractor shall inform the Engineer that such alteration or re-location will be necessary. The Engineer shall then, in conjunction with the Contractor and the owner of the service, decide on the action to be taken and shall:

- a) prepare a specification of the work to be carried out and:
- b) request the Contractor to submit a quotation for the cost of the alteration and/or re-location of the relevant service.

All action taken in respect of establishing existing services, whether “known” or not, and whether requiring alteration or relocation or not, shall be carried out as far in advance of the Contractor’s operations as possible.

Where the authority concerned elects to carry out on its own account any alterations or protective measures, the Contractor shall co-operate with and allow such authority reasonable access and sufficient space and time to carry out the required work.

Permanent alterations to or permanent diversion of services necessitated by the execution of the Works and authorised by the Engineer will be paid for under the relevant Lump Sum, but no such work will be paid for if it has not been previously inspected and if written instructions have not been given.

SERIES 0: GENERAL

SECTION 002: ENGINEER'S ACCOMMODATION

This item will be paid in terms of CTMM CIVIL SPECIFICATIONS 2005

Measurement and Payment:

Add the following pay items:

Item		Unit
B002.05	Specialist services	
B002.05.01	Payment of geologists and social facilitator, etc.	Prov Sum
B002.05.02	Overheads, charges and profit on the above	percentage (%)

The provisional sum shall include full compensation for the appointment of a specialist service provider. The appointment of the service provider and identification of requirement thereof shall be at the discretion of the Engineer.

Payment shall be made proof of payment to the appointed service provider.

The tendered percentage is a percentage of the amount actually spent under the provisional sum item, which shall include full compensation for the profit in connection with providing the specified service.

B SECTION 003: DAYWORKS

B003.01 SCOPE

This section covers the listing of daywork items in accordance with sub-clause 6.5.1.1 of the General Conditions of Contract, for the use in determining payment for work which cannot be quantified in specific units in the Pricing Schedule, or work ordered by the engineer during the construction period which was not foreseen at tender stage and for which no applicable rate exists in the Pricing Schedule.

B003.02 ORDERING OF DAYWORK

No daywork shall be undertaken unless written authorisation has been obtained from the engineer.

B003.03 MEASUREMENT AND PAYMENT

Item	Unit
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B003.01 Personnel

B003.01.01 Unskilled labour	hour (h)
B003.01.02 Semi-skilled labour	hour (h)
B003.01.03 Skilled labour	hour (h)
B003.01.04 Ganger	hour (h)

Item	Unit
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B003.02 Equipment

B003.02.01 TLB tractor fitted with backactor and loader:

B003.02.01.01 Model Power 55 kW.....	hour (h)
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B003.02.01.01 Model Power 70 kW.....	hour (h)
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B003.02.02 Vibrating roller (self-propelled):

B003.02.02.01 Model mass 2 t width 0,9 m.....	hour (h)
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B003.02.02.02 Model mass 10 t width 2,2.....	hour (h)
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B003.02.03 Grader (CAT 140G or equivalent)	hour (h)
--	----------

B003.02.04 Water truck (9000 litres)	hour (h)
--	----------

Item	Unit
B003.03 Materials	
B003.03.01 Procurement of materials	provisional (Prov) sum
B003.03.02 Contractor's handling costs, profit and all other charges in respect of sub-item B003.03.01.....	percentage (%)

Item	Unit
B003.04 Transport	
B003.04.01 LDV	kilometre (km)
B003.04.02 Flatbed (8 ton)	kilometre (km)
B003.04.03 Tipper truck (6 m ³)	kilometre (km)
B003.04.04 Tipper truck (10 m ³)	kilometre (km)
B003.04.05 Minibus (20 seater) for use during site inspections.....	kilometre (km)

The unit of measurement for items B003.01 and B003.02 shall be the hour for the item of equipment or personnel. Non-working hours for transport breakdown, lack of operator of any other reason shall not be measured. The time shall be taken from the time that the personnel and/or equipment depart until return.

Measurement shall only be for work instructed and directed by the engineer, where the engineer considers no other appropriate rate is applicable in the Pricing Schedule. Prior to the commencement of any work by the personnel described under item B003.01 the contractor must obtain written consent from the engineer regarding their classification in terms of "unskilled", semi-skilled" and "skilled" personnel.

The tendered rates for labour under B003.01 shall include full compensation to cover overhead charges and profit, leave pay, bonuses, subsistence, allowances, Employer's contributions, additional payment for overtime where applicable, insurances, housing, site supervision, use of small hand tools and appliances, non -mechanical plant and equipment and consumable stores, for all administrative, supervisory, operative and contingent costs, relating to the supply of personnel.

The tendered rates for plant for item B003.02 shall be an all-inclusive hire charge for the use of the vehicle and driver or plant/equipment and operator and shall apply only to vehicles plant and equipment nominated in writing by the engineer, for all administrative, supervisory, operative and contingent cost, and profit relating to the running of the plant.

The unit of measurement for subitem B003.03 shall be the amounts actually paid for the procurement of materials to be purchased and shall be made in accordance with the provision of the General Conditions of Contract. Only the actual quantities of materials used, as verified by the engineer, shall be paid for.

The percentage tendered for subitem B003.03.02 shall be the percentage of the amounts actually paid for the procurement of materials as ordered under subitem B003.03.01 and shall be in full and final compensation in respect of the contractor's handling costs, profit and all other charges in connection with the procurement and supply of the materials to the point of usage.

The unit of measurement for item B003.04 shall be the kilometre distance that the vehicle travelled for transporting personnel and/or plant. All travelling shall be approved by the engineer.

The tendered rate for item B003.04 shall include full compensation for the cost of the vehicle including fuel, maintenance depreciation and running costs.

The above mentioned tendered rates shall be full compensation for the various items as specified and no further profit shall be paid.

SERIES 1: ANCILLARY WORK

SECTION 101: SITE CLEANING AND GRUBBING

11 MEASUREMENT AND PAYMENT

Amend pay items 101.02 ,101.05.02 to read as follows:

Item		Unit
B101.02	Cutting and removing large trees	
B001.02.01	Removing and grubbing of large tree and tree stumps up to 1,5m girth (Including the removal of stumps and roots)	No (number)
B101.05.02	Concrete or brick elements	
B101.05.02.01	Unreinforced concrete or brick elements	m ³
B101.05.02.02	Unreinforced concrete or brick elements	m ³

Add the following pay items:

Item		Unit
B101.06	Brickwork	
B001.06.01	Brickwall up to 230mm wide	m ²

SERIES 1: ANCILLARY WORK

SECTION 102: ACCOMMODATION OF TRAFFIC

MEASUREMENT AND PAYMENT

Item 102.01: Accommodation of traffic and maintenance of bypasses

Amend pay item 102.01 *Accommodation of traffic and maintenance of bypasses* to read as follow:

Item	Unit
B102.01	Kilometre (km)
Accommodation of traffic and maintenance of bypasses	

The unit of measurement shall be the kilometre of the bypass constructed and along the centre line of existing roads Sections where traffic is diverted onto existing roads which the Contractor is not required to maintain shall not be included.

The tendered rate for the accommodation of traffic and the maintenance of bypasses shall include full compensation for all general obligations and incidental items of cost necessary for the accommodation of traffic and the maintenance of bypasses and of existing roads used as bypasses, during the construction period and during the defects liability period where such items of cost are not specifically paid for under the pay items provided under this section in the Schedule of Quantities. It shall also include full compensation for traffic control, the provision of traffic signs and, where necessary, communications equipment required to regulate traffic, for the construction of temporary drainage works, excluding temporary culverts, and for the maintenance of all drainage works, arranging for the moving of services, attending to traffic problems, complying with the requirements of the Road Traffic Act and of City of Tshwane, and for providing temporary access to properties, excluding temporary bridges.

Payment shall be made in two equal instalments in respect of each section. The first instalment shall be made when suitable bypasses have been approved for use. The second instalment shall become due when the traffic can again be accommodated on the permanent roads, all bypasses have been obliterated, all previously existing roads have been reinstated and all general obligations of the Contractor have been complied with, everything to the satisfaction of the Engineer.

Item 102.14: Temporary traffic-control facilities

Amend pay item 102.14.01 Flagmen to read as follow:

Item	Unit
102.14	Temporary traffic-control facilities
B102.14.01	Flagmen
	man day

The unit of measurement shall be a full day worked by flagmen. A man-day shall be deemed to comprise of a number of shifts within an 8-hour period. Shifts of 4 hours and less shall be measured as a half man-day."

Add the following pay item:

Item 102.15: Re-use or removal of traffic-control facilities

Item		Unit
B102.15.06	Traffic cones	No

SERIES 1: ANCILLARY WORK

SECTION 103: OVERHAUL

Amend as follows:

B1030.01 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 5km’.

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

SERIES 2: EARTHWORKS

SECTION 202: TRENCHING

16 MEASUREMENT AND PAYMENT

Amend pay item 202.01 as follows:

Item	Unit
B202.01 Trench excavations	
B202.01.01 Up to 1m wide Up to 1m wide including 1.5m wide clearing and grubbing along the pipe route	m ³
B202.01.01.01 Not exceeding 1m deep	m ³
B202.01.01.02 Exceeding 1,0m deep and up to 1.5m deep	m ³
B202.01.01.03 Exceeding 1.5m deep and up to 2,0m deep	m ³
B202.01.02 Over 1.0m and up to 2.0m wide including clearing and grubbing along the pipe route	
B202.01.02.01 Exceeding 2.0m and up to 2.5m deep	m ³
B202.01.02.02 Exceeding 2.5m deep and up to 3.5m deep	m ³
B202.01.02.03 Exceeding 3.5m deep and up to 4.5m deep	m ³
B202.01.02.04 Exceeding 4.5m deep and up to 5.0m deep	m ³

Amend pay item 202.01 as follows:

Item	Unit
B202.08 Backfilling additional excavations in trench floor, using	
202.08.01 Concrete 15Mpa/19mm	m ³
202.08.02 9mm Crushed stone	m ³

SERIES 3: SEWERS

SECTION 302: CONSTRUCTION

MEASUREMENT AND PAYMENT

Amend pay item 302.01 as follows:

Item	Unit
B302.01 Supplying, laying and jointing of sewer pipes irrespective of depth or width of trench	
B302.01.01 400mm diameter HDPE pipe type PE100, PN16, SDR11 butt-welding joint to ISO 4427 or similar approved.	m ³
B302.01.02 500mm diameter HDPE pipe type PE100, PN16, SDR11 butt-welding joint to ISO 4427 or similar approved.	m ³

Add the following pay item:

Item	Unit
B302.02 Constructing of pipe bedding	
B302.02.02 Supply from commercial source and constructed 20mm crusher stones or washer bedding	m ³

Add the following pay item:

Item	Unit
B302.09 Construction of manholes up to 3.5m deep	
B302.09.02.01 Supply and install precast concrete manholes to SANS 1294 complete for 400mm diameter pipe as detailed on the CoT's Standard drawings – sewer.	No.
B302.09.02.02 Supply and install precast concrete manholes to SANS 1294 complete for 500mm diameter pipe as detailed on the CoT's Standard drawings – sewer.	No.

The tendered rate shall include concrete manhole bases, step irons factory casted into the concrete rings at 300mm staggered intervals, the cost of excavations in all types of materials, backfilling layers compacted to 93% MOD AASHTO density. The cost shall also cover the water tight sealing of the manhole ring joints and connection of the main sewer line of all sizes.

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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.

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APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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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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 –

- (a) prepare a baseline risk assessment for an intended construction work project;
- (b) 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);
- (c) provide the designer with the health and safety specification contemplated in paragraph (b);
- (d) ensure that the designer takes the prepared health and safety specification into consideration during the design stage;
- (e) ensure that the designer carries out all responsibilities contemplated in regulation 6;
- (f) include the health and safety specification in the tender documents;
- (g) ensure that potential principal contractors submitting tenders have made adequate provision for the cost of health and safety measures;
- (h) ensure that the principal contractor to be appointed has the necessary competencies and resources to carry out the construction work safely;
- (i) 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;
- (j) 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);
- (k) appoint every principal contractor in writing for the project or part thereof on the construction site;
- (l) 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;
- (m) ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor;

- (n) 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 is required the contractor 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.

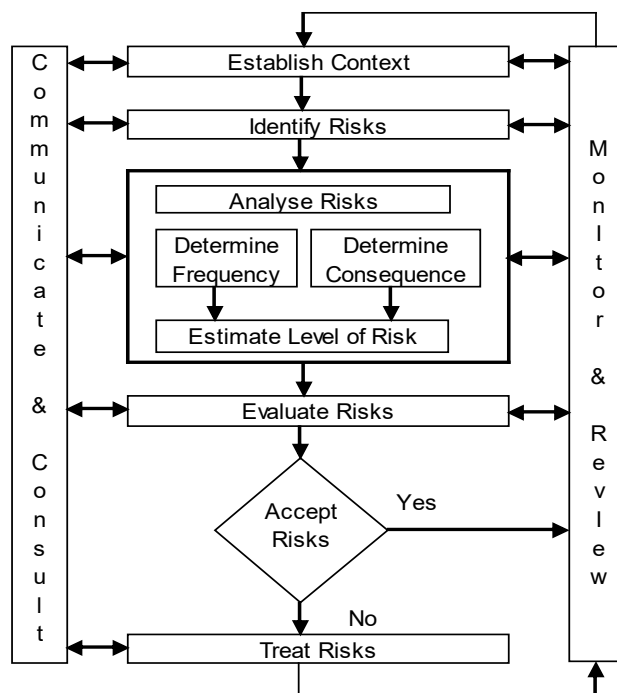


Figure 1: Risk Management Process

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.

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 to 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;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					Safe work and operating procedures; 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; Electrocution; 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	Electrocution; damage to property &	Medium	Supervision; Prevent exposure; Substitution; Engineering controls;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
			Environmental impact		Training; Inspection of equipment; 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;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					Safe work and operating procedures; Rescue plan Personal Protective Equipment & Clothing
	Bulk Earthworks (excavations) and 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	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	Scaffolding; Shatters; Beams; Reinforcement;	Injury; damage to property & Environmental impact	Low	Prevent exposure; Substitution; Engineering controls; Training;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
	reinforcement and shutters.	Concrete works			Inspection of equipment; Competent person; Safe work and operating procedures; Fall protection; 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

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
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; 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;

ITEM	ACTIVITY ISSUE	HAZARD	RISK	RISK RATING (High/Med/Low)	MINIMUM CONTROL
					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; 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

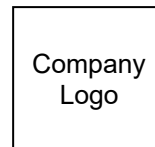
17.1.1 The scheduled items for health and safety will be as specified in clause 31 of section 001 of the Standard Specifications.

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.

10.1.2 .

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
Logo

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
Logo

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.

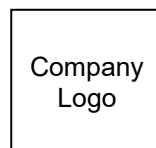
This appointment is valid from (**date**) to the completion of the stipulated construction work.

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
Logo

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
Logo

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

<div>Company Logo</div>	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
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ANNEXURE 2

NOTIFICATION TEMPLATES

Company
Logo

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

CITY OF TSHWANE
HUMAN SETTLEMENTS DEPARTMENT

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

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 satisfactorily 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 aways, 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>	001 002.02.01
	<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</i>	001

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
		<i>removed from the site on completion of the contract.</i>	002 104
Vegetation	On site	<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
	Weeds	<i>Clearance of weeds must be done by hand before seeding.</i>	104
	Grass cover	<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
Water	Available for human consumption	<i>Water for human consumption must be tested and treated in accordance with recommendations.</i>	
Soil management	Topsoil	<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
	Borrow material	<i>EMPR's for borrow pits to be submitted to the Department of Mineral and Energy Affairs for approval</i>	201 203
Archaeological & Cultural sites	Discover of archaeological sites of artefacts	<i>If an artefact on site is uncovered, work in the immediate vicinity must be stopped immediately and an archaeological consultant must be contacted. Work may only resume once clearance is given in writing by the archaeologist.</i>	GCC
Graves	Discovery of graves	<i>If a grave on site is uncovered, work in the immediate vicinity must be stopped and an undertaker should be contacted</i>	GCC

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
<i>Waste management</i>	<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
<i>Sewage treatment</i>	<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
<i>Fuel, diesel & hazardous materials</i>	<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>	
	<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</i>	RELEVANT SECTION IN SPECIFICATIONS

ENVIRONMENTAL COMPONENT	ACTIVITY	MITIGATION	RELEVANT SECTION IN SPECIFICATIONS
		<i>for the site.</i>	
	<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

CONTRACT NO: HHS01-2022/23

APPOINTMENT OF A CONTRACTOR FOR THE UPGRADING OF SEWER PIPELINE AT ZITHOBENI

C4 SITE INFORMATION

C4.1 LOCALITY PLAN

The project area is situated in Zithobeni Township which is located 50km east of Pretoria; north of Bronkhorstspuit and south west of Ekalanga.

Please refer to Figure 1 below:

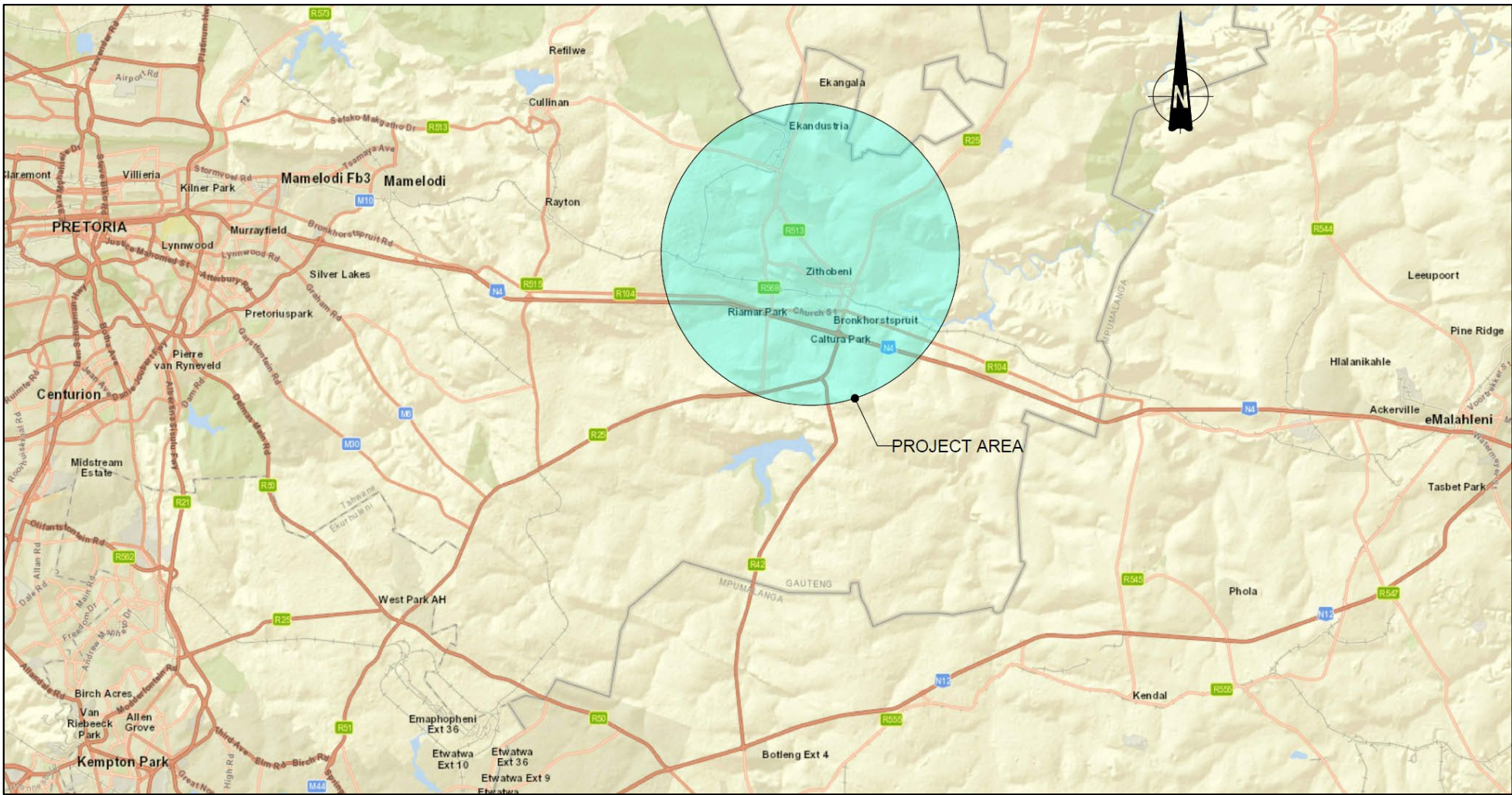


Figure 1: Locality Plan – Zithobeni and surrounding areas

C4.2 LIST OF TENDER DRAWINGS

LIST OF DRAWINGS

DRAWING DESCRIPTION	DRAWING NUMBER
INDEX	
Cover Page	-
Locality Plan & List of Drawings	GP20013-CIV-SWR-000
Keyplan	GP20013-CIV-SWR-001
LAYOUT PLANS	
Proposed Sewer Layout	GP20013-CIV-SWR-002
LONG SECTIONS	
Proposed Sewer Longsection	GP20013-CIV-SWR-100



CITY OF
TSHWANE
IGNITING EXCELLENCE

ZITHOBENI HEIGHTS: UPGRADING OF SEWER PIPE LINE IN EXT 8& 9

DRAWINGS ISSUED FOR TENDER

JULY 2021

PREPARED BY

aseda.

BEYOND INFRASTRUCTURE

TEL (011) 312 4070
FAX (011) 312 2689
E-mail: admin@aseda.co.za

BUILDING No.7
546 CONSTANTIA PARK
16th ROAD
MIDRAND 1685

LIST OF DRAWINGS

ZITHOBENI HEIGHTS: UPGRADING OF SEWER PIPE LINE IN EXT 8& 9

DRAWING No
GENERAL LAYOUT PLANS

GP20013-CIV-SWR-000
GP20013-CIV-SWR-001
GP20013-CIV-SWR-100
GP20013-CIV-SWR-300
GP20013-CIV-SWR-301
GP20013-CIV-SWR-302
GP20013-CIV-SWR-303

DESCRIPTION

LOCALITY PLAN
PROPOSED SEWER LAYOUT
PROPOSED SEWER LONGSECTION
SEWER DETAILS(MANHOLE,BEDDING,HOUSE CONNECTION,PIPE JACKING SLEEVE)
SEWER DETAILS(MAMHOLE COVER & FRAME,ROOF SLAB)
NAMEBOARD DETAILS
PROPOSED DROP MANHOLE DETAILS

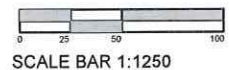


LOCALITY PLAN
N.T.S

NOTES AND SPECIFICATIONS

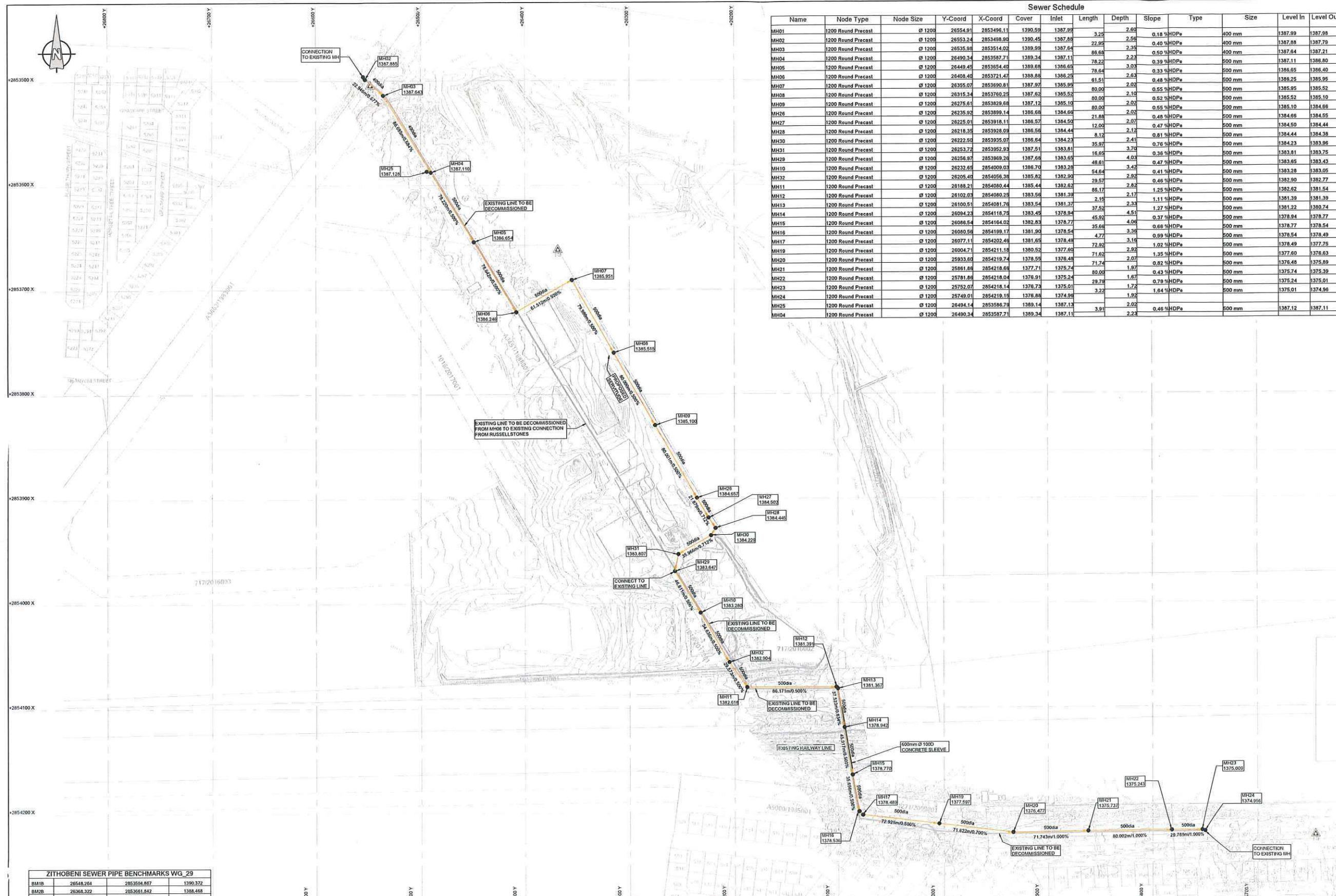
GENERAL

1. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
2. ALL DIMENSIONS ARE IN MILLIMETERS, (UNLESS OTHERWISE SPECIFIED).
3. DO NOT SCALE FROM THESE DRAWINGS.
4. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
5. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COT DETAIL DRAWINGS.
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD DRAWINGS, (IF APPLICABLE).
7. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
8. THE SIGNATURE OR INITIALS ON THIS DRAWING, OF ANY DIRECTOR OF THE WATER AND SANITATION DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
9. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
10. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
11. MAINTAIN AND PROTECT EXISTING LINE DURING EXECUTION OF WORKS AT ALL TIMES.



CITY OF TSHWANE
WATER AND SANITATION
DEPARTMENT

AMENDMENTS					WATER AND SANITATION					CONSULTANT DETAIL					DESIGNED					PROJECT STATUS					LOCATION OF PROJECT:				
NR	DATE	APPROVED	DESCRIPTION	PAR	DIRECTOR: WATER AND SANITATION - PLANNING					aseda					NAME: Pr Eng. Prof Reg No:					CONTRACT No:					ZITHOBENI HEIGHTS				
TO		OS	ISSUED FOR TENDER	T.M	NAME	Prof. Reg. No.	SIGNATURE	DATE		NAME	Prof. Reg. No.	SIGNATURE	DATE		PROJECT No.					PROJECT ENGINEER OF COT:					DESCRIPTION OF PROJECT:				
					REGIONAL DIRECTOR: (1,2,3,4,5,6 or 7)					TEL 011 312 2070					SHEET No.					NAME: Pr Eng. Prof Reg No:					UPGRADING OF SEWER PIPE LINE IN				
					DIRECTOR: SYSTEM DEVELOPMENT					FAX 011 312 2069					PAPER SIZE:					SIGNATURE: DATE:					ZITHOBENI EXT 8 & 9				
					DIRECTOR: BULK WATER					E-mail: admin@aseda.co.za					A0					INSPECTOR OF WORKS OF COT:					LOCALITY PLAN				
					DIRECTOR: INFRASTRUCTURE PROVISION					BUILDING No. 7					SCALE:					NAME: Pr Eng. Prof Reg No:					N.T.S				
					DIRECTOR: WASTE WATER TREATMENT					168 ROAD					1:1250					SIGNATURE: DATE:					WBS No.:				
										MIDRAND 1685					DATE:					NAME: Pr Eng. Prof Reg No:					COT DRAWING NUMBER:				
															DESIGN OFFICE APPROVAL					SIGNATURE: DATE:					GP20013-CIV-SWR-000				
															NAME: Pr Eng. Prof Reg No:					SIGNATURE: DATE:									
															CONSULTANT DRAWING NUMBER:														



Sewer Schedule													
Name	Node Type	Node Size	Y-Coord	X-Coord	Cover	Inlet	Length	Depth	Slope	Type	Size	Level In	Level Out
MH01	1200 Round Precast	Ø 1200	26554.91	2853496.11	1390.59	1387.89	3.25	2.60	0.18 %HDPe		400 mm	1387.99	1387.88
MH02	1200 Round Precast	Ø 1200	26553.24	2853498.90	1390.45	1387.88	22.95	2.56	0.40 %HDPe		400 mm	1387.88	1387.79
MH03	1200 Round Precast	Ø 1200	26535.98	2853514.02	1389.99	1387.84	86.68	2.35	0.50 %HDPe		400 mm	1387.84	1387.21
MH04	1200 Round Precast	Ø 1200	26490.34	2853597.71	1389.34	1387.11	78.22	2.23	0.39 %HDPe		500 mm	1387.11	1386.80
MH05	1200 Round Precast	Ø 1200	26449.48	2853654.40	1389.68	1386.63	78.64	3.03	0.33 %HDPe		500 mm	1386.63	1386.40
MH06	1200 Round Precast	Ø 1200	26408.40	2853721.47	1388.86	1386.25	61.51	2.63	0.48 %HDPe		500 mm	1386.25	1385.95
MH07	1200 Round Precast	Ø 1200	26395.07	2853690.81	1387.97	1385.92	80.00	2.02	0.55 %HDPe		500 mm	1385.92	1385.52
MH08	1200 Round Precast	Ø 1200	26315.34	2853760.25	1387.62	1385.52	80.00	2.10	0.52 %HDPe		500 mm	1385.52	1385.10
MH09	1200 Round Precast	Ø 1200	26275.61	2853829.68	1387.12	1385.10	80.00	2.02	0.55 %HDPe		500 mm	1385.10	1384.66
MH26	1200 Round Precast	Ø 1200	26235.92	2853899.14	1386.68	1384.64	80.00	2.02	0.55 %HDPe		500 mm	1384.66	1384.55
MH27	1200 Round Precast	Ø 1200	26225.01	2853918.11	1386.57	1384.50	21.88	2.07	0.48 %HDPe		500 mm	1384.50	1384.44
MH28	1200 Round Precast	Ø 1200	26218.35	2853928.09	1386.56	1384.44	12.00	2.12	0.47 %HDPe		500 mm	1384.44	1384.38
MH30	1200 Round Precast	Ø 1200	26222.50	2853935.07	1386.64	1384.23	8.12	2.41	0.81 %HDPe		500 mm	1384.23	1383.96
MH31	1200 Round Precast	Ø 1200	26253.72	2853952.93	1387.51	1383.81	35.97	3.70	0.76 %HDPe		500 mm	1383.81	1383.75
MH29	1200 Round Precast	Ø 1200	26256.97	2853969.20	1387.68	1383.65	16.65	4.03	0.36 %HDPe		500 mm	1383.65	1383.43
MH10	1200 Round Precast	Ø 1200	26232.65	2854009.03	1386.70	1383.38	46.61	3.42	0.41 %HDPe		500 mm	1383.38	1383.05
MH32	1200 Round Precast	Ø 1200	26205.40	2854056.36	1385.82	1382.90	29.57	2.82	0.46 %HDPe		500 mm	1382.90	1382.77
MH11	1200 Round Precast	Ø 1200	26188.21	2854080.44	1385.44	1382.62	86.17	2.62	1.25 %HDPe		500 mm	1382.62	1381.54
MH12	1200 Round Precast	Ø 1200	26102.03	2854080.29	1383.56	1381.39	2.15	2.33	1.11 %HDPe		500 mm	1381.39	1381.39
MH13	1200 Round Precast	Ø 1200	26100.51	2854081.76	1383.54	1381.37	37.52	2.33	1.27 %HDPe		500 mm	1381.22	1380.74
MH14	1200 Round Precast	Ø 1200	26094.23	2854118.75	1383.45	1378.84	45.92	4.51	0.37 %HDPe		500 mm	1378.84	1378.77
MH15	1200 Round Precast	Ø 1200	26086.54	2854164.02	1382.83	1378.77	35.68	4.06	0.66 %HDPe		500 mm	1378.77	1378.54
MH16	1200 Round Precast	Ø 1200	26080.58	2854199.17	1381.90	1378.54	4.77	3.36	0.99 %HDPe		500 mm	1378.54	1378.49
MH17	1200 Round Precast	Ø 1200	26077.11	2854202.46	1381.65	1378.49	72.92	3.16	1.02 %HDPe		500 mm	1378.49	1377.75
MH19	1200 Round Precast	Ø 1200	26004.71	2854211.18	1380.52	1377.60	71.62	2.92	1.35 %HDPe		500 mm	1377.60	1377.63
MH20	1200 Round Precast	Ø 1200	25993.60	2854219.74	1378.55	1376.48	71.74	2.07	0.82 %HDPe		500 mm	1376.48	1375.89
MH21	1200 Round Precast	Ø 1200	25861.88	2854218.64	1377.71	1375.74	80.00	1.87	0.43 %HDPe		500 mm	1375.74	1375.39
MH22	1200 Round Precast	Ø 1200	25781.86	2854218.04	1376.91	1375.24	29.78	1.72	0.79 %HDPe		500 mm	1375.24	1375.01
MH23	1200 Round Precast	Ø 1200	25752.07	2854218.14	1376.73	1375.01	3.22	1.92	1.84 %HDPe		500 mm	1375.01	1374.96
MH24	1200 Round Precast	Ø 1200	25749.01	2854219.19	1376.88	1374.96							
MH25	1200 Round Precast	Ø 1200	26494.14	2853586.78	1389.14	1387.13	2.02				500 mm	1387.12	1387.11
MH04	1200 Round Precast	Ø 1200	26490.34	2853587.71	1389.34	1387.11	3.91	2.23	0.46 %HDPe		500 mm	1387.12	1387.11

NOTES AND SPECIFICATIONS

GENERAL

- ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
- ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED.
- DO NOT SCALE FROM THESE DRAWINGS.
- ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
- ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COT DETAIL DRAWINGS. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
- THE SIGNATURE OR INITIALS ON THIS DRAWING, OF ANY DIRECTOR OF THE WATER AND SANITATION DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
- THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
- FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.
- MAINTAIN AND PROTECT EXISTING LINE DURING EXECUTION OF WORKS AT ALL TIMES.

LEGEND

PROPOSED SEWER PIPE NETWORK

EXISTING SEWER TO BE ABANDONED

EXISTING SEWER

FLOW DIRECTION

MANHOLE

BENCHMARK

SERVITUDE

FENCE

PIPE JACKING SLEEVE

SCALE BAR 1:1250

AMENDMENTS		WATER AND SANITATION		CONSULTANT DETAIL		DESIGNED		CONTRACT		PROJECT STATUS		LOCATION OF PROJECT:	
NR	DATE	APPROVED	DESCRIPTION	PAR	DIRECTOR: WATER AND SANITATION - PLANNING	NAME	Pr Eng. Prof Reg No:	PROJECT No.	PROJECT No.	SHEET No.	PAPER SIZE:	ZITHOBENI HEIGHTS	
T.O.		OS	ISSUED FOR TENDER	T.M	REGIONAL DIRECTOR: (1,2,3,4,5,6 or 7)	SIGNATURE:	DATE:				A0	DESCRIPTION OF PROJECT:	
					DIRECTOR: SYSTEM DEVELOPMENT							UPGRADING OF SEWER PIPE LINE IN ZITHOBENI EXT 8 & 9	
					DIRECTOR: BULK WATER							PROPOSED SEWER LAYOUT PLAN SCALE 1:1250	
					DIRECTOR: INFRASTRUCTURE PROVISION							WBS No. :	
					DIRECTOR: WASTE WATER TREATMENT							COT DRAWING NUMBER: GP20013-CIV-SWR-001	

ZITHOBENI SEWER PIPE BENCHMARKS WG_29			
BM1B	26548.264	2853694.607	1390.372
BM2B	26368.392	2853691.542	1388.468
BM3B	26443.595	2854222.720	1378.091

CITY OF TSHWANE
WATER AND SANITATION
DEPARTMENT

aseda
BEYOND INFRASTRUCTURE

TEL 011 312 4070
FAX 011 312 2688
E-mail: aseda@aseda.co.za

BUILDING No. 7
548 COVENTRIA PARK
1694 ROAD
MIDRAND 1685

Prof Reg Nr
HEREBY CERTIFY THAT THE SERVICES WILL HAVE BEEN INSTALLED
ACCORDING TO NOTE 9 OF THE ABOVE NOTES AND TO THE
DRAWING

SIGNATURE: _____ DATE: _____

CONSULTANT DRAWING NUMBER: _____

NAME: _____ Pr Eng. Prof Reg No: _____
SIGNATURE: _____ DATE: _____

NAME: T.MADOKWE Pr Eng. Prof Reg No: _____
SIGNATURE: _____ DATE: _____

NAME: _____ Pr Eng. Prof Reg No: _____
SIGNATURE: _____ DATE: _____

NAME: _____ Pr Eng. Prof Reg No: _____
SIGNATURE: _____ DATE: _____

NAME: _____ Pr Eng. Prof Reg No: _____
SIGNATURE: _____ DATE: _____

NAME: _____ Pr Eng. Prof Reg No: _____
SIGNATURE: _____ DATE: _____

CONTRACT No: _____

PROJECT No: _____

SHEET No: _____

PAPER SIZE: A0

SCALE: 1:1250

DATE: _____

PROJECT STATUS

CONCEPT DRAWING

DESIGNER DRAWING

APPROVED CONSTRUCTION DRAWING

AS BUILT DRAWING

PROJECT ENGINEER OF COT: _____

SIGNATURE: _____ Pr Eng. Prof Reg No: _____

DATE: _____

INSPECTOR OF WORKS OF COT: _____

SIGNATURE: _____ Pr Eng. Prof Reg No: _____

DATE: _____

LOCATION OF PROJECT: ZITHOBENI HEIGHTS

DESCRIPTION OF PROJECT: UPGRADING OF SEWER PIPE LINE IN ZITHOBENI EXT 8 & 9

PROPOSED SEWER LAYOUT PLAN SCALE 1:1250

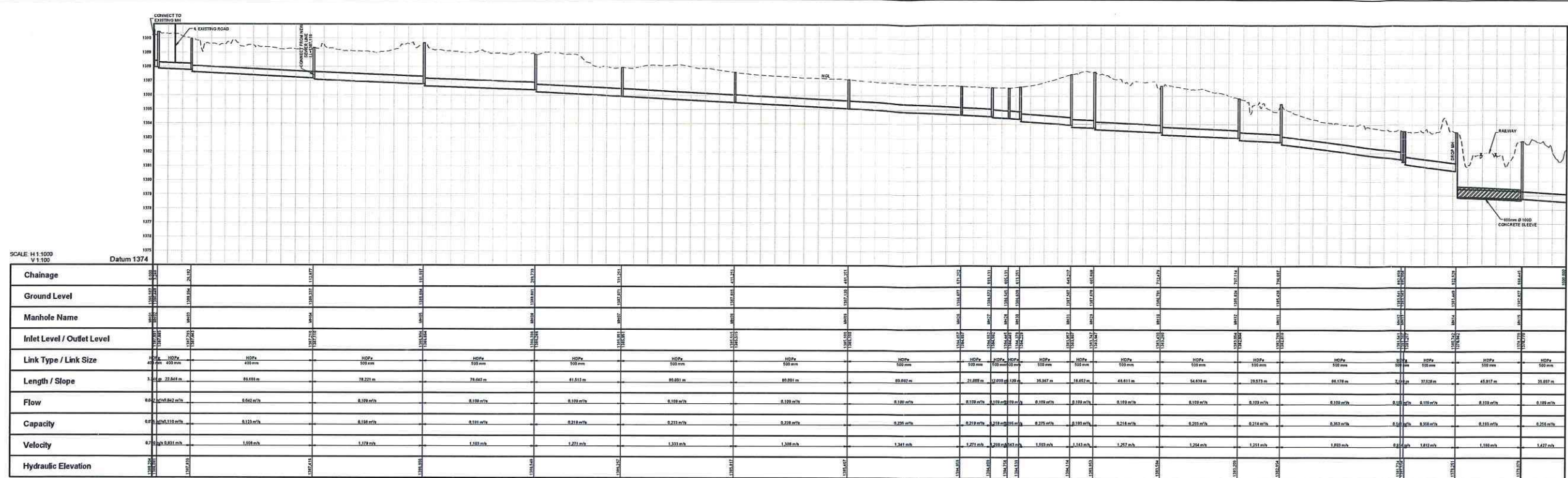
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COT DRAWING NUMBER: GP20013-CIV-SWR-001

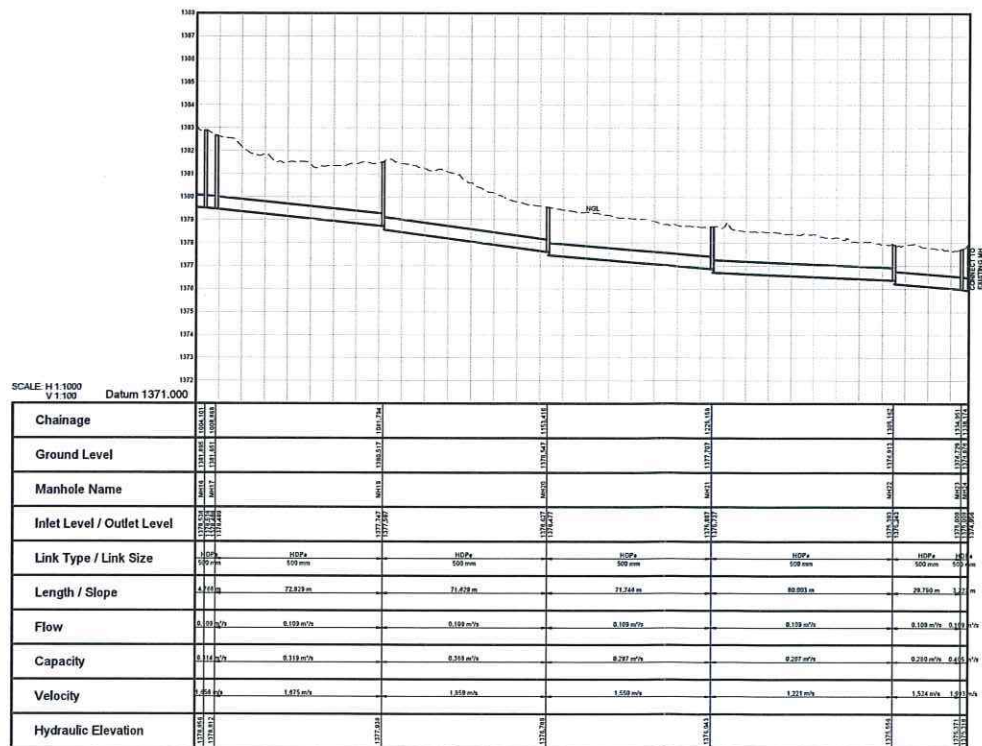
NOTES AND SPECIFICATIONS

GENERAL

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2. ALL DIMENSIONS ARE IN MILLIMETERS. (UNLESS OTHERWISE SPECIFIED).
3. DO NOT SCALE FROM THESE DRAWINGS.
4. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
5. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COT DETAIL DRAWINGS.
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD DRAWINGS, (IF APPLICABLE).
7. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
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10. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

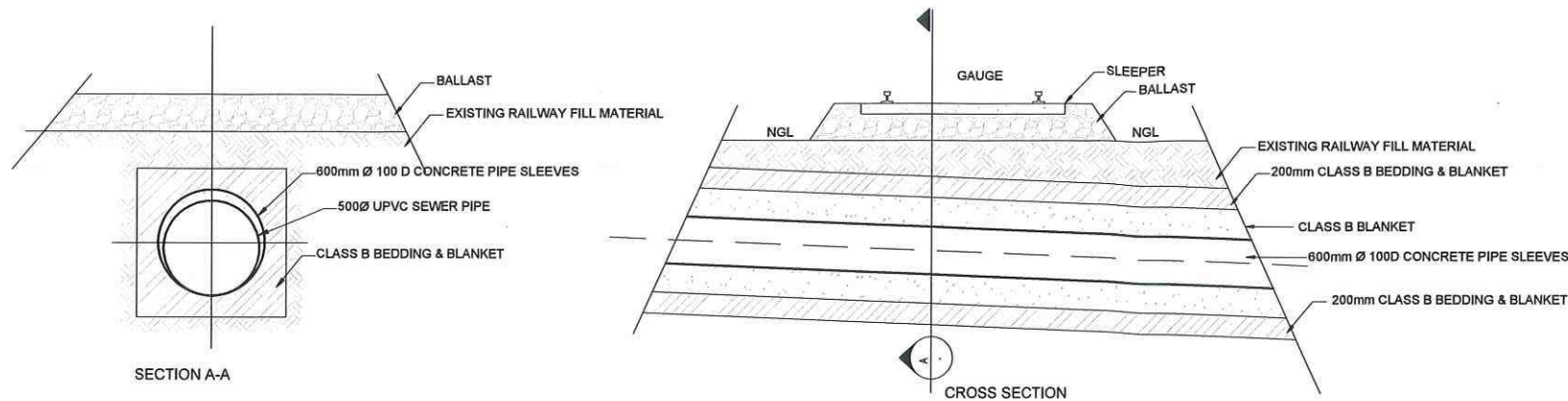


Manhole MH01 to MH15

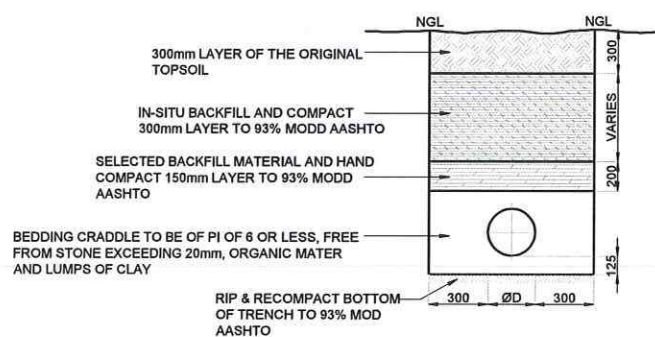


Manhole MH16 to MH24

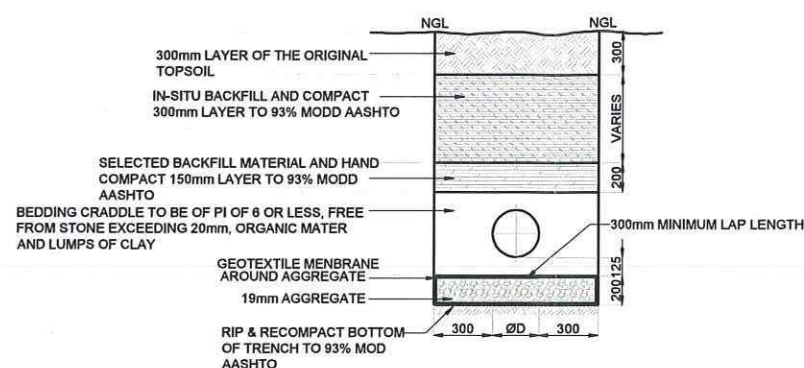
 <p>CITY OF TSHWANE WATER AND SANITATION DEPARTMENT</p>	AMENDMENTS				WATER AND SANITATION FOR APPROVAL - PROJECT MANAGER'S SIGNATURE				CONSULTANT DETAIL				DESIGNED NAME: _____ Pr Eng. Prof Reg No: _____ SIGNATURE: _____ DATE: _____				CONTRACT No: _____				PROJECT STATUS <input type="radio"/> CONCEPT DRAWING <input checked="" type="radio"/> TENDER DRAWING <input type="radio"/> APPROVED CONSTRUCTION DRAWING <input type="radio"/> AS BUILT DRAWING				LOCATION OF PROJECT: ZITHOBENI HEIGHTS			
	REGIONAL DIRECTOR: (1,2,3,4,5,6 or 7) NAME: _____ Prof. Reg. No: _____ SIGNATURE: _____ DATE: _____				DIRECTOR: SYSTEM DEVELOPMENT NAME: _____ Prof. Reg. No: _____ SIGNATURE: _____ DATE: _____				aseda BEYOND INFRASTRUCTURE TEL (011) 312 4070 FAX (011) 312 3688 E-mail: info@aseda.co.za				DRAWN NAME: T.MADOKWE Pr Eng. Prof Reg No: _____ SIGNATURE: _____ DATE: _____				PROJECT No. _____				DESCRIPTION OF PROJECT: UPGRADING OF SEWER PIPE LINE IN ZITHOBENI EXT 8 & 9							
	DIRECTOR: BULK WATER NAME: _____ Prof. Reg. No: _____ SIGNATURE: _____ DATE: _____				DIRECTOR: INFRASTRUCTURE PROVISION NAME: _____ Prof. Reg. No: _____ SIGNATURE: _____ DATE: _____				CHECKED NAME: _____ Pr Eng. Prof Reg No: _____ SIGNATURE: _____ DATE: _____				SHEET No. _____				PROJECT ENGINEER of COT: NAME: _____ Pr Eng. Prof Reg No: _____ SIGNATURE: _____ DATE: _____				WBS No.: _____							
	DIRECTOR: WASTE WATER TREATMENT NAME: _____ Prof. Reg. No: _____ SIGNATURE: _____ DATE: _____				CONSULTANT DRAWING NUMBER _____				INFORMATION OFFICE CHECKED NAME: _____ Pr Eng. Prof Reg No: _____ SIGNATURE: _____ DATE: _____				PAPER SIZE: A0				INSPECTOR OF WORKS of COT: NAME: _____ Pr Eng. Prof Reg No: _____ SIGNATURE: _____ DATE: _____				COT DRAWING NUMBER: GP20013-CIV-SWR-100							



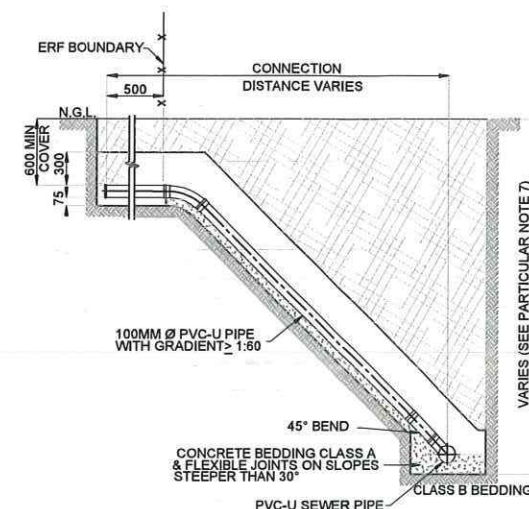
PIPE JACKING SLEEVE
SCALE 1:25



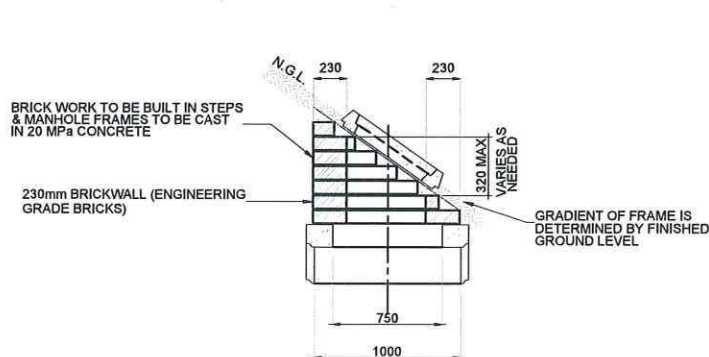
TYPICAL CLASS B BEDDING FOR FLEXIBLE PIPE
SCALE 1:25



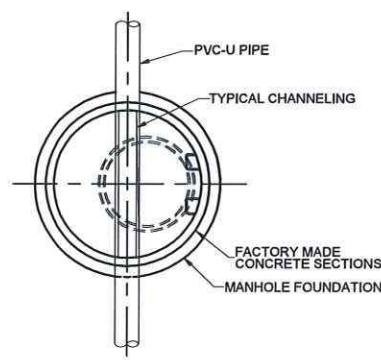
TYPICAL CLASS B BEDDING DETAIL FOR WETLAND AREAS
SCALE 1:25



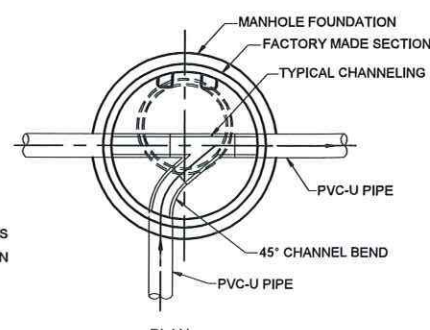
HOUSE CONNECTION TYPE C
SCALE 1:25



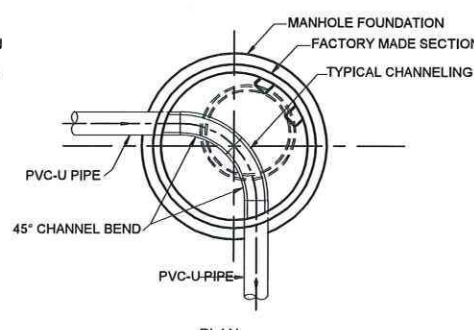
SECTION B-B
SCALE 1:25
BUILT IN MANHOLE FRAME AT FINISHED SLOPED SIDEWALKS WITH WRITTEN PERMISSION FROM THE ENGINEER ONLY



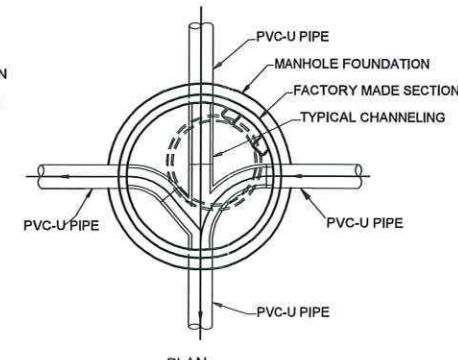
PLAN
SCALE 1:25
TYPICAL EXAMPLE OF THROUGH CONNECTION IN MANHOLE



PLAN
SCALE 1:25



PLAN
SCALE 1:25



PLAN
SCALE 1:25
TYPICAL EXAMPLE OF SIDE CONNECTIONS IN MANHOLE

MANHOLE BENCHING DETAILS

NOTES AND SPECIFICATIONS

GENERAL

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10. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

NOTES

1. SELECTED BACKFILL CLASS I: IMPLIES APPROVED SELECTED MATERIAL FROM TRENCH EXCAVATION, FREE FROM STONES AND WITH AN OPTIMUM MOISTURE CONTENT.
2. SELECTED BACKFILL CLASS II: IMPLIES SELECTED BACKFILL FROM TRENCH EXCAVATION, WHICH SHALL NOT CONTAIN ANY STONES LARGER THAN 150mm Ø.
3. CLASS B BEDDING CRADLE SHALL CONSIST OF AN APPROVED SELECTED GRAVEL MATERIAL WITH A PI NOT EXCEEDING 6, FREE FROM STONES EXCEEDING 20mm, ORGANIC MATTER & LUMPS OF CLAY.
4. CLASS A BEDDING / ENCASED CONCRETE BETWEEN JOINTS SHALL BE POURED IN ONE CONTINUOUS OPERATION USING CLASS 20/19 MPa CONCRETE.
5. FLEXIBLE JOINTS MUST BE PROVIDED AT EACH PIPE JOINT IN A CLASS A CONCRETE BEDDING / ENCASED, WITH A 12mm THK SOFTBOARD PLACED VERTICALLY FOR THE ENTIRE CONCRETE AREA. PIPE JOINTS MUST BE SEALED WITH WET CLAY TO PREVENT SLUSH FROM PENETRATING THE JOINT.
6. EXCEPT FOR THE 300mm BACKFILL ON THE TOP OF THE PIPE, THE BALANCE OF THE TRENCH MAY BE BACKFILLED WHEN THE CLASS A BEDDING / ENCASED HAS OBTAINED THE COMPRESSIVE STRENGTH OF 15 MPa.



CITY OF TSHWANE
WATER AND SANITATION
DEPARTMENT

AMENDMENTS				
NR	DATE	APPROVED	DESCRIPTION	PAR
TO		OS	ISSUED FOR TENDER	TM

WATER AND SANITATION				
FOR INTERNAL APPROVAL - RECEIVED SIGN WHEN APPLICABLE				
DIRECTOR: WATER AND SANITATION - PLANNING				
NAME	Prof. Reg. No.	SIGNATURE	DATE	
REGIONAL DIRECTOR: (1,2,3,4,5,6 or 7)				
NAME	Prof. Reg. No.	SIGNATURE	DATE	
DIRECTOR: SYSTEM DEVELOPMENT				
NAME	Prof. Reg. No.	SIGNATURE	DATE	
DIRECTOR: BULK WATER				
NAME	Prof. Reg. No.	SIGNATURE	DATE	
DIRECTOR: INFRASTRUCTURE PROVISION				
NAME	Prof. Reg. No.	SIGNATURE	DATE	
DIRECTOR: WASTE WATER TREATMENT				
NAME	Prof. Reg. No.	SIGNATURE	DATE	

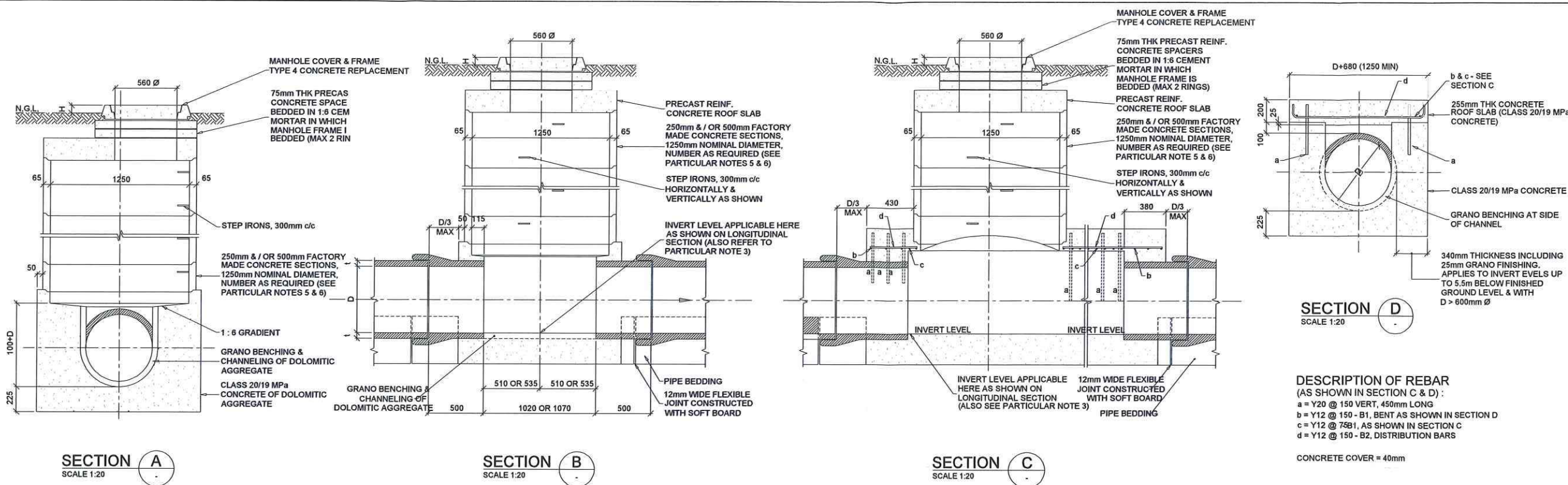
CONSULTANT DETAIL	
BUILDING 7B/7 540 CONSTITUTION PARK 1601 MIDRAND 1655 TEL: 011 312 4010 FAX: 011 312 7889 E-mail: admin@aseda.co.za	
HEREBY CERTIFY THAT THE SERVICES WILL HAVE BEEN INSTALLED ACCORDING TO NOTE 9 OF THE ABOVE NOTES AND TO THE DRAWING.	
SIGNATURE	DATE
CONSULTANT DRAWING NUMBER:	

DESIGNED	
NAME:	Pr Eng. Prof Reg No.:
SIGNATURE:	DATE:
DRAWN	
NAME: T.MADOKWE	Prof Reg No.:
SIGNATURE:	DATE:
CHECKED	
NAME:	Pr Eng. Prof Reg No.:
SIGNATURE:	DATE:
INFORMATION OFFICE CHECKED	
NAME:	Pr Eng. Prof Reg No.:
SIGNATURE:	DATE:
DESIGN OFFICE APPROVAL	
NAME:	Pr Eng. Prof Reg No.:
SIGNATURE:	DATE:

CONTRACT	
No.:	
PROJECT	
No.:	
SHEET	
No.:	
PAPER SIZE	
A1	
SCALE	
DATE	

PROJECT STATUS			
RECEIVED SIGN WHEN APPLICABLE			
<input type="radio"/> CONCEPT DRAWING	<input checked="" type="radio"/> TENDER DRAWING	<input type="radio"/> APPROVED CONSTRUCTION DRAWING	<input type="radio"/> AS BUILT DRAWING
PROJECT ENGINEER OF COT:			
NAME:	Pr Eng.	Prof Reg No.:	
SIGNATURE:		DATE:	
INSPECTOR OF WORKS OF COT:			
NAME:		Prof Reg No.:	
SIGNATURE:		DATE:	

LOCATION OF PROJECT:	
ZITHOBENI HEIGHTS	
DESCRIPTION OF PROJECT:	
UPGRADING OF SEWER PIPE LINE IN ZITHOBENI EXT 8 & 9	
SEWER DETAILS(MANHOLE,BEDDING,HOUSE CONNECTION,PIPE JACKING SLEEVE)	
WB No.:	
COT DRAWING NUMBER: GP20013-CIV-SWR 300	



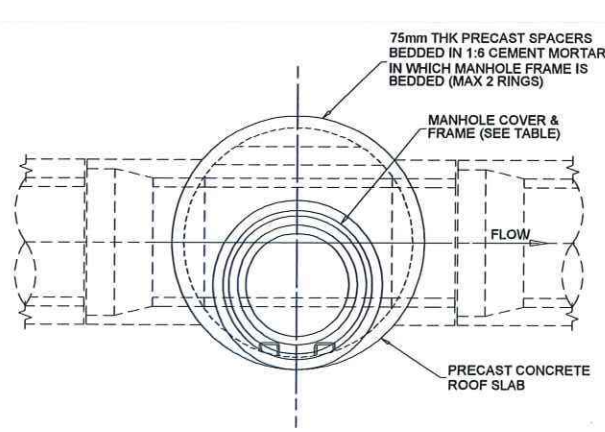
NOTES AND SPECIFICATIONS

GENERAL

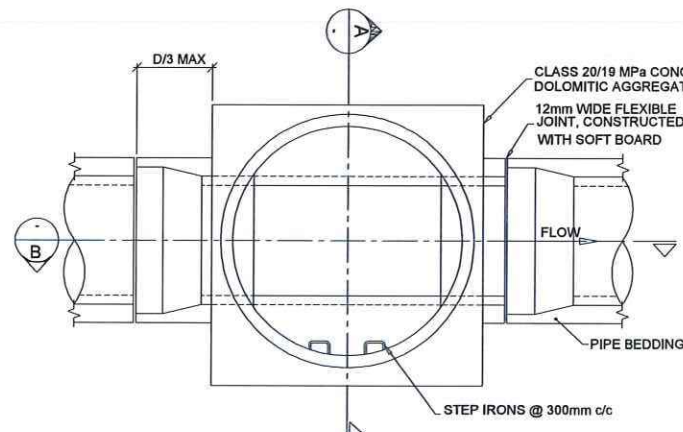
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5. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COT DETAIL DRAWINGS.
6. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD DRAWINGS, IF APPLICABLE.
7. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
8. THE SIGNATURE OR INITIALS ON THIS DRAWING, OF ANY DIRECTOR OF THE WATER AND SANITATION DEPARTMENT, IN NO WAY REMOVES ANY RESPONSIBILITY WHATSOEVER FROM THE CONSULTANT.
9. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
10. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

NOTES

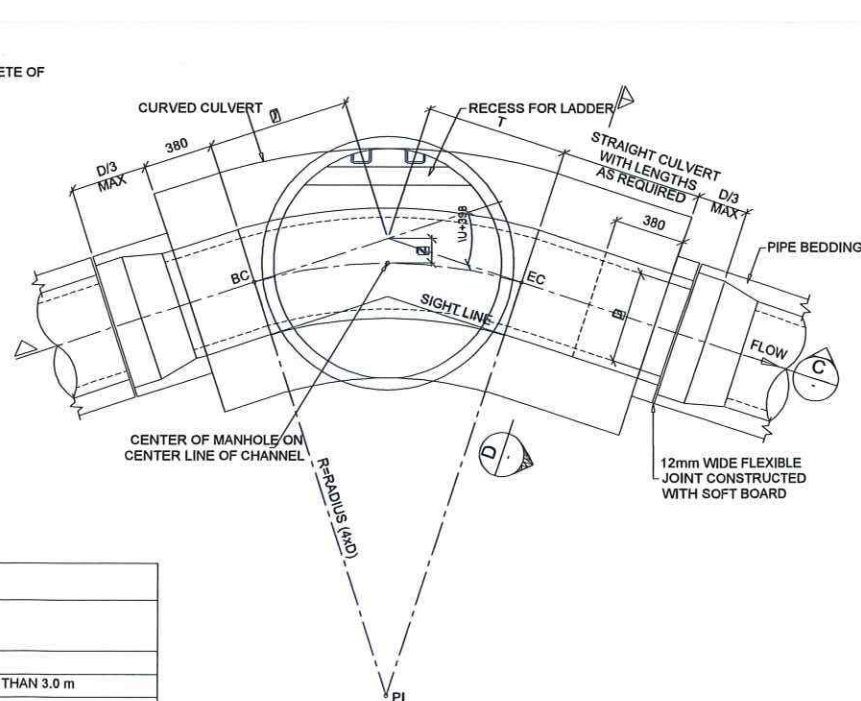
1. SELECTED BACKFILL CLASS I: IMPLIES APPROVED SELECTED MATERIAL FROM TRENCH EXCAVATION, FREE FROM STONES AND WITH AN OPTIMUM MOISTURE CONTENT
2. SELECTED BACKFILL CLASS II: IMPLIES SELECTED BACKFILL FROM TRENCH EXCAVATION, WHICH SHALL NOT CONTAIN ANY STONES LARGER THAN 150mm Ø
3. CLASS B BEDDING CRADLE SHALL CONSIST OF AN APPROVED SELECTED GRAVEL MATERIAL WITH A PI NOT EXCEEDING 6, FREE FROM STONES EXCEEDING 20mm, ORGANIC MATTER & LUMPS OF CLAY
4. CLASS A BEDDING / ENCASEMENT CONCRETE BETWEEN JOINTS SHALL BE POURED IN ONE CONTINUOUS OPERATION USING CLASS 20/19 MPa CONCRETE
5. FLEXIBLE JOINTS MUST BE PROVIDED AT EACH PIPE JOINT IN A CLASS A CONCRETE BEDDING / ENCASEMENT, WITH A 12mm THK SOFTBOARD PLACED VERTICALLY FOR THE ENTIRE CONCRETE AREA. PIPE JOINTS MUST BE SEALED WITH WET CLAY TO PREVENT SLUSH FROM PENETRATING THE JOINT
6. EXCEPT FOR THE 300mm BACKFILL ON THE TOP OF THE PIPE, THE BALANCE OF THE TRENCH MAY BE BACKFILLED WHEN THE CLASS A BEDDING / ENCASEMENT HAS OBTAINED THE COMPRESSIVE STRENGTH OF 15 MPa



PLAN - MANHOLE COVER & FRAME
SCALE 1:20



PLAN - ROOF SLAB REMOVED
SCALE 1:20



TYPICAL SETTING-OUT DETAIL
ROOF SLAB REMOVED
SCALE 1:20

MANHOLE CHAMBER SIZES	
NOMINAL Ø (mm)	USAGE
1250	STRAIGHT THROUGH MANHOLES
1500	LARGER PIPES, BENDS IN MANHOLES & MANHOLES DEEPER THAN 3.0 m
NOTE : MANHOLE CHAMBER SIZES TO BE APPROVED BY THE EXECUTIVE DIRECTOR : WATER AND SANITATION	



CITY OF TSHWANE
WATER AND SANITATION
DEPARTMENT

AMENDMENTS			
NR	DATE	APPROVED	DESCRIPTION
TO	OS		ISSUED FOR TENDER

WATER AND SANITATION			
FOR INTERNAL APPROVAL - RECEIVED SIGN WHEN APPLICABLE			
DIRECTOR: WATER AND SANITATION - PLANNING	NAME	Prof. Reg. No.	SIGNATURE DATE
REGIONAL DIRECTOR: (1,2,3,4,5,6 or 7)	NAME	Prof. Reg. No.	SIGNATURE DATE
DIRECTOR: SYSTEM DEVELOPMENT	NAME	Prof. Reg. No.	SIGNATURE DATE
DIRECTOR: BULK WATER	NAME	Prof. Reg. No.	SIGNATURE DATE
DIRECTOR: INFRASTRUCTURE PROVISION	NAME	Prof. Reg. No.	SIGNATURE DATE
DIRECTOR: WASTE WATER TREATMENT	NAME	Prof. Reg. No.	SIGNATURE DATE
	NAME	Prof. Reg. No.	SIGNATURE DATE

CONSULTANT DETAIL	
BUILDING No 7 545 CONSTITUTION PARK 1601 ROAD MIDRAND 1685 TEL: 011 312 4070 FAX: 011 312 2669 E-mail: admin@aseda.co.za	
I HEREBY CERTIFY THAT THE SERVICES WILL HAVE BEEN INSTALLED ACCORDING TO NOTE 9 OF THE ABOVE NOTES AND TO THE DRAWING	
SIGNATURE	DATE
CONSULTANT DRAWING NUMBER:	

DESIGNED	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:
DRAWN	
NAME:	Prof Reg No:
SIGNATURE:	DATE:
CHECKED	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:
INFORMATION OFFICE CHECKED	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:
DESIGN OFFICE APPROVAL	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:

CONTRACT	
No:	
PROJECT	
No:	
SHEET	
No:	
PAPER SIZE	
A1	
SCALE	
DATE	

PROJECT STATUS	
RECEIVED SIGN WHEN APPLICABLE	
CONCEPT DRAWING	TENDER DRAWING
APPROVED DRAWING	AS BUILT DRAWING
PROJECT ENGINEER OF COT:	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:
INSPECTOR OF WORKS OF COT:	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:

LOCATION OF PROJECT:	
ZITHOBENI HEIGHTS	
DESCRIPTION OF PROJECT:	
UPGRADING OF SEWER PIPE LINE IN ZITHOBENI EXT 8 & 9	
SEWER DETAILS(MANHOLE COVER & FRAME, ROOF SLAB)	
WBS No.:	
COT DRAWING NUMBER:	
GP20013-CIV-SWR 301	

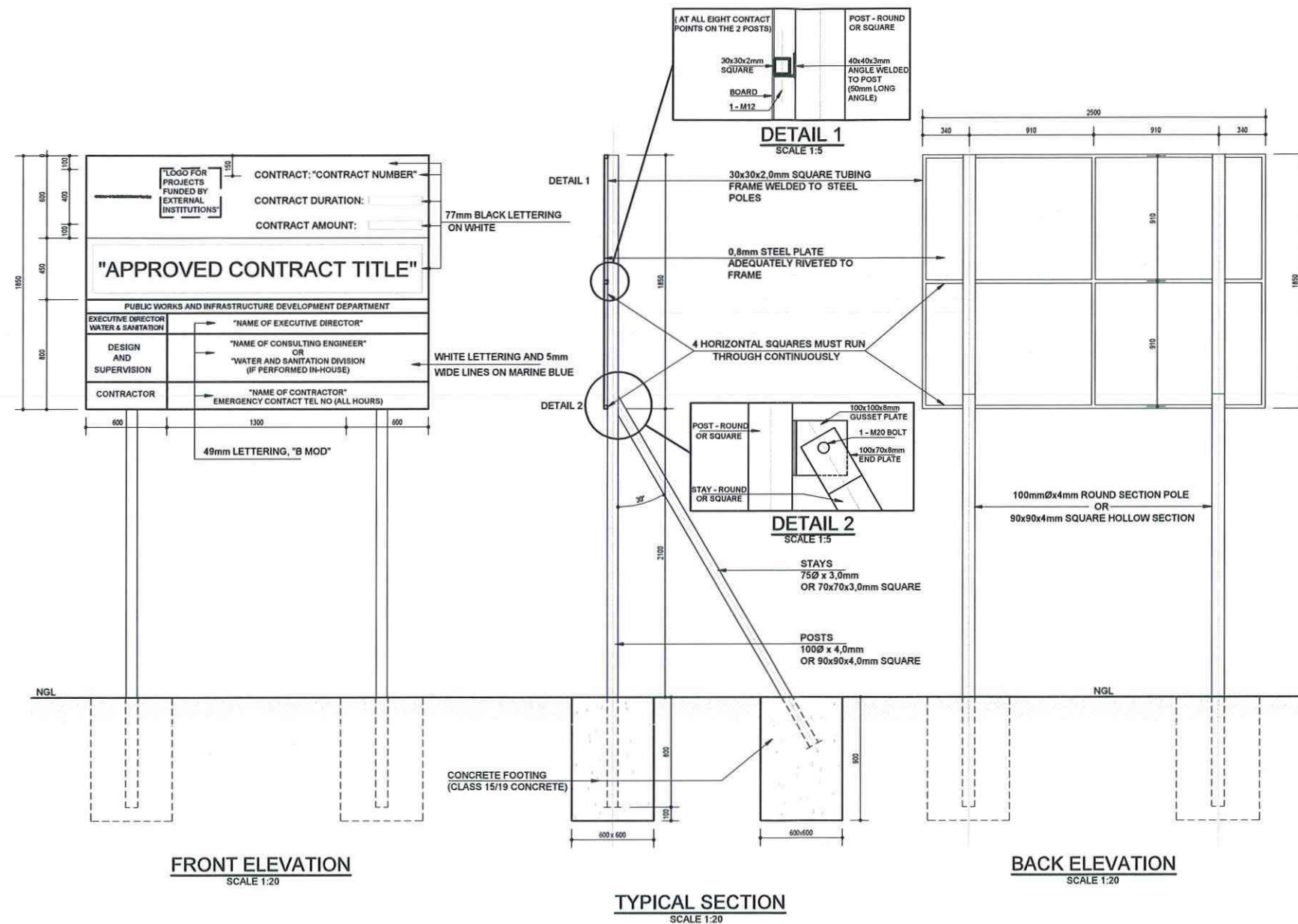
NOTES AND SPECIFICATIONS

GENERAL

1. ALL MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE REQUIREMENTS OF THE LATEST RELEVANT SABS REQUIREMENTS.
2. ALL DIMENSIONS ARE IN MILLIMETERS. (UNLESS OTHERWISE SPECIFIED).
3. DO NOT SCALE FROM THESE DRAWINGS. ALL DIMENSIONS MUST BE CHECKED AND APPROVED ON SITE.
4. ALL CONSTRUCTION TO BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, THIRD EDITION 2005 AND THE STANDARD COT DETAIL DRAWINGS.
5. THESE DRAWINGS MUST BE READ IN CONJUNCTION WITH THE STANDARD DRAWINGS (IF APPLICABLE).
6. THIS DRAWING MUST BE READ IN CONJUNCTION WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS, SERIES 4.
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8. THE CONSULTANT REMAINS RESPONSIBLE TO ENSURE THAT ALL THE GUIDELINES, STANDARD DRAWINGS, STANDARDS AND SPECIFICATIONS OF WATER AND SANITATION DEPARTMENT HAVE BEEN MET AND ARE COMPLIED WITH.
9. FINAL POSITION OF SERVICES TO BE DETERMINED ON SITE.

NOTES

1. ALL PAINTS TO HAVE GLOSS FINISH AND COMPLY WITH SANS 1519-2.
2. ALL WHITE AREAS AND LETTERING TO BE OFF-WHITE IN COLOUR. OFF-WHITE TO BE MADE UP BY ADDING 0.4 GRAMS BLACK AND 0.4 GRAMS RED PAINT TO ONE LITRE PURE WHITE PAINT.
3. COLOUR OF PAINT TO CONFORM TO BS 2000 No. 4.
4. ALL LETTERING TO BE DONE ACCORDING TO THE PROVISION OF THE LATEST EDITION OF THE SOUTHERN AFRICAN DEVELOPMENT COMMUNITY ROAD TRAFFIC SIGNS MANUAL.
5. ALL LETTERING ARE 48mm DIN 1451 PART 2 STYLE 'B MOD' UNLESS OTHERWISE INDICATED.



CITY OF TSHWANE
WATER AND SANITATION
DEPARTMENT

AMENDMENTS				
NR	DATE	APPROVED	DESCRIPTION	PAR
TO		OS	ISSUED FOR TENDER	TM

WATER AND SANITATION				
FOR INTERNAL APPROVAL - RECEIVED SIGN WHEN APPLICABLE				
DIRECTOR: WATER AND SANITATION - PLANNING	NAME	Prof. Reg. No.	SIGNATURE	DATE
REGIONAL DIRECTOR: (1,2,3,4,5,6 or 7)	NAME	Prof. Reg. No.	SIGNATURE	DATE
DIRECTOR: SYSTEM DEVELOPMENT	NAME	Prof. Reg. No.	SIGNATURE	DATE
DIRECTOR: BULK WATER	NAME	Prof. Reg. No.	SIGNATURE	DATE
DIRECTOR: INFRASTRUCTURE PROVISION	NAME	Prof. Reg. No.	SIGNATURE	DATE
DIRECTOR: WASTE WATER TREATMENT	NAME	Prof. Reg. No.	SIGNATURE	DATE
	NAME	Prof. Reg. No.	SIGNATURE	DATE

CONSULTANT DETAIL	
TEL 011 313 14079 FAX 011 313 2069 E-mail: aseda@aseda.co.za	
BUILDING No. 7 346 CONSTITUTION PARK 10th FLOOR MEYERD 1565	
HEREBY CERTIFY THAT THE SERVICES WILL HAVE BEEN INSTALLED ACCORDING TO NOTE 9 OF THE ABOVE NOTES AND TO THE DRAWING	
SIGNATURE	DATE
CONSULTANT DRAWING NUMBER:	

DESIGNED	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:
DRAWN	
NAME:	Prof Reg No:
SIGNATURE:	DATE:
CHECKED	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:
INFORMATION OFFICE CHECKED	
NAME:	Pr Eng. Prof Reg No:
SIGNATURE:	DATE:
DESIGN OFFICE APPROVAL	
NAME:	Prof Reg No:
SIGNATURE:	DATE:

CONTRACT	
No:	
PROJECT	
No:	
SHEET	
No:	
PAPER SIZE:	
A1	
SCALE:	
DATE:	

PROJECT STATUS			
RECEIVED SIGN WHEN APPLICABLE			
<input type="radio"/> CONCEPT DRAWING	<input checked="" type="radio"/> TENDER DRAWING	<input type="radio"/> APPROVED CONSTRUCTION DRAWING	<input type="radio"/> AS BUILT DRAWING
PROJECT ENGINEER of COT:			
NAME:	Pr Eng.	Prof Reg No:	
SIGNATURE:		DATE:	
INSPECTOR OF WORKS of COT:			
NAME:		Prof Reg No:	
SIGNATURE:		DATE:	

LOCATION OF PROJECT:	
ZITHOBENI HEIGHTS	
DESCRIPTION OF PROJECT:	
UPGRADING OF SEWER PIPE LINE IN ZITHOBENI EXT 8 & 9	
NAMEBOARD DETAILS	
WBS No. :	
COT DRAWING NUMBER: GP20013-CIV-SWR 302	

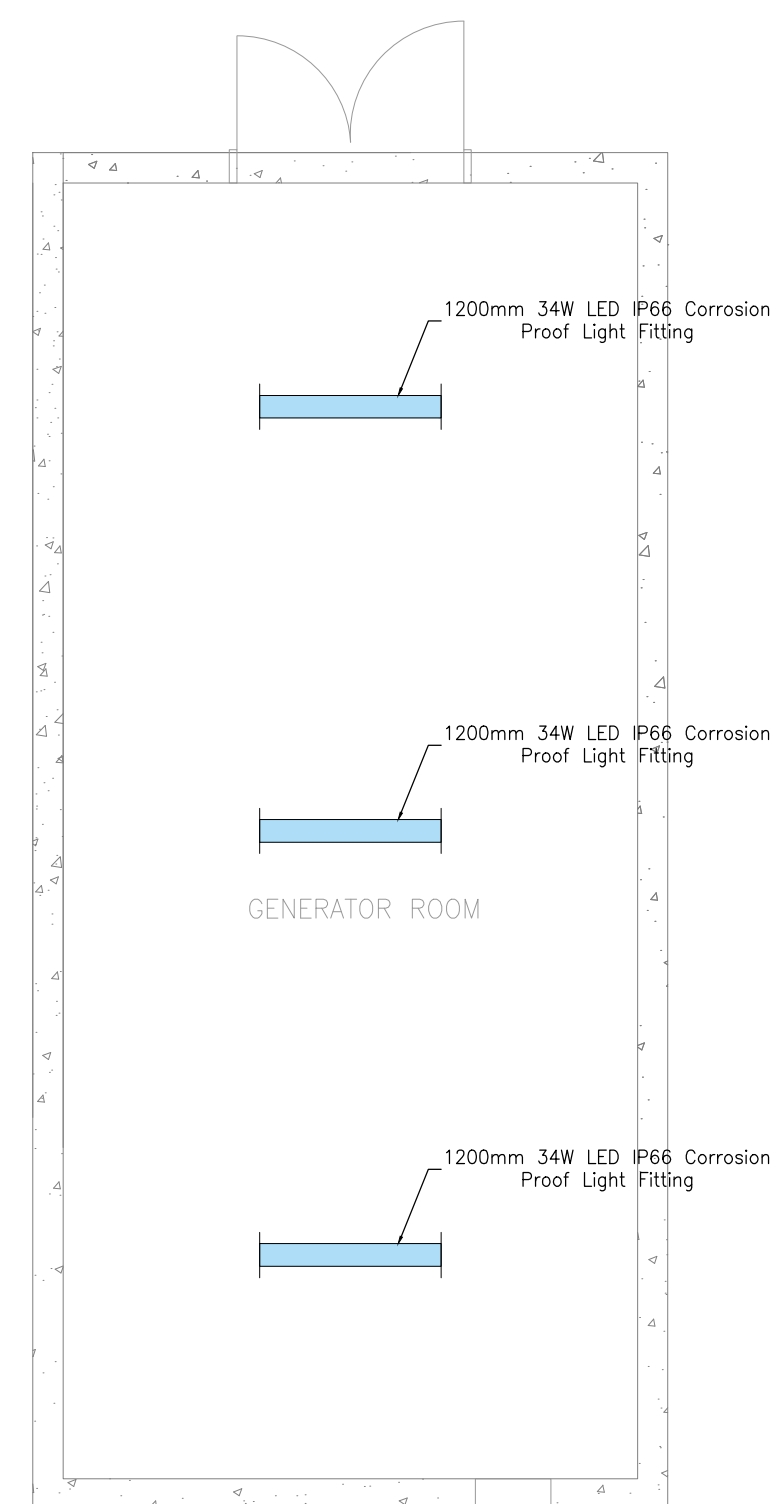
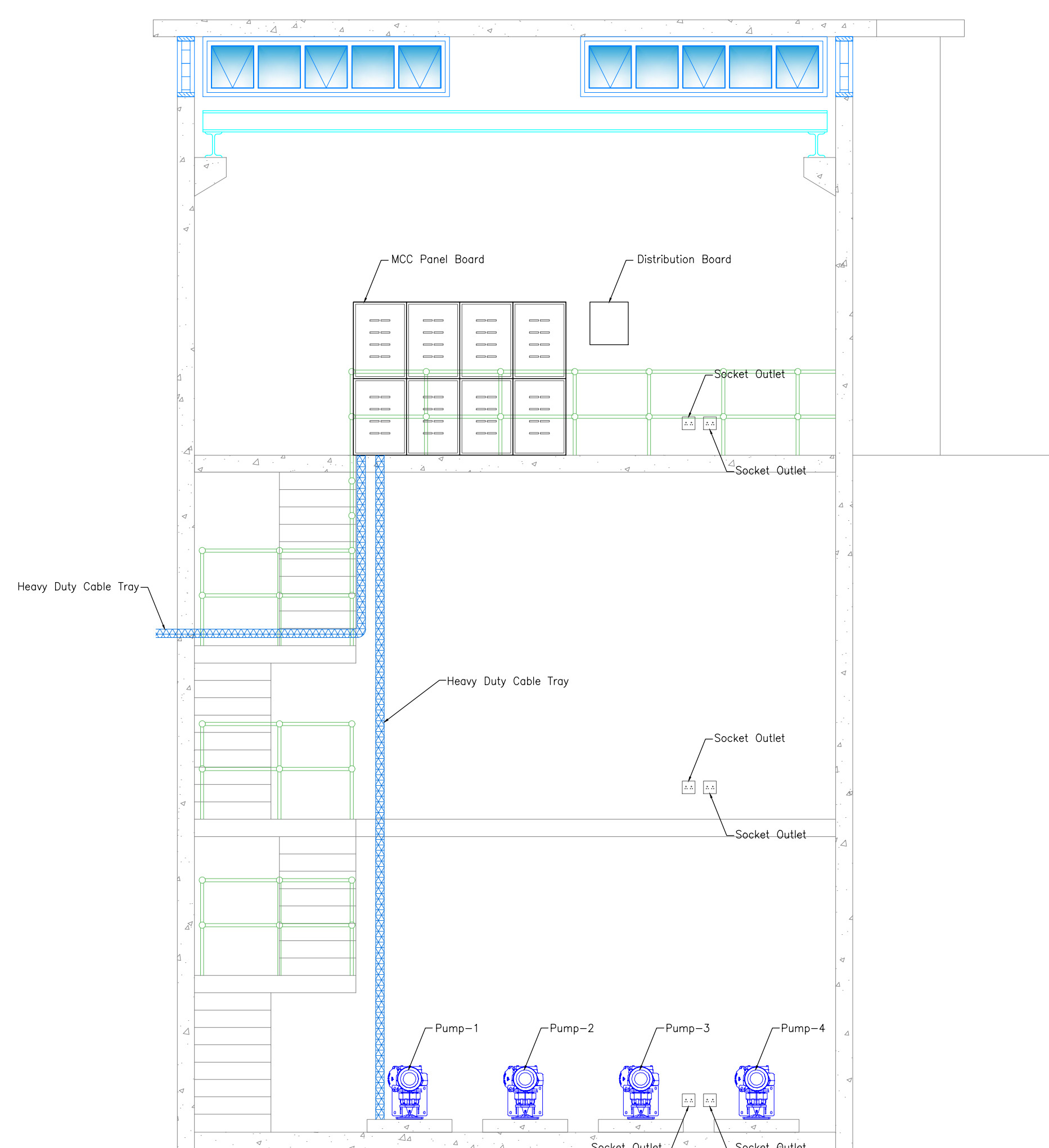


MIN. CLEARANCE BETWEEN
ROOF SLAB AND TOP OF RODDING
EYE TO BE 300mm

1. SELECTED BACKFILL CLASS I : IMPLIES
APPROVED SELECTED MATERIAL FROM
TRENCH EXCAVATION, FREE FROM STONES AND
WITH AN OPTIMUM MOISTURE CONTENT
2. SELECTED BACKFILL CLASS II : IMPLIES
SELECTED BACKFILL FROM TRENCH EXCAVATION,
WHICH SHALL NOT CONTAIN ANY STONES
LARGER THAN 150mm Ø
3. CLASS B BEDDING CRADLE SHALL CONSIST OF AN
APPROVED SELECTED GRAVEL MATERIAL WITH A
PI NOT EXCEEDING 6, FREE FROM STONES
EXCEEDING 20mm, ORGANIC MATTER & LUMPS OF
CLAY
4. CLASS A BEDDING / ENCASEING CONCRETE
BETWEEN JOINTS SHALL BE POURED IN ONE
CONTINUOUS OPERATION USING CLASS 20/19
MPa CONCRETE
5. FLEXIBLE JOINTS MUST BE PROVIDED AT EACH
PIPE JOINT IN A CLASS A CONCRETE BEDDING /
ENCASING, WITH A 12mm THK SFTBOARD
PLACED VERTICALLY FOR THE ENTIRE
CONCRETE AREA. PIPE JOINTS MUST BE SEALED
WITH WET CLAY TO PREVENT SLUSH FROM
PENETRATING THE JOINT
6. EXCEPT FOR THE 300mm BACKFILL ON THE TOP
OF THE PIPE, THE BALANCE OF THE TRENCH MAY
BE BACKFILLED WHEN THE CLASS A BEDDING /
ENCASING HAS OBTAINED THE COMPRESSIVE
STRENGTH OF 15 MPa

<div><p>CITY OF TSHWANE ETHEKOPOLITSE PO BOX 1022 PRETORIA 0001</p></div> <div>CITY OF TSHWANE</div> <div>WATER AND SANITATION DEPARTMENT</div>	AMENDMENTS				WATER AND SANITATION <small>FOR INTERNAL APPROVAL - RECEIVED SIGN WHEN APPLICABLE</small>				CONSULTANT DETAIL				DESIGNED <small>Pr Eng. Prof Reg No. _____ DATE: _____</small>		CONTRACT No. _____	PROJECT STATUS <small>RECEIVED SIGN WHEN APPLICABLE</small>				LOCATION OF PROJECT: ZITHOBENI HEIGHTS							
	NR	DATE	APPROVED	DESCRIPTION	PAR	DIRECTOR: WATER AND SANITATION - PLANNING				<div><p>aseda. BEYOND INFRASTRUCTURE</p></div> <div><small>TEL 011 3132 4070 BUILDING No. 7 FAX 011 3132 2665 5th Floor, 10th Floor E-mail: aseda@aseda.co.za 10th Floor PRETORIA 0001</small></div>	NAME		Prof. Reg. No.	SIGNATURE	DATE	DRAWN <small>Pr Eng. Prof Reg No. _____ DATE: _____</small>		CHECKED <small>Pr Eng. Prof Reg No. _____ DATE: _____</small>		INFORMATION OFFICE CHECKED <small>Pr Eng. Prof Reg No. _____ DATE: _____</small>		DESIGN OFFICE APPROVAL <small>Pr Eng. Prof Reg No. _____ DATE: _____</small>		PROJECT ENGINEER of COT: <small>NAME: _____ Pr Eng. Prof Reg No. _____ SIGNATURE: _____ DATE: _____</small>		DESCRIPTION OF PROJECT: UPGRADING OF SEWER PIPE LINE IN ZITHOBENI EXT 8 & 9	
	TO		OS	ISSUED FOR TENDER	TM	REGIONAL DIRECTOR: (1,2,3,4,5,6 or 7)					NAME		Prof. Reg. No.	SIGNATURE	DATE	SHEET No. _____		PAPER SIZE: A1		SCALE: _____		INSPECTOR OF WORKS of COT: <small>NAME: _____ Pr Eng. Prof Reg No. _____ SIGNATURE: _____ DATE: _____</small>		PROPOSED DROP MANHOLE DETAILS			
						DIRECTOR: SYSTEM DEVELOPMENT				NAME		Prof. Reg. No.	SIGNATURE	DATE	Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		WBS No. : _____						
						DIRECTOR: BULK WATER				NAME		Prof. Reg. No.	SIGNATURE	DATE	Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		COT DRAWING NUMBER: GP20013-CIV-SWR 303						
						DIRECTOR: INFRASTRUCTURE PROVISION				NAME		Prof. Reg. No.	SIGNATURE	DATE	Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____								
						DIRECTOR: WASTE WATER TREATMENT				NAME		Prof. Reg. No.	SIGNATURE	DATE	Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____								
										CONSULTANT DRAWING NUMBER: _____		SIGNATURE		DATE	Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____								
										HEREBY CERTIFY THAT THE SERVICES WILL HAVE BEEN INSTALLED ACCORDING TO NOTE 9 OF THE ABOVE NOTES AND TO THE DRAWING.		SIGNATURE		DATE	Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____								
												SIGNATURE		DATE	Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____		Pr Eng. Prof Reg No. _____								

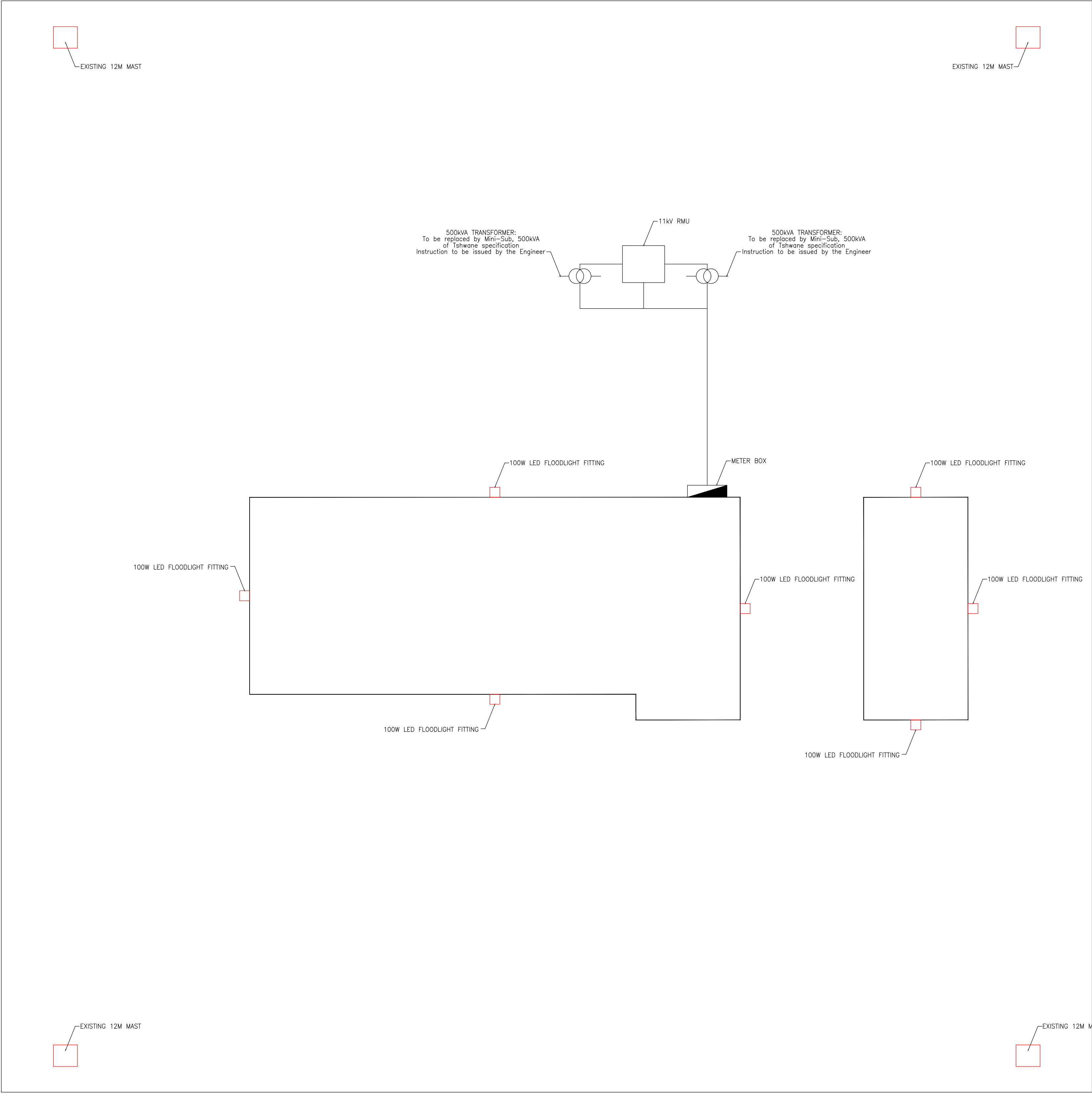


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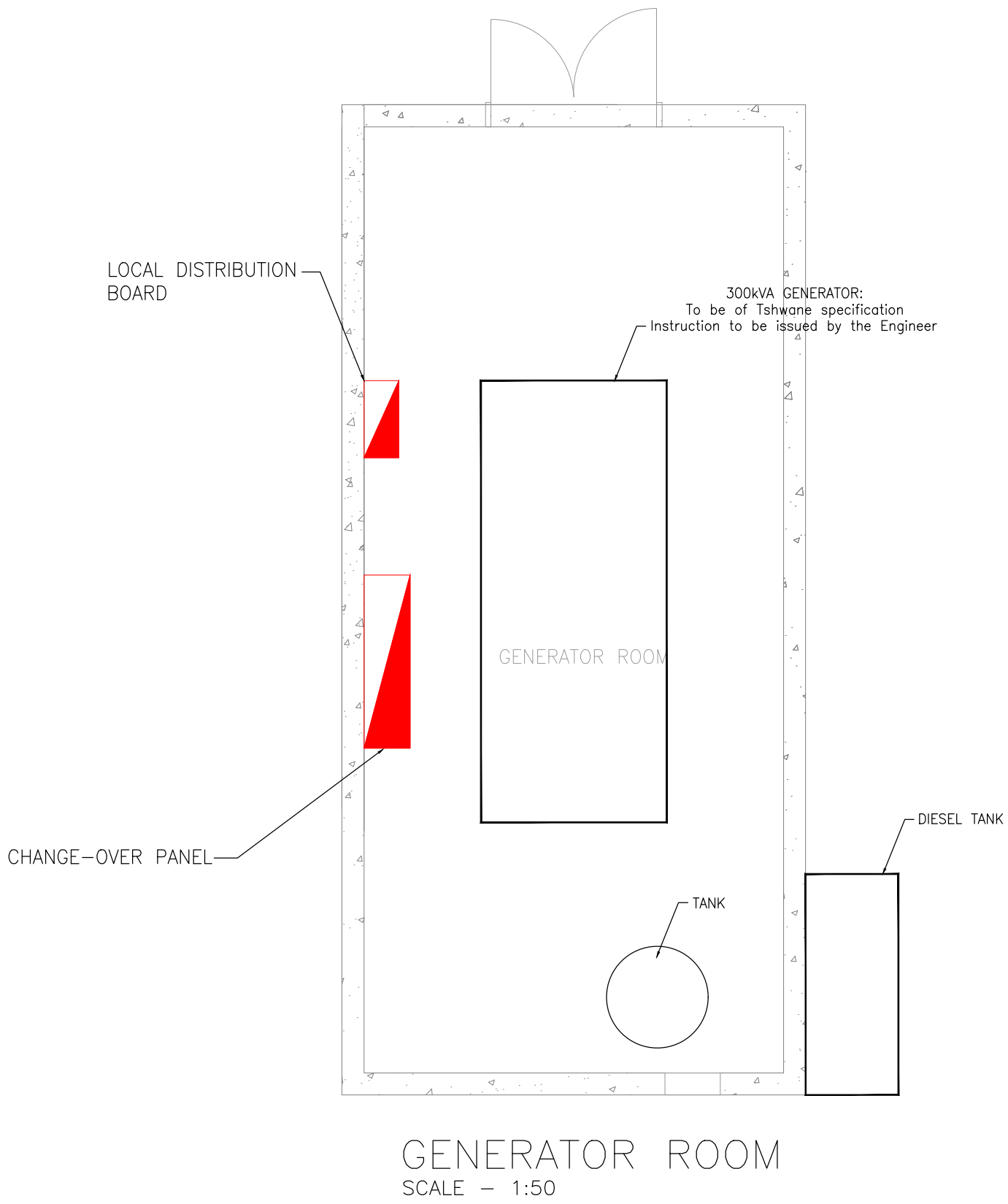


ITEM	QTY	DESCRIPTION	Parts List	SIZE	MATERIAL
1	1	Body			316/s
2	4	Roar assembly		4.5mm	316/s
3	106	Chain link		75mm	316/s & Acetal
4	1	Sprayer arm and blade assembly			316/s UHDFE
5	1	Geoslow SEW	SA 77 DRE 80M4		
6	1	Motor		0.75kW	
7	2	Inspection plate		3	316/s
8	2	Front cover plate		1.6mm	316/s
9	1	Mechanical Overload		1mm	316/s
10	1	Discharge chute plate		1.6mm	316/s
11	1	Top discharge chute cover			316/s
12	28	Top bar		40x6x4	316/s
13	1	Screen Support Gusset			316/s
14	1	Screen Channel Support			316/s
15	1	Screen Support Gusset			316/s
16	2	Screen Channel Support Plate			316/s


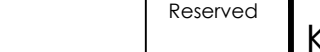
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SITE PLAN
SCALE - 1:100



GENERATOR ROOM
SCALE - 1:50

STATUS CODE		Group Codes BUILDINGS		DRAWING STATUS			No	Date	chkd	Details		CLIENT	CONSULTANT		PROJECT		Copyright Reserved	Revision					
				FOR TENDER											KOMMANDO PUMP STATION			Project code	Status	Group	Consultant	Doc Type	Seq No	Rev
0 - Pre - Feasibility study	BP - Building IT	PROJECT NUMBER 0317 - KPS - TCS			A	08.07.2022	EM	FOR TENDER				526 16th Road Constafia Office Park Johannesburg 1685	TEL: 011 312 4070 EMAIL: admin@aseda.co.za	DRAWING TITLE SEWER PUMP STATION SITE PLAN & GENERATOR ROOM LAYOUT		KPS - C - BE - TCS - TDW - 000 - A							
1 - Feasibility study	BP - Building Public Address																						
A - Preliminary Design	BS - Building Service																						
B - Design Review	BA - Building Architectural																						
C - Tender Design	BE - Building Electrical																						
D - Detailed Design	BF - Building Fire Service	Drawn By	Designed By	Reviewed/Approved By										SCALE		1:50; 1:100							
E - For Construction	BM - Building Mechanical	N NGCEMU	A13204	N NTUTA	E MENSAH	20100414								CHECKED		A							
F - As Built	BT - Building Public Telecoms	Name	S.A.I.D Number	Name	Pr Number	Name	Pr Number	Signature						REV. No									
G - For Information Only	BU - Building Public Utilities													DATE		08.07.2022							