

O.R. TAMBO DISTRICT MUNICIPALITY



O.R. TAMBO
DISTRICT MUNICIPALITY

CONTRACT NO.: ORTDM SCMU 30-21/22

**DESCRIPTION: LUKWETHU REGIONAL WATER SUPPLY SCHEME AND
SURROUNDING VILLAGES (PHASE 1) – NEW REST AND NGCANASINI
RETICULATION IN WARD 29**

CONTRACT 13

AUGUST 2022

NAME OF TENDERER:

TENDER AMOUNT:

CSD SUPPLIER NUMBER:

CLOSING DATE & TIME: 29 SEPTEMBER 2022 @ 12H00

Prepared for:

The Municipal Manager
OR Tambo District Municipality
Private Bag X6043
MTHATHA
5099

Tel. No. (047) 501 6400

Prepared by:

Water Services Department
OR Tambo District Municipality
Private Bag X6043
MTHATHA
5099

Tel. No. (047) 501 6400

PLEASE CHECK

x / √

1. That you have read all the pages of the tender document.
2. That you have completed ALL the forms required to be completed in NON-ERASEABLE INK.
3. That your arithmetic calculation in the pricing schedule is correct.
4. That you have attached ALL necessary documentation relating to the Composition of the tendering entity, i.e.
 - (a) Company registration documents naming the shareholders and Directors / members of the company, close corporation etc.
 - (b) Joint venture agreement, if tendering entity is a joint venture.
5. That the **COMPLETE** tender document is submitted.
6. That the **FORM OF OFFER** is completed in full and signed.
7. That ALL returnable documents are submitted.
8. That ALL returnable schedules are completed and signed.
9. Ensure that your tender is submitted by **12H00PM** on the closing date of the tender.

O.R. TAMBO DISTRICT MUNICIPALITY

CONTRACT NO.: ORTDM SCMU 30–21/22

LUKWETHU REGIONAL WATER SUPPLY SCHEME & SURROUNDING VILLAGES (PHASE 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 – CONTRACT 13

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Book of Drawings bounded to this document

TENDERS ARE HEREBY INVITED FOR:

CONTRACT NO.: ORTDM SCMU 30-21/22: LUKWETHU REGIONAL WATER SUPPLY SCHEME & SURROUNDING VILLAGES (PHASE 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 – CONTRACT 13

To ensure that your Tender is not exposed to invalidation, documents are to be completed in accordance with the conditions and Tender rules contained in the Tender documents. Supporting documents must be sealed and externally endorsed **CONTRACT NO.: ORTDM SCMU 30-21/22: LUKWETHU REGIONAL WATER SUPPLY SCHEME & SURROUNDING VILLAGES (PHASE 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 – CONTRACT 13** and be submitted in the open tender box, Ground Floor, OR Tambo District Municipality, Nelson Mandela Drive, Myezo Park, Mthatha, Eastern Cape, not later than 12H00pm on the **29 September 2022**.

The lowest or any Bid will not necessarily be accepted and the OR Tambo District Municipality reserves the right not to consider any tender not suitably endorsed or comprehensively completed as well as the right to accept a Tender in whole or part. Tenders will be adjudicated in accordance with the Supply Chain Management Policy of the OR Tambo District Municipality.

The following documents must be completed, signed (where applicable) and submitted as a complete set:

Document		Colour of pages
Number	Heading	
T1.1	Tender Notice and Invitation to Tender	White
T1.2	Tender Data	Pink
T2.1	List of Returnable Documents	Yellow
T2.2	Returnable Documents for tender evaluation purposes	Yellow
C1.1	Form of Offer and Acceptance	White
C1.2	Contract Data	White
C1.3	Operational Health & Safety Specification	White
C1.4	ORTDM Supply Chain Management Policy	White
C2.1	Pricing Instructions	Yellow
C2.2	Activity Schedule	Yellow
C3	Scope of Works	Blue
C4	Site Information	Green
C5	Additional Relevant Documents	White

TENDER NOTICE AND INVITATION TO TENDER

Tenders are hereby invited from suitably qualified and experienced contractors who are registered with CIDB for the Water Services Infrastructure Grant under the O.R. Tambo District Municipality.

Project Number	Name and Description	CIDB Grading	Briefing session
ORTDM SCMU 30-21/22	LUKWETHU REGIONAL WATER SUPPLY SCHEME & SURROUNDING VILLAGES (PHASE 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 – CONTRACT 13	4CE PE/5CE or higher	O.R. Tambo District Municipal Offices: Myezo

A compulsory clarification meeting with representatives of the client will take place at **10H00** on Monday, **29 August 2022** at the O.R. Tambo District Municipal Offices: Myezo, before proceeding to site.

THE MUNICIPALITY WILL NOT REPEAT ANY MATTERS ALREADY COVERED IN THE COMPULSORY BRIEFING MEETING TO THE BIDDERS WHO ARRIVE MORE THAN 10 MINUTES LATE TO THE MEETING, NOR WILL IT ALLOW SUCH BIDDERS TO COMPLETE THE ATTENDANCE REGISTER. ANY BID RECEIVED FROM A BIDDER WHO DID NOT ATTEND THE BRIEFING MEETING AND SIGN THE ATTENDANCE REGISTER WILL NOT BE CONSIDERED.

Bid documents should be downloaded on the e-Tender website (www.etenders.gov.za) alternatively on the OR Tambo website (www.ortambodm.gov.za) at no cost.

Bids must be completed in black ink, enclosed in a sealed envelope and clearly marked with the "**Project number, project name and description**", deposited in the Open Tender Box, Ground Floor, O. R. Tambo District Municipality Building, Nelson Mandela Drive, Myezo Park, Mthatha, Eastern Cape, not later than **12H00pm on Thursday, 29 September 2022.**

It must be expressly understood that the Municipality does not accept responsibility for ensuring that bid submissions sent by courier or post, or delivered in any other way, are deposited in the Tender Box. It is therefore preferable for the bidder to ensure that its bid submission is placed in the Tender Box by its own staff or representative(s).

Tender submissions will be opened in public at 12H00pm on **Thursday, 29 September 2022.** The Municipality reserves the right not to accept the lowest priced tender or any tender at all, or to accept the whole or part of any tender.

RETURNABLE DOCUMENTS TO BE SUBMITTED WITH THE BID:

- Original or certified copy of BBBEE certificate, or sworn affidavit confirming annual total revenue and level of black ownership if bidder is an Exempted Micro Enterprise (EME) or Qualified Small Enterprise (QSE);
- Certified copies of business registration documents, as issued by CIPC;
- Certified copy of identity documents of directors/shareholders/partners/members, as the case may be.

NB: CERTIFICATION OF DOCUMENTS MUST NOT BE MORE THAN SIX (6) MONTHS FROM DATE CERTIFIED BY COMMISSIONER OF OATHS.

THE BID WILL BE REJECTED IF THE BIDDER FAILS TO:

- Complete fully the bid document or to provide the information requested, or to sign the bid at the appropriate spaces provided or next to errors, his/her/ its bid
- Fill and properly sign the form of offer.
- Attach proof of registration with CSD.
- Attach proof of registration with Construction Industry Development Board (CIDB)
- Attach proof of latest municipal rates and taxes statement of the bidder indicating that rates and taxes are not in arrears for more than 3 months.
- Attach proof of latest municipal rates and taxes statement of each company director indicating that rates and taxes are not in arrears for more than 3 months.
- Attach proof of latest municipal water and sanitation charges statement of the bidder indicating that rates and taxes are not in arrears for more than 3 months for bidders who reside in the O. R. Tambo District Municipality area.
- Attach proof of latest municipal water and sanitation charges statement of each company director indicating that rates and taxes are not in arrears for more than 3 months for bidders who reside in the O. R. Tambo District Municipality area.
- Attach confirmation of address from a ward councillor where the bidder and company directors operate and reside in a peri-urban area where no rates and taxes and service charges are not billed.
- Attach a copy of a valid lease agreement where the bidder does not own the property they are operating from.
- Attach joint Venture Agreement or Consortium Agreement signed and initialled on each page (if applicable).

EVALUATION OF BIDS IN TERMS OF THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK REGULATIONS, 2017:

Bids will be evaluated in three stages, namely:

- Stage 1- Compliance with Bid Rules and other Requirements
- Stage 2 – Functionality assessment
- Stage 3 - Price and B-BBEE status level

Item	Weight
Stage 1 Compliance with Bid Rules and other Requirements	
Stage 2 of Evaluation-Functionality	100
• Company Experience with respect to similar projects	30
• Qualifications and Experience of key staff assigned to the contract	30
• Preliminary Quality Assurance Plan	20
• Availability of key plant and equipment	10
• Preliminary Programme	10
Stage 3 of Evaluation- Price & B-BBEE	100
• B-BBEE	20
• Price	80

CONDITIONS OF THE TENDER WITH REGARDS TO SUB-CONTRACTING

ITS IS THE CONDITION OF THIS TENDER THAT SUCCESSFUL TNDERER MUST SUBCONTRACT A MINIMUM OF 10% OF THE VALUE OF THE CONTRACT TO THE DESIGNATED GROUPS AS INFIGATED IN THE TENDER DOCUMENT

Tenders may only be submitted on tender documentation issued. No late, faxed, e-mailed, or other form of tender will be accepted.

Technical enquiries: Mr. N. Noto, telephone number 047 501 6425 or email: nkosiyabon@ortambodm.gov.za.

All Supply Chain Management enquiries may be directed to Mr. S. Hopa, telephone number 047 501 6449 or Email: sakhiwoh@ortambodm.org.za during office hours: Monday to Friday 08H00-13H00 and 13H30-16H30.

Tenders will be evaluated in terms of the Supply Chain Management policy of the O. R. Tambo District Municipality. The lowest tender will not necessarily be accepted and the Municipality reserves right to accept the whole or part of any tender or not to consider any tender not suitably endorsed. An 80/20-point system shall apply where 80 points is allocated for price and 20 points allocated for B-BBEE status level of contributor as follows:

B-BBEE status level of contributor	Number of points
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

Unincorporated Joint Ventures and Consortia will only be allocated B-BBEE points provided they submit their consolidated B-BBEE certificate and that such consolidated B-BBEE certificate is prepared for every separate tender.

S.W. Mkhize

Municipal Manager

T1.2 TENDER DATA

The conditions of tender are the **Standard Conditions of Tender** as contained in Annexure F of the 30 January 2009 edition of the **CIDB Standard for Uniformity in Construction Procurement**. The Standard Conditions of Tender Procurements make several references to the Tender Data for details that apply specifically to the Tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of Tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.

Please note that the word "Client" is used in this document and referred to as "Employer" in the Standard Conditions of Tender document.

Clause Number	
F.1	General
F.1.1	The Client is: O. R. Tambo District Municipality Private Bag X6043 Mthatha 5099
F.1.2	The Tender documents issued by the Client comprise: Tender T1.1 Tender Notice and invitation to tender T1.2 Tender Data T2.1 List of Returnable Documents T2.2 Returnable Documents for tender evaluation purposes T2.3 Returnable Documents to be incorporated into the contract
	Contract Part 1 : Agreements and Contract data C1.1 Forms of Offer and Acceptance C1.2 Contract Data C1.3 Occupational health and safety specification C1.4 O.R. Tambo District Municipality's Health and Safety Specification Part 2 : Pricing Data C2.1 Pricing Instructions C2.2 Bill of Quantities

	Part 3 : Scope of Works C3.1 Description of the Works C3.2 Engineering C3.3 Procurement C3.4 Construction C3.5 Management C3.6 Annexures (Specification) Part 4: Site Information C4 Site information
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	<p>Part 5: Additional Relevant Documents</p> <p>Part 6: Contract Drawings</p>	
F1.3	<p>Interpretation 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 tender conditions.</p>	
F.1.4	<p>Communication: Communication with all stakeholders shall be through the O. R. Tambo Municipality’s PMU Manager. Communications shall be in the English language. The Employer shall not take any responsibility for non-receipt of communications from or by a tenderer.</p>	
	<p>The Employer is O. R. Tambo District Municipality Private Bag x 6043 Mthatha 5099</p> <p>Tel: (047) 501 6400 Email: nkosiyabon@ortambodm.gov.za</p> <p>Contact person: Mr. N. Noto</p>	<p>The employer’s agent is: Lead Consultant Flux Development Scientists cc No.11B Sissons Street Fortgale, Mthatha, 5099 (047) 531 0424 Email: sibusiso@fluxgroup.co.za Contact Person : Mr S.N. Langa</p> <p>Sub-Consultant BM Infrastructure Development 48 Flamingo Drive Southernwood, Mthatha, 5099 (047) 531 0409 Email: info@bmengineers.co.za Contact Person : Mr A. Tulelo</p>
F.1.5	<p>The employer’s right to accept or reject any tender offer</p>	
F.1.5.1	<p>Reject or accept The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such a cancellation and rejection, but will give written reasons for such action upon written request to do so.</p>	
F.1.6	<p>Procurement procedures</p>	
F.1.6.1	<p>A contract will, subject to F.3.13, be concluded with the tenderer who in terms of F.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.</p>	
F.2	<p>Tenderer’s obligations</p>	
F.2.1.1	<p>Eligibility Only those tenders who are registered with CIDB and have in their employ management and supervisory staff satisfying the requirement of the scope of work for labour intensive competencies for supervisory and management staff are eligible to submit tenders.</p>	
F.2.1.2	<p>CIDB Grading The required CIDB grading for this project is 4CE PE/ 5CE or Higher.</p>	

F.2.2	Cost of tendering Accept that the Employer will not compensate the tenderers 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 satisfy requirements.	
F.2.3	Check documents Check the tender documents on receipt for completeness and notify the employer of any discrepancy or omission.	
F.2.4	Confidentiality and copyright 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.	
F.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.	
F2.6	Acknowledge Addenda Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary apply for an extension of the closing time stated in the tender data, in order to take the addenda into account.	
F.2.7	The arrangements for a compulsory clarification meeting are:	
	Date: Monday, 29 August 2022 Starting time: 10h00	Location: O.R. Tambo Municipality Offices, Myezo, then proceed to site
F.2.8	Seek clarification Request clarification of the tender documents, if necessary, by notifying the employer at least five working days before the closing time stated in the tender data.	
F2.10	Pricing the tender	
F.2.10.1	Include in the rates, prices, and the tendered total of the prices (if any) all duties, taxes (except Value Added Tax (VAT), and other levies payable by the successful tenderer, such duties, taxes and levies being those applicable 14 days before the closing time stated in the tender data.	
F.2.10.2	Show VAT payable by the employer separately as an addition to the tendered total of the prices.	
F.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.	
F.2.10.4	State the rates and prices in South African Rand	
F2.11	Alterations to documents 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. Erasures and the use of masking fluid are prohibited.	

F.2.12	<p>Alternative tender offers Alternative offers may be submitted only if a main tender offer, strictly in accordance with all the requirements of the tender documents, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender documents with the alternative requirements the tenderer proposes.</p>
F.2.13.5	<p>The Client's address for delivery of Tender offers and identification details to be shown on each Tender offer package are:</p> <p>Location of Tender box: Tender Box, Ground Floor, O. R. Tambo District Municipality Building, Nelson Mandela Drive, Myezo Park, Mthatha, Eastern Cape.</p> <p>Physical address: O. R. Tambo House, Nelson Mandela Drive, Mthatha</p>
F.2.14	<p>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.</p>
F.2.15	<p>Closing time The closing times for submission of Tenders are 12H00pm Thursday, 29 September 2022.</p>
F.2.15	<p>Telephonic, telegraphic, telex, facsimile or e-mailed Bid offers will not be accepted.</p>
F.2.16	<p>Tender offer validity The Tender offer validity period is 90 Days as stated in the tender data.</p>
F.2.17	<p>Clarification of tender offer after submission The tenderer shall 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.</p>
F.2.18	<p>Provide other material The tenderer shall, when requested by the Employer to do so, 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.</p>
F2.20	<p>Submit securities, bonds, policies Submit to the employer before formation of the contract, certificates of insurance required in terms of the conditions of contract identified in the contract data.</p>
F.2.23	<p>The tenderer is required to submit with his tender:</p> <ol style="list-style-type: none"> (1) a valid Tax Verification Pin issued by the South African Revenue Services; and (2) Certified copy of the original of all the Companies / CC Registration documents. (3) Joint Venture Agreement where applicable in CIDB format (signed and initialed on each page). (4) Proof of registration with CIDB (5) Certified copies of the original green bar-coded ID copies of Members of the companies.

F.3	The employer's undertakings
F.3.1	Respond to requests from the tenderer
F.3.1.1	Respond to a request for clarification received up to five working days before the tender closing time stated in the Tender Data and notify all tenderers who drew procurement documents.
F.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 seven 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 drew documents.
F.3.4	Opening of tender submissions
F.3.4.1	The employer shall 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.
F.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, preferences claimed and time for completion for the main tender offer only.
F.3.4.3	The Client shall not be obliged to make available the record outlined in F.3.4.2 to any tenderer who fail to attend the tender opening.
F.3.6	Non-disclosure The client shall 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.
F.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.
F3.9	Arithmetical errors, omissions and discrepancies
F.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.
F.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 F.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.
F.3.9.3	Notify the tenderer of all errors or omissions that are identified in the tender offer and invite the tenderer to either confirm the tender offer as tendered or accept the corrected total of prices.

F.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.
F.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.

F3.11

Evaluation of tender offers

Replace the contents of the entire sub-clause with the following:

The procedure for evaluation of responsive tender offers will be method 2 of table F.1 of SANS 294: 2004. Financial offer & Preferences. The bid will be awarded to the bidder who has scored the highest points for price and preferences combined **BUT** the prerequisite will be to obtain at least **60 points** for quality (functionality), which will be explained in Stage 1 below.

Nevertheless, O. R. Tambo District Municipality retains the right to accept any bid.

C. First stage in evaluation: Compliance with Bid Rules and other Requirements

The bids will be checked to ensure that they comply with the bid rules and all other requirements of the project document. In particular the following documentation must be completed and/or included within the bid.

- The form of Offer and Acceptance
- Audited financial statements for any tender price over R10million
- Certified company registration documents and ID of members
- Form C: Compulsory Enterprise Questionnaire
- Form D: Certificate of Authority for Signature
- Form E: Amendments, Qualifications and Alternatives
- Form H: Certificate of Good Standing
- Form I: Relevant experience
- Form J: Details of key staff and CVs
- Form M: Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2017

Note:

- All information supporting the above forms such as Curricula Vitae of staff who will work on the project and their functions, details of ownership, relevant experience etc.
- Addenda issued during the bid period, if any.
- The pricing schedule

Failure to supply the required information will compromise the bid

D. Next Stage in Evaluation: Quality / Functionality; Price & BBBEE Status Level

The next state in the evaluation process will consist of two stages, as follows:

STAGE 2: FUNCTIONALITY/QUALITY EVALUATION

ITEM	WEIGHT
Functionality (see detailed criteria below)	100
• Experience with respect to similar projects	30
• Qualifications and Experience of key staff assigned to the contract	30
• Preliminary Quality Assurance Plan	20
• Availability of key plant and equipment	10
• Preliminary Programme	10

Only bidders who score **60 points or more** on stage 1 will be evaluated further and therefore eligible for award.

The maximum score for functionality shall be **100**, distributed as follows:

Tender functionality / quality claimed		
	Category of Quality / Functionality	Maximum tender evaluation points provided
B1.1	Experience on similar projects	30
	Experience on similar projects completed within the last five (5) years: Proven experience in the construction of Water Supply pipelines, concrete reservoirs etc. or Waterborne Sewer pipelines contracts. Copies of Certificate of Completion MUST be submitted with the bid. No points will be awarded where Certificates of Completion have not been submitted with the Bid. If the value of completed project is not reflected on the certificate, provide contractor’s appointment or letter from the client with values.	30
	The Contractor has successfully completed at least Four (4) projects that satisfies the sub-criteria and provided evidence whose total sum of a value of R20 Million .	30
	The Contractor has successfully completed at least Three (3) projects that satisfies the sub-criteria and provided evidence whose total sum of a value of R15 Million .	20
	The Contractor has successfully completed at least Two (2) projects that satisfies the sub-criteria and provided evidence whose total sum of a value of R10 Million .	10
B1.2	Qualifications and Experience of key personnel (NB no key personnel member may be assigned more than one duty on the Contract, i.e. different personnel must be assigned for each of the following key positions) Contracts Manager = Minimum ND Civil Engineering/ NQF level 6, Site Agent = Minimum N6 Civil Engineering and Foreman = Minimum Grade 12/ N3 Civil Engineering/ Plumbing. Bidders must submit CV’s/Resume and contactable references.	30
	Contracts Manager, Site Agent, Foreman	
	Favourable previous experience in the Civil Engineering field with a minimum of 5 years; Contracts Manager = 12 points, 3-4 years = 10 points & 0-2 years = 8 points.	12
	Favourable previous experience in the Civil Engineering field with a minimum of 5 years; Site Agent = 10 points, 3-4 years = 8 points & 0-2 years = 6 points.	10
	Favourable previous experience in the Civil Engineering field with a minimum of 5 years; Foreman = 8 points, 3-4 years = 6 points & 0-2 years = 4 points.	8
	Contractor failed to provide evidence of qualification and experience.	0
B1.3	Preliminary Quality Assurance Plan must outline processes, procedures and associated resources, applied by whom and when to ensure sufficient quality Control Procedures are in place to meet the requirements and manage risks and what contribution can be made regarding value management. Particular attention in the plan must be given to Execution, Testing and Commissioning.	20

	The Quality Assurance Plan specifies important issues approach in an innovative and efficient way, indicating that the Bidder has outstanding knowledge of state-of-the-art approaches. The approach provides detailed ways to improve the project outcomes.	20
	The Quality Assurance Plan shows practical and coherent systems to actively manage quality.	15
	The Quality Assurance Plan shows how quality will be actively managed	10
	The Quality Assurance Plan is too generic to show how quality will be actively managed.	5
	Bidder failed to provide a Quality Assurance Plan.	0
B1.4	Availability of key machinery and equipment (Points will only be awarded for the mentioned machinery proof of registration with traffic authority must be submitted and to include the current license disc. Note irrelevant machinery to the project will not be considered. For hire provide a <u>signed confirmation letter</u> from a reputable service provider together with <u>proof of ownership</u>). For compaction equipment POE should include the submission of Tax Invoices, Serial Numbers and Photographic Evidence.	10
	Bidder owns three (3) or will hire three (3) of the machinery required for the execution of the contract; namely, Excavator or TLB, 8 Ton Trucks (Flatbed or Dropside), compaction equipment (Pedestrian roller/ trench compactor/ Vibrating plates), and the machinery/equipment is available for the project.	10
	Bidder owns two (2) or will hire Two (2) of the machinery required for the execution of the contract; namely, Excavator or TLB, 8 Ton Trucks (Flatbed or Dropside), compaction equipment (Pedestrian roller/ trench compactor/ Vibrating plates), and the machinery/equipment is available for the project.	5
	The Bidder failed to provide proof of ownership of plant/equipment.	0
B1.5	Preliminary Programme: The tenderer shall attach a preliminary programme reflecting the proposed sequence of execution of the activities required for the contract. The programme shall be in accordance with the information supplied in the Project Specification, the contract data and with all aspects of this Tender.	10
	Detailed Programme provided in Gantt Chart format, correlated to the scope of work.	10
	No Programme provided or where provided, the activity schedule is generic with no correlation to the Scope of Work.	0

STAGE 3: EVALUATION FOR PRICE AND PREFERENCE (80/20)

The procedure for Stage 3 of evaluation of responsive tenders is **Method 2**

a) PRICE: 80

b) B-BBEE STATUS LEVEL OF CONTRIBUTION: 20

a) Points Awarded for Price (Ps)

A total of 80 points will be awarded to the Tenderer with the lowest balanced price. The **other tenders will be awarded points on the ratio to bench mark price as follows**

$$Ps = 80 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where

Ps = Points scored for price of bid under consideration

Pt = Rand value of bid under consideration

Pmin = Rand value of lowest acceptable bid

b) Points awarded for B-BBEE Status Level of Contribution

In terms of Regulation 5 (2) and 6 (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 (80/20 system)
1	20
2	18
3	14
4	12
5	8
6	6
7	4
8	2
Non-compliant Contributor	0

The total calculated points will be rounded to the second decimal place.

F.3.13	Acceptance of tender offer
F3.13.1	Accept the tender offer, if in the opinion of the employer, it does not present any unacceptable commercial risk and only if the tenderer: a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement, b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract, c) has the legal capacity to enter into the contract, d) is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing, e) complies with the legal requirements, if any, stated in the tender data, and f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.
F3.13.2	Notify the successful tenderer of the employer's acceptance of his tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the tender data, or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying statements, it will constitute the formation of a contract between the employer and the successful tenderer as described in the form of offer and acceptance.
F.3.14	Notice to unsuccessful tenderers After the successful tenderer has acknowledged the employer's notice of acceptance, after written request, the employer will notify the tenderers that their tender offers have not been accepted on the e-tender website: www.etenders.gov.za , by listing the successful tender.
F.3.15	Prepare Contract documents 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, c) other revisions agreed between the employer and the successful tenderer, and d) The schedule of deviations attached to the form of offer and acceptance, if any.
F.3.16	Issue final contract Prepare and issue the final draft of the contract to the successful tenderer for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any).

T2.1 LIST OF RETURNABLE DOCUMENTS
--

The Tenderer must complete the following returnable documents:

T2.2 Returnable Documents required for Tender evaluation purposes		
1	Form 2.2.1	General Information of the Tenderer
2	Form 2.2.2	Authority for Signatory
3	Form 2.2.3	Schedule of Previous Experience
4	Form 2.2.4	Schedule of Current Projects
5	Form 2.2.5	Declaration of good standing regarding tax
6	Form 2.2.6	Certificate of Attendance at Site Meeting
7	Form 2.2.7	Proposed Key Personnel
8	Form 2.2.8	Schedule Equipment to be used
9	Form 2.2.9	Schedule of Proposed Sub-Contractors
10	Form 2.2.10	Financial References
11	Form 2.2.11	Municipal Bidding Documents (MBD forms)

T2.3 Returnable Documents that will be incorporated into the contract		
1	Form 2.3.1	Record of Addenda to Tender Documents
2	Form 2.3.2	Procurement Form

T2.2 RETURNABLE DOCUMENTS

RETURNABLE DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

- Form 2.2.1 General Information of Tenderer
- Form 2.2.2 Authority of Signatory
- Form 2.2.3 Schedule of Previous Experience
- Form 2.2.4 Schedule of Current Projects
- Form 2.2.5 Declaration of good standing regarding tax
- Form 2.2.6 Registration on the Central Supplier Database
- Form 2.2.7 Certificate of Attendance at Site Meeting
- Form 2.2.8 Proposed Key Personnel
- Form 2.2.9 Schedule of Proposed Sub-consultants
- Form 2.2.10 Financial References
- Form 2.2.11 Municipal Bidding Documents (MBDs)

FORM 2.2.1 GENERAL INFORMATION OF TENDERER

1. Name of Tenderer:

2. Contact details

Address :

Tel no :

Fax no :

Cell no :

E-mail address:

3. Legal entity: Mark with an X.

Sole proprietor	
Partnership	
Close corporation	
Company (Pty) Ltd	
Joint venture	

In the case of a Joint venture, provide details on joint venture members:

Joint venture member	Type of entity (as defined above)

4. Income tax reference number:
(in case of a joint venture, provide for all joint venture members)

5. Municipal services area where the enterprise is registered:
(in case of a joint venture, provide for all joint venture members)

6. Company / close corporation Registration Number:
(in case of a joint venture, provide for all joint venture members)

7. VAT Registration number:
(in case of a joint venture, provide for all joint venture members)

8. CIDB registration number:
(in case of a joint venture, provide for all joint venture members)

ATTACH THE FOLLOWING DOCUMENTS HERETO

1. For Closed Corporations

 Certified copies of CK1 or CK2 as applicable (Founding Statement)

2. For Companies

 Certified copies of Shareholders register

3. ID copies

 Certified ID Copies for members

4. CIDB registration

 Proof of registration with CIDB

5. CSD registration

 Proof of registration with Central Supplier Database

6. For Joint Venture Agreements

 Copy of the Joint Venture Agreement between all the parties, as well as the certified documents in (1), and or (2) and (4) and (4) of each Joint Venture member.

7. Original of certified copy of the latest municipal rates (not older than 3 months) where enterprise is registered

FORM 2.2.2 AUTHORITY OF SIGNATORY

Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for the relevant category.

A Company	B Partnership	C Joint Venture	D Sole Proprietor	E Close Corporation

A. Certificate for Company

I,....., chairperson of the board of directors of hereby confirm that by resolution of the board (copy attached) taken on.....20.....,Mr/Mrs.....acting in the capacity of.....was authorised to sign all documents in connection with this tender and any contract resulting from it on behalf of the company.

As witness

1.....
Chairman

2.....
Date

B. Certificate of Partnership

We, the undersigned, being the key partners in the business trading as hereby authorise Mr/Mrs....., acting in the capacity of.....to sign all documents in connection with the tender for Contract.....and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NOTE: This certificate is to be completed and signed by all of the key partners upon whom rests the direction of the affairs of the Partnership as a whole.

C. Certificate for Joint Venture

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

This authorisation is evidenced by the attached power of attorney signed by legally authorised signatories of all the partners to the Joint Venture.

NAME OF FIRM	ADDRESS	DULY AUTHORISED SIGNATORY
Lead partner CIDB registration no		Signature :..... Name :..... Designation :.....
CIDB registration no		Signature :..... Name :..... Designation :.....
CIDB registration no		Signature :..... Name :..... Designation :.....
		Signature :..... Name :..... Designation :.....

A copy of the Joint Venture Agreement showing clearly the percentage contribution of each partner to the Joint Venture shall be appended to this Schedule.

D. Certificate for Sole Proprietor

I,, hereby confirm that I am the sole owner of the business trading as.....

As Witness:

1.....
Signature: Sole owner

2.....
Date

E. Certificate for Close Corporation

We, the undersigned, being the key members in the business trading as.....hereby authorise Mr/Mrs.....

Acting in the capacity of....., to sign all documents in connection with the tender for Contract.....and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NOTE: This certificate is to be complete and signed by all the key members upon whom rests the direction of the affairs of the Close Corporation as a whole

ATTACH HERETO THE DULY SIGNED AND DATED
ORIGINAL OR CERTIFIED COPY OF AUTHORITY OF
SIGNATORY ON COMPANY LETTERHEAD

**FORM 2.2.5 DECLARATION OF GOOD STANDING REGARDING
TAX**

<i>SOUTH AFRICAN REVENUE SERVICES</i>	Tender No: Closing Date:
--	---

**DECLARATION OF GOOD STANDING REGARDING TAX
PARTICULARS**

1. Name of Taxpayer/Tenderer:

2. Trade Name:

3. Identification Number: (If applicable)

4. Company / Close Corporation registration number:

5. Income Tax reference number:

6. VAT registration number: (If applicable)

7. PAYE employer’s registration number: (If applicable)

8. Monetary value of Bid:

DECLARATION

I, the undersigned, the above taxpayer/Bidder, hereby declare that my Income Tax, Pay-As-You-Earn (PAYE) and Value-Added-Tax (VAT) obligations of the above-mentioned taxpayer, which include the rendition of returns and payment of the relevant taxes:

- (i) Have been satisfied in terms of the relevant Acts; or
- (ii) That suitable arrangements have been made with the Receiver of Revenue,..... to satisfy them.*

..... SIGNATURE CAPACITY DATE
---------------------------	--------------------------	----------------------

PLEASE NOTE:* The declaration (ii) cannot be made unless formal arrangements have been made with the Receiver of Revenue with regard to any outstanding revenue/outstanding tax returns.

SARS TAX COMPLIANCE PIN:

FORM 2.2.6 REGISTRATION ON THE CENTRAL SUPPLIER DATABASE

Attach proof of registration with the Central Supplier Database. **This information is material to the award of the Contract.**

**ATTACH CERTIFIED PROOF OF REGISTRATION ON THE NATIONAL
CENTRAL SUPPLIER DATABASE**

FORM 2.2.7 CERTIFICATE OF ATTENDANCE AT SITE MEETING
--

This is to certify that I, (Name)

duly authorised representative of(Tenderer)

Address:

Date:

Visited the site on(date) in the presence of

.....

(Engineer)

I have made myself familiar with the sites and all the local conditions likely to influence the work and the cost thereof.

I further certify that I am satisfied with the description of the work and explanations given by the said Engineer and that I understand perfectly the work to be done, as specified and implied, in the execution of this contract.

REPRESENTATIVE OF EMPLOYER

REPRESENTATIVE OF TENDERER

FORM 2.2.10 FINANCIAL REFERENCES

FINANCIAL STATEMENTS

I/We agree to furnish an audited copy of the latest set of financial statements together with my/our Directors' and Auditors' report for consideration by the Client.

DETAILS OF TENDERERS BANKING INFORMATION

I/We hereby authorise the Client/Engineer to approach all or any of the following banks for the purposes of obtaining a financial reference:

BANK NAME:										
ACCOUNT NAME: <i>(e.g. ABC Civil Construction cc)</i>										
ACCOUNT TYPE: <i>(e.g. Savings, Cheque etc)</i>										
ACCOUNT NO:										
ADDRESS OF BANK:										
CONTACT PERSON:										
TEL. NO. OF BANK / CONTACT:										
How long has this account been in existence:	<table border="1"> <tr> <td>0-6 months</td> <td><input type="checkbox"/></td> <td rowspan="4">(Tick which is appropriate)</td> </tr> <tr> <td>7-12 months</td> <td><input type="checkbox"/></td> </tr> <tr> <td>13-24 months</td> <td><input type="checkbox"/></td> </tr> <tr> <td>More than 24 months</td> <td><input type="checkbox"/></td> </tr> </table>	0-6 months	<input type="checkbox"/>	(Tick which is appropriate)	7-12 months	<input type="checkbox"/>	13-24 months	<input type="checkbox"/>	More than 24 months	<input type="checkbox"/>
0-6 months	<input type="checkbox"/>	(Tick which is appropriate)								
7-12 months	<input type="checkbox"/>									
13-24 months	<input type="checkbox"/>									
More than 24 months	<input type="checkbox"/>									

Name of Tenderer:

Date:

Signature:

Full name of signatory:

ATTACH AUDITED
FINANCIAL STATEMENTS

FORM 2.2.11 MUNICIPAL BIDDING DOCUMENTS (MBD)

MBD 1

**PART A
INVITATION TO BID**

BID NUMBER:	ORTDM SCMU 30-21/22	CLOSING DATE:	29 SEPTEMBER 2022	CLOSING TIME:	
DESCRIPTION:	LUKWETHU REGIONAL WATER SUPPLY SCHEME & SURROUNDING VILLAGES (PHASE 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 – CONTRACT 13				

BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT:

<i>TENDER BOX, GROUND FLOOR, O.R. TAMBO DISTRICT MUNICIPALITY BUILDING</i>
<i>NELSON MANDELA DRIVE</i>
<i>MYEZO PARK</i>
<i>MTHATHA</i>
<i>EASTERN CAPE</i>

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			
TAX COMPLIANCE STATUS	TCS PIN:		CSD No:
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	<input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT <input type="checkbox"/> Yes <input type="checkbox"/> No
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]			
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, ANSWER 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	SCM DEPARTMENT	CONTACT PERSON	Mr. N. Noto
CONTACT PERSON	Mr. Sakhiwo Hopa	TELEPHONE NUMBER	047 501 6425
TELEPHONE NUMBER	047 501 6449	FACSIMILE NUMBER	N/A
FACSIMILE NUMBER	N/A	E-MAIL ADDRESS	nkosiyabon@ortambodm.gov.za
E-MAIL ADDRESS	sakhiwoh@ortambodm.gov.za		

**PART B
TERMS AND CONDITIONS FOR BIDDING**

1. BID SUBMISSION:	
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED).
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.

SIGNATURE OF BIDDER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state¹.
2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.
3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.
 - 3.1 Full Name of bidder or his or her representative:.....
 - 3.2 Identity Number:
 - 3.3 Position occupied in the Company (director, trustee, shareholder²):
.....
 - 3.4 Company Registration Number:
 - 3.5 Tax Reference Number:
 - 3.6 VAT Registration Number:
 - 3.7 The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.
 - 3.8 Are you presently in the service of the state?.....**YES / NO**
 - 3.8.1 If yes, furnish particulars.....
.....

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

- (a) a member of –
 - (i) any municipal council;
 - (ii) any provincial legislature; or
 - (iii) the national Assembly or the national Council of provinces;
- (b) a member of the board of directors of any municipal entity;
- (c) an official of any municipality or municipal entity;
- (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);
- (e) a member of the accounting authority of any national or provincial public entity; or
- (f) an employee of Parliament or a provincial legislature.

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

3.9 Have you been in the service of the state for the past twelve months? **YES / NO**

3.9.1 If yes, furnish particulars.....
.....

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

3.10.1 If yes, furnish particulars
.....

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

3.11.1 If yes, furnish particulars.....
.....

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

3.12.1 If yes, furnish particulars
.....

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

3.13.1 If yes, furnish particulars.....
.....

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

3.14.1 If yes, furnish particulars
.....

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

Full name	Identity number	State employee number

.....
Signature

.....
Date

.....
Capacity

.....
Name of Bidder

DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)

For all procurement expected to exceed R10 million (all applicable taxes included), bidders must complete the following questionnaire:

NO.	QUESTION	ANSWER (TICK WHICH RESPONSE IS APPLICABLE)	
		YES	NO
1.	Are you by law required to prepare annual financial statements?		
1.1	If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the last 3 years.		

NO.	QUESTION	ANSWER (TICK WHICH RESPONSE IS APPLICABLE)	
		YES	NO
2.	Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than 3 months or any other service provider in respect of which payment is overdue for more than 30 days?		
2.1	If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than 3 months or other service provider in respect of which payment is overdue for more than 30 days.		
2.2	If yes, provide details:		

NO.	QUESTION	ANSWER (TICK WHICH RESPONSE IS APPLICABLE)	
		YES	NO
3.	Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract?		
3.1	If yes, provide details:		

NO.	QUESTION	ANSWER (TICK WHICH RESPONSE IS APPLICABLE)	
		YES	NO
4.	Will any portion of the goods or services be sourced from outside the Republic, and if so, what portion, and whether any portion of payment from the municipality is expected to be transferred outside of the Republic?		
4.1	If yes, provide details:		

CERTIFICATION

I, THE UNDERSIGNED (NAME)

CERIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS CORRECT.

I ACCEPT THAT THE STATE MAY ACT AGAINST ME SHOULD THIS THIS DECLARATION PROVE TO BE FALSE.

.....

Signature

.....

Date

.....

Position

.....

Name of Bidder

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

- (a) The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 preference point system shall be applicable; or
- (b) The 80/20 preference point system will be applicable to this tender.

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 OR 90/10 PREFERENCE POINT SYSTEMS

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

$$P_s = 80 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right) \quad \text{or} \quad P_s = 90 \left(1 - \frac{P_t - P_{\min}}{P_{\min}} \right)$$

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 (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	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 or 20 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	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

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	<input type="checkbox"/>	NO	<input type="checkbox"/>
-----	--------------------------	----	--------------------------

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 may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
 - 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.

<p>WITNESS:</p> <p>1.</p> <p>2.</p>

<p>..... SIGNATURE(S) OF BIDDER(S)</p> <p>DATE:.....</p> <p>ADDRESS:</p> <p>.....</p> <p>.....</p>
--

DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

- 1 This Municipal Bidding Document must form part of all bids 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 bid of any bidder may be rejected if that bidder, or any of its directors have:
 - a. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - b. been convicted for fraud or corruption during the past five years;
 - c. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - d. been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No 12 of 2004).
- 4 In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

Item	Question	Yes	No
4.1	<p>Is the bidder or any of its directors listed on the National Treasury's Database of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this Database were informed in writing of this restriction by the Accounting Officer/Authority of the institution that imposed the restriction after the <i>audi alteram partem</i> rule was applied).</p> <p>The Database of Restricted Suppliers now resides on the National Treasury's website (www.treasury.gov.za) and can be accessed by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.1.1	If so, furnish particulars:		
4.2	<p>Is the bidder 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 (No 12 of 2004)? The Register for Tender Defaulters can be accessed on the National Treasury's website (www.treasury.gov.za) by clicking on its link at the bottom of the home page.</p>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.3.1	If so, furnish particulars:		
Item	Question	Yes	No
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.4.1	If so, furnish particulars:		

4.5	Was any contract between the bidder and the municipality / municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, THE UNDERSIGNED (FULL NAME) CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM TRUE AND CORRECT.

I ACCEPT THAT, IN ADDITION TO CANCELLATION OF A CONTRACT, ACTION MAY BE TAKEN AGAINST ME SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

CERTIFICATE OF 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 *pe 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 or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

**PROJECT NO.: ORTDM SCMU 30-21/22: LUKWETHU REGIONAL WATER SUPPLY SCHEME &
SURROUNDING VILLAGES (PHASE 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 –
CONTRACT 13**

in response to the invitation for the bid made by:

O.R. TAMBO DISTRICT MUNICIPALITY

do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of: _____ that:

(Name of Bidder)

1. I have read and I 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 complete in every respect;
3. I am authorized 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 authorized 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;
 - (b) could potentially submit a bid in response to this bid invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the bidder and/or is in the same line of business as the bidder

MBD 9

6. The bidder has arrived at the accompanying bid independently from, 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 service will be rendered (market allocation)
 - (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a 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 arrangements 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 of the awarding of the contract.

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

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices 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 from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

.....

Signature

.....

Date

.....

Position

.....

Name of Bidder

T2.3 RETURNABLE DOCUMENTS

RETURNABLE DOCUMENTS THAT WILL BE INCORPORATED INTO THE CONTRACT

Form 2.3.1 Record of Addenda to Tender Documents

Form 2.3.2 Procurement Form

FORM 2.3.1 RECORD OF ADDENDA TO TENDER DOCUMENTS

(Addenda received from Engineer for amendments on Tender Documentation)

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

Name of Tenderer:

Date:

Signature:

Full name of signatory:

FORM 2.3.2 PROCUREMENT FORM

Acceptable Tenders will be evaluated using a system that awards points on the basis of Tender price and the meeting of specific goals.

DEFINITIONS

“Acceptable Tender” means any Tender which, in all respects, complies with the conditions of Tender and specifications as set out in the Tender document, including conditions as specified in the Preferential Procurement Policy Framework Act (Act 5 of 2000) and the Supply Chain Management of Council.

“Council” refers to the OR TAMBO DISTRICT Municipality.

“Equity ownership” refers to the percentage ownership and control, exercised by individuals within an enterprise and they are involved in the day to day running of the Company.

“HDI equity ownership” refers to the percentage of an enterprise, which is owned by individuals, or in the case of a company, the percentage shares that are owned by individuals meeting the requirements of the definition of a HDI.

“Historically disadvantaged individuals (HDIs)” means all South African citizens –

- (i) Who had no franchise in national elections prior to the introduction of the 1983 and 1993 constitutions (Referred to as Previously Disadvantaged Individuals (PDIs) in this document)
- (ii) Women
- (iii) Disabled persons.

“SMME’s” (small, medium and micro enterprises) refers to separate and distinct business entities, including co-operative enterprises and NGOs, managed by one owner or more, as defined in the National Small Business (Act 102 of 1996). Refer to the attached addendum for a definition of SMME’s for different economic sectors.

Tenders are adjudicated in terms of NDM Procurement Policy, and the following framework is provided as a guideline in this regard.

1. Technical adjudication and General Criteria

- Tenders will be adjudicated in terms of inter alia:
- Compliance with Tender conditions
- Technical specifications

If the Tender does not comply with the Tender conditions, the Tender will be rejected. If technical specifications are not met, the Tender may also be rejected.

With regard to the above, certain actions or errors are unacceptable, and warrants **REJECTION OF THE TENDER**, for example:

- A Tax Verification Pin. (**Only valid tax verification pin** must be attached to the Tender document).
- Pages to be completed, removed from the Tender document, and have therefore not been submitted.
- Failure to complete the schedule of quantities as required
- Scratching out without initialling next to the amended rates or information.
- Writing over / painting out rates / the use of tippex or any erasable ink, eg. Pencil.
- Failure to attend compulsory site inspections
- The Tender has not been properly signed by a party having the authority to do so, according to the **Form 2.2.2 – “Authority for Signatory”**
- No authority for signatory submitted.
- Form of Offer not completed.
- Particulars required in respect of the Tender have not been provided – non-compliance of Tender requirements and/or specifications.
- The Tenderer’s attempts to influence, or has in fact influenced the evaluation and/or awarding of the contract.
- The Tender has been submitted after the relevant closing date and time
- Each page of the Contract portion of this Tender document (Part C1 – C4) must be initialled by the authorised person in order for the document to constitute a proper Contract between the Employer (ORTDM) and the undersigned.
- If any municipal rates and taxes or municipal service charges owed by that Tenderer or any of its directors to the municipality, or to any other municipality or municipal entity, are in arrears for more than three months.
- If any Tenderer who during the last five years has failed to perform satisfactorily on a previous contract with the municipality or any other organ of state after written notice was given to that Tenderer that performance was unsatisfactory.

2. Size of enterprise and current workload

Evaluation of the Tenderer’s position in terms of:

- Previous and expected current annual turnover
- Current contractual obligations
- Capacity to execute the contract

3. Staffing profile

Evaluation of the Tenderer’s position in terms of:

- Staff available for this contract being Tendered for
- Qualifications and experience of key staff to be utilised on this contract

4. Financial ability to execute the contract:

Evaluation of the Tenderer's financial ability to execute the contract. Emphasis will be placed on the following:

- Contact the Tender's bank manager to assess the Tenderer's financial ability to execute the contract and the Tenderer hereby grants his consent for this purpose.

5. Good standing with SA Revenue Services

- Determine whether an original tax pin an original valid tax clearance certificate has been submitted.
- The Tenderer must affix a Tax Verification Pin to page T2.2.9 of the Tender document.

6. Penalties

The O.R. Tambo District Municipality will if upon investigation it is found that a preference in terms of the Contract has been obtained on a fraudulent basis, or any specified goals are not attained in the performance of the contract, on discretion of the Municipal Manager, one or more of the following penalties will be imposed:

- Cancel the contract and recover all losses or damages incurred or sustained from the Tenderer.
- Impose a financial penalty of twice the theoretical financial preference associated with the claim, which was made in the Tender.
- Restrict the suppliers, its shareholders and directors on obtaining any business from the O.R. Tambo District Municipality for a period of 5 years.

DECLARATION

I/We the undersigned, who warrants that he/she is duly authorised to do so on behalf of the firm, certifies that the items mentioned in part of the foregoing procurement form and returnable documents qualifies/qualify for the preference(s) shown and acknowledge(s) that:

The information furnished is true and correct.

The contractor may be required to furnish documentary proof to the satisfaction of the OR Tambo District Municipality that the claims are correct.

If the claims are found to be inflated, the OR Tambo District Municipality may, in addition to any other remedy it may have, recover from the contractor all cost, losses or damages incurred or sustained by the OR Tambo District Municipality as a result of the award of the Contract and/or cancel the contract and claim any damages which the OR Tambo District Municipality may suffer by having to make less favourable arrangements after such cancellation.

Signature of Tenderer

Signed at _____ on _____ day of _____

For the tenderer

WITNESSES:

1. _____

2. _____

C1 AGREEMENTS AND CONTRACT DATA

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Special Conditions
- C1.4 Occupational Health and Safety Agreement
- C1.5 Supply Chain Management Policy

FORM 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: **PROJECT NO.: ORTDM SCMU 30-21/22: LUKWETHU REGIONAL WATER SUPPLY SCHEME & SURROUNDING VILLAGES (PHASE 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 – CONTRACT 13**

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 Tender 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

.....
.

..... Rand (in words); R (in figures).

This Offer may be accepted by the Employer by signing the Acceptance part of this Form of Offer and Acceptance and returning one copy of this document to the Tenderer before the end of the period of validity stated in the Tender Data, whereupon the Tenderer becomes the party named as the Contractor in the Conditions of Contract identified in the Contract Data.

Signature(s) _____

Name(s) _____

Capacity _____

For the tenderer _____
(Name and address of organisation)

Name & Signature _____

Of Witness _____

Name

Date

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 1 Agreements and Contract Data (which includes this Agreement)
- Part 2 Pricing Data
- Part 3 Scope of Work
- Part 4 Site information
- Part 5 Additional Relevant Documentation
- Part 6 Contract Drawings

and drawings and documents or parts thereof, which may be incorporated by reference into Parts 1 to 6 above.

Deviations from and amendments to the documents listed in the Tender Data, including the proposed key personnel 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, which must be duly signed by the authorised representative(s) of both parties.

The Tenderer shall within two weeks after receiving a completed copy of this Agreement, including the Schedule of Deviations (if any), contact the Employer's agent (whose details are given in the Contract Data) to arrange the delivery of any bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at or just after the date this Agreement comes into effect. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

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

Signature(s) _____

Name(s) _____

Capacity _____

For the tenderer _____

(Name and address of organisation)

Name & Signature
Of Witness

Name

Date

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 becomes the subject of agreements reached during the process of Offer and Acceptance; the outcome of such agreement shall be recorded here.
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract, shall also be recorded here.
4. Any change or addition to the tender documents arising from the above agreements and recorded here shall also be incorporated into the final draft of the Contract.

1 Subject

Details

2 Subject

Details

3 Subject

Details

4 Subject

Details

5 Subject

Details

6 Subject

Details

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the 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 in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

FOR THE TENDERER:

Signatures (s) _____

Name(s) _____

Capacity _____

(Name and address of Organisation)

Name & Signature
Of Witness _____ Date _____

FOR THE EMPLOYER

Signatures (s) _____

Name(s) _____

Capacity _____

(Name and address of Organisation)

Name & Signature
Of Witness _____ Date _____

FORM C1.2 CONTRACT DATA

PART 1: DATA PROVIDED BY THE EMPLOYER

The contract data of this contract are:

- C1.2.1 Conditions of Contract
- C1.2.2 Data provided by the Employer
- C1.2.3 Data provided by the Contractor

C1.2.1 Conditions of Contract

The General Conditions of Contract for Construction Works 3rd Edition (2015) published by the South African Institution of Civil Engineering, is applicable to this contract. Copies of these conditions of contract may be obtained from the South African Institution of Civil Engineering www.saice.org.za

The General Conditions of Contract for Construction Works make several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities, and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the general conditions of contract.

The General Conditions of Contract shall be read in conjunction with the variations, amendments and additions set out in the Contract Specific Data below. Each item of data given is cross-referenced to the Clause in the General Conditions of Contract to which it mainly applies.

C1.2.2 Data Provided By The Employer

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

The following contract specific data are applicable to this Contract:

CONTRACT SPECIFIC DATA

The following contract specific data, referring to the General Conditions of Contract for Construction Works, Second Edition, 2010, are applicable to this Contract:

Clause 1.1.1.13:

The Defects Liability Period is **12 months**.

Clause 1.1.1.14:

The time for achieving Practical Completion is **10 Months**.

Clause 1.1.1.15:

The name of the Employer is **O. R. Tambo District Municipality**

Clause 1.1.1.26:

The Pricing Strategy is a Re-measurement

Clause 1.2.1.2:

The address of the Employer is: *Postal:* Private Bag x 6043, Mthatha 5100.

Physical: O.R. Tambo House, Nelson Mandela Drive, Mthatha 5100.

Tel: [047] 501 6400

Fax: [047] 532 4166

Clause 1.1.1.16:

The name of the Engineer is:

Lead Consultant

Flux Development Scientists cc

Sub-consultant

BM Infrastructure Development

Clause 1.2.1.2:

The address of the Engineer is *Postal:*

No.11B Sissions Street

Fortgate

Mthatha

5099

Telephone: (047) 531 0424

E-mail: sibusiso@fluxgroup.co.za

48 Flamingo Drive

Southernwood

Mthatha

5099

Telephone: (047) 531 0424

E-mail: info@bmengineers.co.za

Clause 4.4.2:

A successful tenderer must subcontract at least **10% (minimum)** of the total contract value excluding VAT, to either of the following enterprises:

- (i) an EME or QSE which is at least 51% owned by black people;
- (ii) an EME or QSE which is at least 51% owned by black people who are youth;
- (iii) an EME or QSE which is at least 51% owned by black people who are women;
- (iv) an EME or QSE which is at least 51% owned by black people with disabilities;
- (v) an EME or QSE which is at least 51% owned by black people living in rural or underdeveloped areas or townships;
- (vi) a cooperative which is at least 51% owned by black people;
- (vii) an EME or QSE which is at least 51% owned by black people who are military veterans;
- (viii) an EME or QSE.

Clause 5.3.1:

The documentation required before commencement with Works execution are:

Approved **Health and Safety Plan** (Refer to Clause 4.3)

Initial **programme** (Refer to Clause 5.6)

Accepted security (Refer to Clause 6.2)

Insurance (Refer to Clause 8.6)

Contractor's Superintendence/ Key Personnel (Refer to Clause 4.12)

Clause 5.3.2:

The time to submit the documentation required before commencement with Works execution is **14 days**.

Clause 5.7.1:

Where the Rate of Progress falls behind the approved Programme of Works by three months, the Employer may terminate the Contract giving a five days' notice

Clause 5.8.1:

The non-working days are Sundays and Saturdays

The special non-working days are:

(1) public holidays

(2) The year-end break commencing on **16/12/2022** and ending on **08/01/2023**.

Clause 5.11.1

In the event that the performance of the services has to be suspended on the grounds of Force Majeure, the period of performance shall be extended by the extent of the delay at no extra cost.

Clause 5.11.2

During the period of his inability to perform services as a result of an event of Force Majeure, the service provider shall not be entitled to any payment in terms of the contract.

Clause 5.12.1 (**5.12.2.2**)

Extension of time for practical completion due to abnormal climatic conditions shall be calculated according to the requirements of the following equation.

$$V = (Nw - Nn) + \frac{(Rw - Rn)}{x}$$

Where:

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

Nw = Actual number of days during the calendar month on which rainfall of 10mm or more has been recorded;

Nn = Average number of days in the relevant calendar month, as derived from existing rainfall records, as stated in the Site Information, on which rainfall of 10 mm or more has been recorded for the calendar month;

Rw = Actual rainfall in mm recorded for the calendar month under consideration; and

Rn = Average rainfall in mm for the calendar month as derived from existing rainfall records as stated in the Site Information.

The number of days per month on which work is expected not to be possible as a result of abnormal rainfall are as per the table below;

MONTH	EXPECTED NUMBER OF WORKING DAYS LOST AS A RESULT OF ABNORMAL RAINFALL
JANUARY	3
FEBRUARY	3
MARCH	3
APRIL	2
MAY	1
JUNE	1
JULY	1
AUGUST	1
SEPTEMBER	2
OCTOBER	2
NOVEMBER	3
DECEMBER	3
TOTAL	25

Clause 5.13.1:
The penalty for failing to complete the Works is **R 1 000.00** per calendar per day.

Clause 5.16.3:
The latent defect period is **10 years**.

Clause 6.8.2
There is no contract price adjustment

Clause 6.10.1.5:
The percentage advance on materials not yet built into the Permanent Works is **80%**

Clause 6.10.3:
The limit of retention money is **10%**

Clause 8.6.1.1.2:
The value of Plant and materials supplied by the Employer to be included in the insurance sum is **NIL**

Clause 8.6.1.1.3:
The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is **10%** of the value.

Clause 8.6.1.3:
The limit of indemnity for liability insurance is **R5 million**.

Clause 9.2.1
The Employer may terminate the contract:

- a) Where the services are no longer required
- b) Where the funding for the services is no longer available
- c) If the service provider does not remedy a failure in the performance of his obligations under the Contract within 7 days after having been notified thereof by the employer.
- d) If the service provider becomes insolvent or liquidated; or
- e) If as a result of Force Majeure, the Service Provider is unable to perform part or the whole service for a period of thirty (30) days.
- f) Where the Rate of Progress falls behind the approved Programme of Works by three months, the Employer may terminate the contract giving a five days' notice.

Clause 10.5.3
The number of Adjudication Board Members to be appointed is **one**.

C1.2.3 Data To Be Provided By The Contractor

Clause 1.1.1.9 The name of the Contractor is: (insert legal name)

Clause 1.2.1.2 The address of the Contractor is:

Physical address _____

Postal Address _____

Telephone _____

Fax _____

Email _____

Clause 6.2.1 The security to be provided by the contractor shall be one of the following

Type of security: Note VAT is included in the contract sum and Value of works for calculating percentages	Contractor's choice. Indicate "Yes" or "no"
(1) Cash deposit of 10% of the Contract Sum plus retention of 10% of the value of the works.	
(2) Performance guarantee (note A) of 10% of the Contract Sum plus retention of 10% of the value of the works.	

Tenderer's signature

Note A

The Performance Guarantee shall be of an Insurance Company listed on the Johannesburg Stock Exchange or owned by such a company, a Registered South African Bank or a recognised government sponsored, provincial or national development agency.

FORM OF GUARANTEE

PERFORMANCE GUARANTEE

For use with the General Conditions of Contract for Construction Works, Second Edition, 2010.

GUARANTOR DETAILS AND DEFINITIONS

“Guarantor” means:.....

Physical Address:.....

“Employer” means:.....

“Contractor” means:.....

“Engineer” means:.....

“Works” means:.....

“Site” means:.....

“Contract” means: The Agreement made in terms of the Form of Offer and Acceptance and such amendments or additions to the Contract as may be agreed in writing between the parties.

“Contract Sum” means: The accepted amount inclusive of tax of R.....

Amount in words:.....

“Guaranteed Sum” means: The maximum aggregate amount of R.....

Amount in words:.....

“Expiry Date” means:.....

CONTRACT DETAILS

Engineer issues: Interim Payment Certificates, Final Payment Certificate, and the Certificate Completion of the Works as defined in the Contract.

PERFORMANCE GUARANTEE

1. The Guarantor’s liability shall be limited to the amount of the Guaranteed Sum.
2. The Guarantor’s period of liability shall be from and including the date of issue of this Performance Guarantee and up to and including the Expiry Date or the date of issue by the Engineer of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Engineer and/or the Employer shall advise the Guarantor in writing of the date on which the Certificate of Completion of the Works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a suretyship;
 - 3.2 its obligation under this Performance Guarantee is restricted to the payment of money.

4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1 A copy of a first written demand issued by the Employer to the Contractor stating that payment of a sum certified by the Engineer in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;
 - 4.2 A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address with a copy to the Contractor stating that a period of seven (7) days has elapsed since the first written demand in terms of 4.1 and the sum certified has still not been paid;
 - 4.3 A copy of the aforesaid payment certificate which entitles the Employer to receive payment in terms of the Contract of the sum certified in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed Sum of the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address calling up this Performance Guarantee, such demand stating that:
 - 5.1 the Contract has been terminated due to the Contractor's default and that this Performance Guarantee is called up in terms of 5; or
 - 5.2 a provisional or final sequestration of liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and
 - 5.3 the aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional/final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Where the Guarantor has made payment in terms of 5, the Employer shall upon the date of issue of the Final Payment Certificate submit an expense account to the Guarantor showing how all monies received in terms of this Performance Guarantee have been expended and shall refund to the Guarantor any resulting surplus. All monies refunded to the Guarantor in terms of this Performance Guarantee shall bear interest at the prime overdraft rate of the Employer's bank compounded monthly and calculated from the date payment was made by the Guarantor to the Employer until the date of refund.
8. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the Guarantor.
9. Payment by the Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
10. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from this Performance Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
11. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
12. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after no claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
13. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
14. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Courts Act No 32 of 1944, as amended, to the

jurisdiction of the Magistrate’s Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate’s Court.

Signed at

Date

Guarantor’s signatory (1)

Capacity

Guarantor’s signatory (2)

FORM C1.3 SPECIAL CONDITION

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.

Applicable labour laws

The Ministerial Determination, Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in Government Notice N° R63 of 25 January 2002, as reproduced below, shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.

1 Introduction

1.1 This document contains the standard terms and conditions for workers employed in elementary occupations on a Special Public Works Programme (SPWP). These terms and conditions do NOT apply to persons employed in the supervision and management of a SPWP.

1.2 In this document –

- (a) "**Department**" means any department of the State, implementing agent or contractor;
- (b) "**Employer**" means any department, implementing agency or contractor that hires workers to work in elementary occupations on a SPWP;
- (c) "**Worker**" means any person working in an elementary occupation on a SPWP;
- (d) "**Elementary** occupation" means any occupation involving unskilled or semi-skilled work;
- (e) "**Management**" means any person employed by a department or implementing agency to administer or execute an SPWP;
- (f) "**Task**" means a fixed quantity of work;
- (g) "**task-based work**" means work in which a worker is paid a fixed rate for performing a task;
- (h) "**task-rated worker**" means a worker paid on the basis of the number of tasks completed;
- (i) "**time-rated worker**" means a worker paid on the basis of the length of time worked.
- (j) "**Task rate or daily rate**" = *As per Government Gazette*

2 Terms of Work

- 2.1 Workers on a SPWP are employed on a temporary basis.
- 2.2 A worker may NOT be employed for longer than 24 months in any five-year cycle on a SPWP.
- 2.3 Employment on a SPWP does not qualify as employment as a contributor for the purposes of the Unemployment Insurance Act 30 of 1966.

3 Normal Hours of Work

- 3.1 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.

- 3.2 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.
- 3.3 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.

4 Meal Breaks

- 4.1 A worker may not work for more than five hours without taking a meal break of at least thirty minutes duration.
- 4.2 An employer and worker may agree on longer meal breaks.
- 4.3 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.
- 4.4 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.

5 Special Conditions for Security Guards

- 5.1 A security guard may work up to 55 hours per week and up to eleven hours per day.
- 5.2 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.

6 Daily Rest Period

Every worker is entitled to a daily rest period of at least eight 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.

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").

8 Work on Sundays and Public Holidays

- 8.1 A worker may only work on a Sunday or public holiday to perform emergency or security work.
- 8.2 Work on Sundays is paid at the ordinary rate of pay.
- 8.3 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.
- 8.4 A time-rated worker who works on a 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 for more than four hours on the public holiday.

9 Sick Leave

- 9.1 Only workers who work four or more days per week have the right to claim sick-pay in terms of this clause.
- 9.2 A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
- 9.3 A worker may accumulate a maximum of twelve days' sick leave in a year.
- 9.4 Accumulated sick-leave may not be transferred from one contract to another contract.
- 9.5 An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
- 9.6 An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
- 9.7 An employer must pay a worker sick pay on the worker's usual payday.
- 9.8 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.
- 9.9 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.
- 9.10 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 Diseases Act.

10 Maternity Leave

- 10.1 A worker may take up to four consecutive months' unpaid maternity leave.
- 10.2 A worker is not entitled to any payment or employment-related benefits during maternity leave.
- 10.3 A worker must give her employer reasonable notice of when she will start maternity leave and when she will return to work.
- 10.4 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.
- 10.5 A worker may begin maternity leave –
 - (a) four weeks before the expected date of birth; or
 - (b) On an earlier date –
 - (i) 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
 - (ii) 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.

10.6 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.

10.7 A worker who returns to work after maternity leave has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.

11 Family responsibility leave

11.1 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 –
 - (i) The employee's spouse or life partner;
 - (ii) The employee's parent, adoptive parent, grandparent, child, adopted child, grandchild, or sibling.

12 Statement of Conditions

12.1 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 SPWP;
- (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 SPWP.

12.2 An employer must ensure that these terms are explained in a suitable language to any employee who is unable to read the statement.

12.3 An employer must supply each worker with a copy of these conditions of employment.

13 Keeping Records

13.1 Every employer must keep a written record of at least the following –

- (a) The worker's name and position;
- (b) In the case of a task-rated worker, the number of tasks completed by the worker;
- (c) In the case of a time-rated worker, the time worked by the worker;
- (d) Payments made to each worker.

13.2 The employer must keep this record for a period of at least three years after the completion of the SPWP.

14 Payment

14.1 An employer must pay all wages at least monthly in cash or by cheque or into a bank account.

14.2 A task-rated worker will only be paid for tasks that have been completed.

14.3 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.

- 14.4 A time-rated worker will be paid at the end of each month.
- 14.5 Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- 14.6 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.
- 14.7 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.
- 14.8 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
- 14.9 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.

15 Deductions

- 15.1 An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.
- 15.2 An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.
- 15.3 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.
- 15.4 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.

16 Health and Safety

- 16.1 Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- 16.2 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 SPWP;
 - (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.

17 Compensation for Injuries and Diseases

- 17.1 It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on a SPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.
- 17.2 A worker must report any work-related injury or occupational disease to their employer or manager.
- 17.3 The employer must report the accident or disease to the Compensation Commissioner.
- 17.4 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.

18 Termination

- 18.1 The employer may terminate the employment of a worker for good cause after following a fair procedure.
- 18.2 A worker will not receive severance pay on termination.
- 18.3 A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
- 18.4 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. However, the worker may be re-engaged if a position becomes available for the balance of the 24-month period.
- 18.5 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.

19 Certificate of Service

- 19.1 On 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 SPWP 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

MONTHLY REPORTING

The successful bidder will be expected to assist with monthly reporting. These will include progress reports, labour reports, etc, submitted to the Project Manager on the dates to be stipulated.

FORM C1.4 HEALTH AND SAFETY AGREEMENT

HEALTH AND SAFETY SPECIFICATION

THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993 CONSTRUCTION REGULATIONS 2003

SECTION 1

1. INTRODUCTION

This document was construed in order to comply with the provisions of the **OCCUPATIONAL HEALTH AND SAFETY ACT NO 85 OF 1993, CONSTRUCTION REGULATIONS 2014 and COVID-19 Occupational Health and Safety Measures in Workplace 2020.**

Definitions of words are those described in the Act and the Construction Regulations of 2003.

This document formulates the specification of the OR Tambo District Municipality in terms of the above act and forms part of the constitution of the organisation.

This document forms part of the employment contract of all employees and is as such accepted in writing by each employee. It also forms part of the agreement between the OR Tambo District Municipality and all service providers.

No clause in this document shall be amended in any contract document construed by agents, designers or anyone else except so ordered or sanctioned by the OR Tambo District Municipality in writing.

SCHEDULE

1.1 Definitions

1. In these Policy any word or expression to which a meaning has been assigned in the Act shall have the meaning so assigned and, unless the context otherwise indicates—

“Agent” means any person who acts as a representative for a client in the managing the overall construction work.

“angle of repose” means the steepest angle of a surface at which a mass of loose or fragmented material will remain stationary in a pile on a surface, rather than sliding or crumbling away;

“Batch plant” means machinery, appliances or other similar devices that are assembled in such a manner so as to be able to mix materials in bulk for the purposes of using the mixed product for construction work;

“Client” means OR Tambo District Municipality;

“competent person” in relation to construction work, means any person having the knowledge, training and experience specific to the work or task being performed: Provided that where appropriate qualifications and training are registered in terms of the provisions of the South African Qualifications Authority Act, 1995 (Act No. 58 of 1995), these qualifications and training shall be deemed to be the required qualifications and training;

“Construction work” means any work in connection with—

- (a) The erection, maintenance, alteration, renovation, repair, demolition or dismantling of or addition to a building or any similar structure;
- (b) The installation, erection, dismantling or maintenance of a fixed plant where such work includes the risk of a person falling;
- (c) the construction, maintenance, demolition or dismantling of any bridge, dam, canal, road, railway, runway, sewer or water reticulation system or any similar civil engineering structure; or
- (d) the moving of earth, clearing of land, the making of an excavation, piling, or any similar type of work;

“construction vehicle” means a vehicle used for means of conveyance for transporting persons or material or both such persons and material, as the case may be, both on and off the construction site for the purposes of performing construction work;

“Contractor” mean an employer, as defined in section 1 of the Act, who performs construction work and includes principal contractors;

“Design” in relation to any structure includes drawings, calculations, design details and specifications;

“Designer” means any person who—

- (a) prepares a design;
- (b) checks and approves a design;
- (c) arranges for any person at work under his control (including an employee of his, where he is the employer) to prepare a design, as well as;
- (d) Architects and engineers contributing to, or having overall responsibility for the design;
- (e) Build services engineers designing details for fixed plant;
- (f) Surveyors specifying articles or drawing up specifications;
- (g) Contractors carrying out design work as part of a design and build project;
- (h) Temporary works engineer designing formwork and false work; and
- (i) Interior designers, shop-fitters and landscape architects.

“ergonomics” means the application of scientific information concerning humans to the design of objects, systems and the environment for human use in order to optimise human well-being and overall system performance;

“Excavation work” means the making of any man-made cavity, trench, pit or depression formed by cutting, digging or scooping;

“explosive powered tool” means a tool that is activated by an explosive charge and that is used for driving bolts, nails and similar objects for the purpose of providing fixing;

“fall prevention equipment” means equipment used to prevent persons from falling from an elevated position, including personal equipment, body harness, body belts, lanyards, lifelines or physical equipment, guardrails, screens, barricades, anchorages or similar equipment;

“fall arrest equipment” means equipment used to arrest the person in a fall from an elevated position, including personal equipment, body harness, lanyards, deceleration devices, lifelines or similar equipment, but excludes body belts;

“fall protection plan” means a documented plan, of all risks relating to working from an elevated position, considering the nature of work undertaken, and setting out the procedures and methods to be applied in order to eliminate the risk;

“Hazard identification” means the identification and documenting of existing or expected hazards to the health and safety of persons, which are normally associated with the type of construction work being executed or to be executed;

“Health and safety file” means a file, or other record in permanent form, containing the information required as contemplated in these regulations;

“Health and safety plan” means a documented plan which addresses hazards identified and includes safe work procedures to mitigate, reduce or control the hazards identified;

“Health and safety specification” means a documented specification of all health and safety requirements pertaining to the associated works on a construction site, so as to ensure the health and safety of persons;

“material hoist” means a hoist used to lower or raise material and equipment, and includes cantilevered platform hoists, mobile hoists, friction drive hoists, scaffold hoists, rack and pinion hoists and combination hoists;

“Medical certificate of fitness” means a certificate valid for one year issued by an occupational health practitioner, issued in terms of these regulations, whom shall be registered with the Health Professions Council of South Africa;

“Method statement” means a written document detailing the key activities to be performed in order to reduce as reasonably as practicable the hazards identified in any risk assessment;

“Mobile plant” means machinery, appliances or other similar devices that is able to move independently, for the purpose of performing construction work on the construction site;

“National Building Regulations” means the National Building Regulations made under section 17(1) of the National Building Regulations and Building Standards Act, 1977 (Act No.103 of 1977), and published under Government Notice No. R.1081 of 10 June 1988, as amended;

“Person day” means one individual carrying out construction work on a construction site for one normal working shift;

“principal contractor” means an employer, as defined in section 1 of the Act who performs construction work and is appointed by the client to be in overall control and management of a part of or the whole of a construction site;

“professional engineer or professional certificated engineer” means any person holding registration as either a Professional Engineer or Professional Certificated Engineer under the Engineering Profession Act, 2000 (Act No. 46 of 2000);

“Professional technologist” means any person holding registration as a Professional Technologist under the Engineering Profession Act, 2000 (Act No. 46 of 2000);

“Provincial director” means the provincial director as defined in regulation 1 of the General Administrative Regulations under the Act;

“risk assessment” means a programme to determine any risk associated with any hazard at a construction site , in order to identify the steps needed to be taken to remove, reduce or control such hazard;

“Roof apex height” means the dimensional height in metres measured from the lowest ground level abutting any part of a building to the highest point of the roof;

“SABS 085” means the South African Bureau of Standards’ Code of Practice entitled “The Design, Erection, Use and Inspection of Access Scaffolding”;

“SABS 0400” means the South African Bureau of Standards, Code of Practice for the application of the National Building Regulations;

“SABS EN 1808” means the South African Bureau of Standards’ Standard Specification entitled: “Safety requirements on suspended access equipment – Design calculations, stability criteria, construction-tests”;

“SABS 1903” means the South African Bureau of Standards’ Standard Front-end Specification entitled: “Safety requirements on suspended access equipment – Design calculations, stability criteria, construction-tests”;

“Scaffold” means any temporary elevated platform and supporting structure used for providing access to and supporting workmen or materials or both;

“shoring” means a structure such as a hydraulic, mechanical or timber/steel shoring system that supports the sides of an excavation and which is intended to prevent the cave-in or the collapse of the sides of an excavation, and “shoring system” has a corresponding meaning;

“Structure” means—

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- (a) any building, steel or reinforced concrete structure (not being a building), railway line or siding, bridge, waterworks, reservoir, pipe or pipeline, cable, sewer, sewage works, fixed vessels, road, drainage works, earthworks, dam, wall, mast, tower, tower crane, batching plants, pylon, surface and underground tanks, earth retaining structure or any structure designed to preserve or alter any natural feature, and any other similar structure;
- (b) any formwork, false work, scaffold or other structure designed or used to provide support or means of access during construction work; or
- (c) any fixed plant in respect of work which includes the installation, commissioning, decommissioning or dismantling and where any such work involves a risk of a person falling two metres or more;

“Suspended platform” means a working platform suspended from supports by means of one or more separate ropes from each support;

“The Act” means the Occupational Health and Safety Act, 1993 (Act No. 85 of 1993);

“Tunnelling” means the construction of any tunnel beneath the natural surface of the earth for a purpose other than the searching for or winning of a mineral

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**HEALTH AND SAFETY SPECIFICATION
THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993
CONSTRUCTION REGULATIONS 2003**

SECTION 2: DESIGNERS

1. All wording shall have the meaning as defined by the H&S Regulations 2003.
2. This specification is in terms of the H&S act 1993 and the regulations of 2003.
3. All work performed and procedures followed by designers shall be done according to the H&S regulations of 2003.
4. The client is aware of the fact that the appointment of a designer does not implicate that the designer becomes the agent of the client for the particular project. The appointment of an agent is done separately in writing and should be accepted by the designer as such.
5. The client is ultimately responsible for all safety issues regarding the project for which a designer is appointed and cannot contract out of his obligations in terms of the law.
6. The client shall not employ a designer should he have reasonable doubts that the designer is not able to execute work in a safe manner.
7. All designers shall have adequate insurance cover to indemnify the client for their acts and omissions in terms of professional conduct the H&S act in particular to indemnify the client against penalties imposed for acts or omissions. The client is aware of the fact that additional insurance over and above PI insurance is necessary to have himself indemnified by the designers for acts and omissions in terms of the H&S regulations. The professional indemnity insurance has a "negligent acts and omissions" wording only and therefore additional insurance is necessary to cover the client against penalties imposed in terms of the regulations.
8. Designers shall not accept work from the client if they are not capable of executing such work professionally and if such work cannot be executed in a safe manner, according to the provisions of the H&S regulations.
9. Designers shall execute all designs in terms of the relevant SABS and other acceptable codes and procedures and shall place great emphasis on safety issues including the maintenance procedures after inaugurations of such systems or projects.
10. Ergonomic parameters shall have high priority in all designs.

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**HEALTH AND SAFETY SPECIFICATION
THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993
CONSTRUCTION REGULATIONS 2003**

SECTION 3: PRINCIPAL CONTRACTORS (P C)

1. All work by the P C shall be done in compliance with the provisions of the H&S regulations.
2. The Employer recognises the right of each employee to work safely in a healthy environment under decent human conditions. Each employee has the right to return home safely and healthy to his home and family after each day's work.
3. Work shall not be done at the expense of human safety or health.
4. Work shall be executed under humane conditions, especially with reference to hours and H&S issues in mind.
5. The P C shall appoint a fulltime H&S Manager should he have more than 50 employees on site.
6. The PC shall conduct monthly safety meetings on site. All foremen, gang leaders and other employees shall participate and all incidents with relation to unsafe practices shall be discussed. Minutes of such meetings shall be kept in the H&S file.
7. Foremen and gang leaders shall, under the supervision of the H&S manager, conduct meetings with all staff and people under their direct supervision on a frequent basis. Minutes of such meetings shall be kept in the H&S file.
8. New personnel (temporary or full time employees) shall attend safety induction courses under the supervision of the H&S manager.
9. The P C shall install and maintain a box in which proposals for improvement of H&S procedures could be placed. All such proposals shall be considered, recorded and placed in the H&S file.
10. An adequate first aid facility shall be placed maintained on site and shall be adequately indicated by means of signs. All personnel shall be made aware of its existence and only trained first aid assistants shall be authorized to treat injuries.
11. The P C shall see that work is only executed by people trained for the particular task.
12. All safety equipment shall be SABS approved and under no circumstance shall any safety equipment be non-certified homemade equipment. Specifications and order details shall be kept in the H&S file.
13. Workers and personnel shall be attending safety courses on a regular basis and all information regarding such training shall be kept in the H&S file.
14. All employees shall be trained in safe working procedures and shall be trained on safety consciousness in particular. Employees in position of leadership shall be trained through accredited training processes in H&S matters.
15. The contractor shall prepare and maintain a safety plan for the particular project and shall train his personnel to work according to such plan.
16. Personnel and workers will be made aware of any natural hazards existing on site. They will also be made aware of items defined by the designer in his risk assessment.
17. No horseplay between employees will be tolerated on site. Neither will aggressive or threatening behaviour by anybody be allowed.

18. Workers shall wear appropriate protective clothing for the applicable task which shall include special safety equipment like protective eyewear, gloves, boots, ear protection, etc. Workers shall be issued with these items and copy of such issuing shall be kept in the H&S file.
19. Workers shall not be allowed to wear loose clothes and footwear.
20. Workers shall have the opportunity and right to prescribed rest, eating and toilet breaks.
21. Workers on nightshift shall be protected against inclement weather and shall have access to adequate food and drinks.
22. In cases where work is executed in remote or in security restricted areas, the P C will make provision for food to be supplied to his employees.
23. Potable water shall be made available free of charge to all workers on site.
24. Adequate toilet and washing facilities shall be made available to workers.
25. In the event of chemicals being present or used on site, the P C will allow for adequate shower facilities on site. All chemicals shall be stored according to specification and shall be clearly identified and marked in prescribed containers.
26. Workers under instruction to execute inherently unsafe procedures shall report such incidences to the H&S manager, designer of client immediately.
27. Unauthorised or unlawful instructions from foremen, gang leaders or colleagues shall be reported by the H&S manager immediately.
28. The P C shall stop his contractors if they work unsafely.
29. All specialist work shall be executed by registered artisans only.
30. Workers shall not be required to lift equipment or material heavier than 25kg or carry a load of more than 50 kg for more than 10 metres.
31. Workers shall not be exposed to conditions of heat where the temperature is above 40° Celsius and the humidity more than 75%. Likewise will personnel not be exposed to temperatures lower than –5° Celsius? Should the designer and the P C decide that the work is urgent; workers will be issued with proper protective clothing.
32. All workers shall have access to a shaded eating and resting place on site.
33. Workers executing tasks in rivers, trenches and other natural or artificial water ways shall be made aware of the hazard of flash floods and special precautions shall be made by the P C to implement an effective flood warning system.
34. Workers executing tasks in manholes for sewer or stormwater systems, shall be made aware of the existence of hazardous gasses in closed areas and shall be issued with gas masks in any event, even after tests conducted by the H&S manager has proven that no gasses are existent. Only specialists shall work in gas filled chambers.
35. Personnel executing work during rainy weather or under other wet conditions shall be equipped with proper gumboots and proper rain suits.
36. No personnel will be allowed to work in water unless gumboots are worn. Should the water be deeper than 300mm watertight suits shall be worn.
37. All ladders shall be fixed against scaffolding or other permanent structures.
38. Welding on site shall only be done by trained personnel behind adequate eye protecting shields and all welders shall wear proper protective gear.
39. Personnel operating grinders, saws or any other hand tools of similar description shall be equipped with the necessary eyewear and ear protection.

40. All personnel working under potentially dusty conditions shall wear nose and mouth filters.
41. Workers operating rock drilling equipment shall wear ear, nose and eye protection.
42. All scaffolding will comply with the H&S regulations.
43. Blasting will be done by specialists under the regulations of the Explosives Act.
44. Workers shall wear protective clothing when exposed to chemicals like cement, lime, detergents, tar, fumes, etc. Should work be executed in the presence of such material, adequate protective clothing and equipment shall be issued after permission is granted by the H&S manager.
45. Workers will not be allowed to make open fires on any part of the site unless it is made in designated areas approved by the H&S manager.
46. Fuel storage will only be allowed on certified areas on site.
47. Workers and other personnel will be trained for fire procedures and will practise such fire drill on a regular basis.
48. Assembly areas for emergency evacuations will be indicated by adequate signage.
49. The P C will have an attendance register for the purposes of identifying people before, during and after potential hazardous situations.
50. All transport supplied by the P C shall be on road worthy vehicles only and all transport shall be conducted in terms of the transport act.
51. Drivers of vehicles shall be responsible for the roadworthiness of vehicles and will report any dysfunctional vehicles to the P C.
52. All drivers will be responsible to handle vehicles in such a way to comply with the transport act.
53. Passengers of vehicles shall report any unsafe conduct to the P C immediately. Such report shall be forwarded to the H&S manager and shall be investigated. Copy of such procedure shall be entered into the H&S file.
54. Only trained personnel shall be permitted and required to operate construction machinery. All such machinery shall be maintained in a safe working condition.
55. All vehicles operating on site shall have audible warning signals if driven backwards.
56. No vehicle shall be kept on site if it is leaking oil or other substances.
57. No vehicle or equipment shall be operated on site if it produces noise above 90 decibel measured within a distance of 10,0 m from the unit.
58. Equipment producing serious dusty conditions shall only be operated under the supervision of the P C and the H&S manager with the necessary protection to workers.
59. All excavations on site shall be adequately protected and not only indicated.
60. Exploratory excavation to reveal services shall be done in a specific way.

All areas to be explored shall first be inspected by the landowner or local authority.
Position of services identified shall then be verified by opening by hand, not by machine.
Particular care shall be taken not to damage these services.
Electrical services are inherently dangerous and shall be opened by skilled people only.
These excavations shall not be left open without supervision. If necessary the excavation shall be backfilled temporarily with approved material until the specified modifications to the services can be made.
61. Access to excavations shall only be by means of ladders or stairs with handrails.

62. All refuse, unsafe material, potential hazardous material and rubbish shall be placed in designated areas to be removed on a regular basis.
63. Rainwater shall be contained in trenches or pipes in such a way that it will not cause contamination of material in these refuse areas.
64. All electrical sources or cables or overhead power lines should be regarded as live at all times and all workers on site shall be made aware of its existence during H&S meetings and as many times as necessary.
65. Adequate signage shall be used on site to indicate
- Non smoking areas on site
 - Safety exits / Emergency exits from buildings under construction
 - Stairs (temporary and permanent works)
 - Toilets
 - Fire fighting equipment
 - Workmen busy with equipment overhead
 - Fire assembly points
 - Fire escapes
 - Areas where members of the public are not allowed.
 - First aid room
66. All visitors to the site shall be granted permission to the site only upon application through a predetermined procedure and records of these visitors shall be kept in the H&S file. Visitors shall attend safety induction training before entering the site. Areas out of bounds to all visitors shall be indicated clearly by means of adequate signs.
67. Work performed in public servitudes like the construction of streets or roads shall be done according to the specifications of the local or national authority and adequate signage shall be implemented.
68. People complaining about their health or people displaying symptoms of illness or disease, shall be allowed to go to the first aid facility or to visit a doctor or a clinic. Permission shall not be withheld unreasonably. In remote areas the P C is required to have reasonable ways of transporting people to a doctor or clinic whether the person is ill or injured on site.
69. Personnel must be informed about the location of the nearest doctor or clinic for casualty purposes and the P C shall provide such transport for injured workers and injured members of the public (within the limits of the site) free of charge.
- 70 A principal contractor who intends to carry out any construction work shall—
- (a) before carrying out that work, notify the provincial director in writing of the construction work if it includes—
- (i) The demolition of a structure exceeding a height of 3 metres; or
 - (ii) The use of explosives to perform construction work; or
 - (iii) The dismantling of fixed plant at a height greater than 3m.
- (b) before carrying out that work, notify the provincial director in writing when the construction work—
- (i) Exceeds 30 days or will involve more than 300 person days of construction work; and
 - (ii) Includes excavation work deeper than 1m; or
 - (iii) Includes working at a height greater than 3 metres above ground or a landing.
- (2) The notification to the provincial director must be done on the form similar to Annexure A to this Policy.
- (3) A principal contractor shall ensure that a copy of the completed form is kept on site for inspection by an inspector, client, client's agent or employee.

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**HEALTH AND SAFETY SPECIFICATION
THE OCCUPATIONAL HEALTH AND SAFETY ACT 1993
CONSTRUCTION REGULATIONS 2003**

SECTION 4: CLIENT

- (1) A client shall be responsible for the following in order to ensure compliance with the provisions of the Act—
- (a) to prepare a documented health and safety specification for the construction work, and provide any principal contractor who is making a bid or appointed to perform construction work for the client with the same;
 - (b) To promptly provide the principal contractor and his or her agent with any information which might affect the health and safety of any person at work carrying out construction work;
 - (c) To appoint each principal contractor in writing for the project or part thereof on a construction site;
 - (d) To take reasonable steps to ensure that each principal contractor's health and safety plan is implemented and maintained on the construction site: Provided that the steps taken, shall include periodic audits at intervals mutually agreed upon between the client and principal contractor, but at least once every month;
 - (e) to stop any contractor from executing construction work which is not in accordance with the principal contractor's health and safety plan for the site or which poses to be a threat to the health and safety of persons;
 - (f) to ensure that where changes are brought about, sufficient health and safety information and appropriate resources are made available to the principal contractor to execute the work safely;
 - (g) to ensure that every principal contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to work commencing on site; and
 - (h) To ensure that potential principal contractors submitting tenders, have made provision for the cost of health and safety measures during the construction process.
- (2) A client shall discuss and negotiate with the principal contractor the contents of the health and safety plan and thereafter finally approve the health and safety plan for implementation.
- (3) A client shall ensure that a copy of the principal contractor's health and safety plan is available on request to an employee, inspector or contractor.
- (4) OR Tambo District Municipality shall not appoint a principal contractor to perform construction work, unless OR Tambo District Municipality is reasonably satisfied that the principal contractor that he or she intends to appoint has the necessary competencies and resources to carry out the work safely.
- (5) A client may appoint an agent in writing to act as his or her representative and where such an appointment is made, the responsibilities as are imposed by these regulations upon a client, shall as far as reasonably practicable apply to the person so appointed.
- (6) No client shall appoint any person as his agent, unless the client is reasonably satisfied that the person he or she intends to appoint has the necessary competencies and resources to perform the duties imposed on a client by these regulations.

ANNEXURE A

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993
Regulation 3 of the Construction Regulations, 2003

NOTIFICATION OF CONSTRUCTION WORK

1.(a) Name and postal address of principal contractor:

(b) Name and tel. no of principal contractor's contact person:

2. Principal contractor's compensation registration number: _____

3.(a) Name and postal address of client:

(b) Name and tel. no. of client's contact person or agent:

4.(a) Name and postal address of designer(s) for the project:

(b) Name and tel. no. of designer(s) contact person:

5. Name and telephone number of principal contractor's construction supervisor on site appointed in terms of regulation 6.(1). _____

6. Name/s of principal contractor's sub-ordinate supervisors on site appointed in terms of regulation 6.(2).

7. Exact physical address of the construction site or site office:

8. Nature of the construction work:

9. Expected commencement date: _____

10. Expected completion date: _____

11. Estimated maximum number of persons on the construction site.

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

13. Name(s) of contractors already chosen.

Principal Contractor

Date

Client

Date

- **THIS DOCUMENT IS TO BE FORWARDED TO THE OFFICE OF THE DEPARTMENT OF LABOUR PRIOR TO COMMENCEMENT OF WORK ON SITE.**
- **ALL PRINCIPAL CONTRACTORS THAT QUALIFY TO NOTIFY MUST DO SO EVEN IF ANOTHER PRINCIPAL CONTRACTOR ON THE SAME SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.**

GUIDELINES FOR CONTRACT ADMINISTRATION



**O.R. TAMBO
DISTRICT MUNICIPALITY**

O.R. TAMBO DISTRICT MUNICIPALITY

OR TAMBO DISTRICT MUNICIPALITY

GUIDELINES FOR CONTRACT ADMINISTRATION
IN TERMS OF THE CONSTRUCTION REGULATIONS 2003
HEALTH & SAFETY ACT 1993

SECTION 1 AND 2

1. PURPOSE OF THIS DOCUMENT

This document describes the procedures to be followed in the execution of Engineering Projects for OR Tambo District Municipality.

The role of all parties to the development project is described.

The document is in terms of the Construction Regulation 2003 of the Health and Safety Act 1993.

2. BACKGROUND

The Minister of Labour has on 18 July 2003 under section 43 of the Occupational Health and Safety Act 1993 (Act No. 85 of 1993) published new regulations in the Government Gazette 7721, Vol. 456. They have immediate effect and are applicable to the Construction Environment.

These regulations inter alia identify the different role players and their responsibilities, particularly the role of the client, the contractor and that of the designer.

The Construction Regulations endeavour to ensure that:

- i) Hazards or potential hazards to a healthy working environment are identified.
- ii) These hazards or potential hazards are removed or minimised.
- iii) Employers and Workers are made aware of the value of safe working procedures and train themselves to work safely in potential hazardous environments or under potentially unsafe conditions.

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GUIDELINES FOR CONTRACT ADMINISTRATION
IN TERMS OF THE CONSTRUCTION REGULATIONS 2003
HEALTH & SAFETY ACT 1993
SECTION 3

3. **THE CLIENT**

In terms of the law the client is ultimately responsible for all acts and omissions as far as health and safety is concerned on site. It should be noted that the client will be held legally responsible for every trespass of the regulations, not the designer or the contractor. The law makes provision for fines to be levied and unless the client has been indemnified by the designer or the contractor, such fines will have to be paid by the client.

Clients cannot contract out of their statutory obligations except where the law allows for it. Therefore any liability imposed upon them for statutory non-compliance, cannot be passed on to designers (consultants) or contractors.

In particular the client's responsibilities are defined as follows:

- | | | |
|-----|---|----------------|
| .1 | To prepare a health and safety (H&S) specification for the work. This should cover the spectrum of activities handled by the client as part of his normal duties. | Clause 4(1)(a) |
| .2 | To provide a risk assessment to the principal contractor. | Clause 4(1)(b) |
| .3 | To appoint the principal contractor in writing. | Clause 4(1)(c) |
| .4 | To ensure that the H&S plan is implemented. | Clause 4(1)(d) |
| .5 | To stop any contractor executing work in an unsafe manner. | Clause 4(1)(e) |
| .6 | To provide additional H&S information to the contractor should changes be made to the work? | Clause 4(1)(f) |
| .7 | To ensure that the principal contractor is registered and in good standing with the workmen's compensation fund. | Clause 4(1)(h) |
| .8 | To make sure tenderers have made provision in their offers for H&S measures. | Clause 4(1)(h) |
| .9 | To discuss and approve the H&S plan with the principal contractor. | Clause 4(2) |
| .10 | To keep a copy of the H&S plan of the principal contractor. | Clause 4(3) |
| .11 | To <u>not</u> employ a contractor unless the client is reasonably satisfied that the principal contractor who is earmarked for an appointment has the necessary skills, competencies and resources to carry out the work safely. | Clause 4(4) |
| .12 | The client can appoint an agent to handle his duties. The client can obviously also delegate some of his duties but this does not make the person responsible for such particular responsibilities as agent.

The client should make sure whether such responsibilities are not already part of the designer in terms of the regulations clause 9(2). | Clause 4(5) |
| .13 | The client shall only appoint someone as his agent if he is reasonably satisfied that such person can handle such responsibilities. | Clause 4(6) |

OR TAMBO DISTRICT MUNICIPALITY

GUIDELINES FOR CONTRACT ADMINISTRATION
IN TERMS OF THE CONSTRUCTION REGULATIONS 2003
HEALTH & SAFETY ACT 1993

SECTION 4

4. THE DESIGNER

The regulations do not use names like engineer, architect, etc. Instead the term designer has been introduced. The responsibilities of the designer are given in a sub-paragraph under the obligations of the Principal Contractor.

<p>4.1 The regulations has a comprehensive definition of the designer and this includes:</p> <ul style="list-style-type: none"> a) A person preparing a design. b) A person checking a design. c) A firm preparing a design. d) An architect or engineer contributing to or having responsibility for a design. e) A building services engineer designing details of fixed plant (scaffolding or cranes). f) A surveyor specifying articles or drawing up specification (Quantity Surveyor). g) A contractor in design & build contract. h) A contractor designing temporary work. i) A interior designer, shop fitter and landscape architect. <p>The regulation also talks of “an engineer designing a structure”. “Structure” is a wide concept and is given in paragraph 3.2.5.1(a) underneath.</p>	<p>Definitions “designer”</p> <p>Definitions “structure”</p>
<p>4.2 The designer does not automatically through an appointment become the agent of the client in terms of the regulations unless he is appointed in writing to that effect and he accepts such appointment in writing.</p>	<p>Clause 4(5)</p>
<p>4.3 The SAACE model agreement between the client and Engineer has a different meaning of the word “agent”.</p> <p>According to the model agreement of SAACE the Engineer acts as the “agent” of the client in a conventional contractual context. “Agent” in terms of the Health & Safety regulations has a totally different meaning.</p>	
<p>4.4 It can be derived from the regulations that the client can appoint a designer to perform certain tasks of the client on his behalf. This still does not mean that these designers become his agent in terms of clause 4(5).</p>	<p>Clause 4(5)</p>

4.5 The regulations are fairly quiet regarding the functions and responsibilities of the designer except when designing of a structure. It is again assumed that the client will identify certain functions to be done by the designer on his behalf.	
4.5.1 “Structure” in terms of the regulations means:	Definitions
(a) <ul style="list-style-type: none">• any building• steel or reinforced concrete structure• railway line• railway siding• bridge• waterworks• reservoir• pipe or pipeline• cable• sewer• sewage works• fixed vessels• road• drainage works• earthworks• dam• wall• mast• tower• tower crane• batching plants• pylon• surface and underground tanks• earth retaining structure or any structure designed to preserve or alter any natural feature and any other similar structure.	
(b) Any formwork, false work, scaffold or other structure designed or used to provide support or access during construction (structural engineering sector).	
(c) Fixed plant to prevent people from falling 2 meters or more.	
4.5.2 The designer is in fact regarded as a person delivering designs only and unless his role is defined by the client, his role is quite limited.	Clause 9(2)
4.5.3 The designer should inform the client and the principal contractor about anticipated dangers relating to the construction work. <u>This is in fact a Risk Assessment.</u>	Clause 9(2)(b)
4.5.4 The designer (in the structural engineering context) shall further furnish to the contractor in writing:	Clause 9(2)
i) A geo-technical report.	
ii) The loading of the structure.	
iii) The method and sequence of the construction process.	
iv) He should exclude inherently dangerous methods of construction in his design.	
v) The maintenance of the structure shall be through safe procedures.	
vi) He should carry out inspections.	
vii) And stop the contractor from executing work dangerously.	

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- viii) A final inspection is necessary to ensure safety of the structure.
 - ix) Great emphasis should be given to the ergonomic design of the structure.
 - x) The engineer should also give input in the design of temporary work e.g. scaffolding.

Clause 10(c)

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**GUIDELINES FOR CONTRACT ADMINISTRATION
IN TERMS OF THE CONSTRUCTION REGULATIONS 2003
HEALTH & SAFETY ACT 1993**

SECTION 5

5. THE PRINCIPAL CONTRACTOR (P C) AND CONTRACTOR

The responsibilities of these parties are comprehensively stipulated in the regulations.

5.1	In general it can be seen that the responsibilities of the PC (Principal Contractor) towards his contractors is Mutatis Mutandis to the responsibilities of the Client towards the PC.	
5.2	The PC is responsible for the collecting of these contractors' safety plans and to hold them to it.	Clause 5(1) and (2)
i)	He should also stop his contractors should they work unsafely.	Clause 5(3)(d)
ii)	He should appoint safety officers should the size of the work warrant it.	Clause 6(6)
iii)	He should cause a risk assessment to be executed by a competent person.	Clause 7(1)
iv)	Visitors to his site should undergo induction pertaining to H&S issues.	Clause 7(8)
v)	He shall see to his employees induction and H&S training.	Clause 7(7)
vi)	The employees of the PC and his contractors shall wear visible proof of their induction training.	Clause 7(9)(a)
5.3	The regulations also covers the detail of:	
	• Fall protection	Clause 8
	• Structures (under this heading the responsibilities of the designer of a structure is found)	Clause 9
	• Formwork and support work	Clause 10
	• Excavation work	Clause 11
	• Demolition work	Clause 12
	• Tunnelling	Clause 13
	• Scaffolding	Clause 14
	• Suspended platforms	Clause 15
	• Boatswain's chairs	Clause 16
	• Material hoists	Clause 17
	• Batch plants	Clause 18
	• Explosive powered tools	Clause 19
	• Cranes	Clause 20
	• Construction vehicles and mobile plant	Clause 21
	• Electrical installation and machinery on construction sites	
	• Use and storage of flammable liquids on construction sites	Clause 22
	• Water environment	
	• Housekeeping on construction sites	Clause 23
	• Stacking and storage on construction sites	Clause 24
	• Fire precautions on construction sites	Clause 25
	• Construction welfare facilities	Clause 26
		Clause 27

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**GUIDELINES FOR CONTRACT ADMINISTRATION
IN TERMS OF THE CONSTRUCTION REGULATIONS 2003
HEALTH & SAFETY ACT 1993**

SECTION 6

6. APPOINTMENT OF THE DESIGNER

Clause 4(5)

- | | | |
|-----|--|----------------|
| 6.1 | The client appoints the consultant or designer as agent only for the particular project and also for the duration of the project. | |
| 6.2 | It is further important to distinguish between “agent” in terms of the SAACE model agreement between client and engineer and “agent” in terms of the H&S regulations. | |
| 6.3 | The responsibilities and duties of a designer in the H&S context are <u>those that are dictated by law and/or those respectively given to him by the client</u> , except when he is a structural engineer and designs a “structure” in which case clause 9(2) applies automatically. | |
| 6.4 | The client should only add to the responsibilities of the designer those which is not automatically in his hand in terms of clause 9(1) of the regulations. | |
| 6.5 | The following duties are not regarded as normal work of the designer of a “structure” and will therefore require an additional appointment. | |
| .1 | To ensure the H&S plan of the PC is implemented on site. | Clause 4(1)(d) |
| .2 | To ensure that changes to the design are also incorporated in the H&S plan. | Clause 4(1)(e) |
| .3 | To ensure that the principal contractor is registered and in good standing with the workmens’ compensation fund. | Clause 4(1)(f) |
| .4 | To see that the contractor registers the site as a construction site at the Department of Labour. | Clause 4(1)(g) |
| .5 | To discuss with the contractor the H&S plan and then recommend to the client the approval thereof. | Clause 4(2) |
| .6 | To keep a copy of the H&S plan of the contractor in his possession and see that a copy is forwarded to the client. | Clause 4(4) |
| .7 | Control the following on site: | |
| a) | To see that the principal contractor keeps the H&S file up to date and that it is given to the client upon completion of the contract. | Clause 5(7) |
| b) | To see that the principal contractor keeps a data base of all contractors involved with the project. | Clause 5(9) |
| c) | To see that the principal contractor appoints one or more construction supervisors. | |
| d) | To see that this person is dedicated to the particular project only. | Clause 6(4) |
| e) | To receive from the contractor his risk assessment and keep a copy of that for his and the clients records. | Clause 7(1) |

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IN TERMS OF THE CONSTRUCTION REGULATIONS 2003
HEALTH & SAFETY ACT 1993

SECTION 7

7. THE ROLE OF THE CLIENT

7.1	The client shall still prepare the H&S specification in terms of clause 4(1)(a) for its global activities. The H&S specification for the particular project is assigned to the designer.	Clause 4(1)(a)
7.2	The client shall approve of the H&S plan of the contractor, but on the recommendation of the consultant/ designer.	Clause 4(2)
7.3	The client employs the Principal Contractor.	Clause 4(1)(c)
7.4	The client can appoint an agent in which case all the responsibilities of the agent in the regulations are transferred to the agent.	Clause 4(5)
7.5	The client should only appoint an agent should he have made reasonably sure that the agent can handle the responsibility.	Clause 4(6)
7.6	The client shall not appoint a contractor if he is not reasonably sure that the contractor can execute such work in a safe manner.	Clause 4(4)

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SECTION 8

8. THE ROLE OF THE PRINCIPAL CONTRACTOR

The principal contractor should execute the following duties:

- | | | |
|-----|--|--------------|
| .1 | Provide a health and safety plan. | 5(1) |
| .2 | See that his contractors comply with the regulations. | 5(2) |
| .3 | He should discuss the particular H&S plan. | 5(5) |
| .4 | He should have his H&S plan available. | 5(6) |
| .5 | He should have an H&S file available on site and hand it over to the client upon completion. | 5(7) |
| .6 | He should not employ contractors who are not capable. | 5(10) |
| .7 | He should have full time supervision on site. | 6(1) to 6(8) |
| .8 | He should produce a risk assessment of the work. | 7(1) |
| .9 | He should train his employees. | 7(4) |
| .10 | He should introduce induction training on site. | 7(7)/ 7(8) |
| .11 | All physical aspects of the regulations as in terms of the regulations. | |

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SECTION 9

9. THE PROCEDURE

- | | | |
|-----|---|---------------------|
| 9.1 | The Client decides to execute work and appoints a designer to administer the work. | |
| 9.2 | The scope of works and the exact duties of the designer are identified and given to him in writing.

The designer should affect insurance by which the client is indemnified (by the designer) for acts and omissions of the designer. This type of insurance does not form part of the normal PI insurance provided by the designer.

The designer prepares a contract document and ensures that this document states clearly the following: | |
| .1 | A risk assessment of the project and the H&S specification of the client. | |
| .2 | All relevant information to enable the pricing of the contract. | 9(2)(a) |
| .3 | Items in the bill to enable the tenderer to price for the risk including insurance indemnifying the client. The document should state whether a full time safety officer is required on site. | 9(2)(b) |
| .4 | (i) Geotechnical information
(ii) Loading of the structure – in other words all relevant technical data taking the definition of “structure” into account.
(iii) The method and sequence of the process. This should identify the priorities of the client. | 9(2)(c)(i) to (iii) |
| .5 | Inherently dangerous procedures should be avoided in the design. | 9(2)(d) |
| .6 | The maintenance of the structure should be considered also so that this aspect would be safe and ergonomic too. | 9(2)(e) |
| 9.3 | The tenderers then respond by each giving a H&S plan based on the risk assessment of the designer. | |
| 9.4 | The client then chooses the contractor according to his procurement policy (taking into account his ability to do the work safely) and appoints him in writing via the designer. | |
| 9.5 | The chosen principal contractor then affects a detailed risk assessment and a risk management plan, based on the H&S specification. | |

-
- | | |
|------|--|
| 9.7 | Once on site the principal contractor should register the site by means of the prescribed form and have it approved by the client/designer. |
| 9.8 | He should open and then maintain his H&S file through the duration of the contract. |
| 9.9 | He should then further adhere to the provisions of the H&S regulations. |
| 9.10 | He should hand over the H&S file (recommend to do that with the designer's as-built drawings). |
| 9.11 | The designer should stop the work if he has reason to believe that the contractor is executing work in an unsafe manner. |
| 9.12 | Likewise should the principal contractor stop the work of his contractor(s) should he have reason to believe that such contractor is not working safely. |

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SECTION 10

10. **CONTRACT DOCUMENTATION**

The contract documentation needs to emphasize the following points in order to comply with the Health and Safety Act 1993 and the Construction Regulations 2003.

A. **In the Specification section**

1. **Health and Safety Specification**

The Client shall issue the Designer with his Health and Safety specification and it shall be included as such in the document.

Should the Designer be of the opinion that variations and additions be made to the specification, due to the nature of the particular project, he shall forward the proposed variation or addition to the NDM who will authorize this in writing.

2. **Risk Assessment**

This can form part of the contract specifications.

It is necessary to identify to the contractor:

- i) The situation on site as it is with all the potential hazards and dangers involved.
- ii) The nature of the work and the situations that the average contractor would encounter during the execution of the work. The nature of the work and the expected risks should be described in particular as well as the method and the sequence of the work.
- iii) The basic safety precautions that he should take.
- iv) The Safety and Health specification of the client.
- v) To allow sufficient items in the bill of quantities for the tenderer to price for the specified H&S precautions.

3. **Insurance**

The contractor shall affect insurance indemnifying the client against penalties levied upon the client due to the acts or omissions of the contractor in failing to comply with the provisions of the H&S regulations 2003.

The contractor shall prove to the Engineer that such insurance has been affected and maintained during the construction.

B. **The Tender Rules**

The tender rules shall contain a clause requiring the contractor to submit a H&S plan based on the risk assessment given in the contract document. It should also state that the client is bound by law not to appoint a contractor

should he be reasonably sure that the contractor would not be able to execute the work safely should he be appointed.

The following example is recommended.

Compliance with the Regulations of the H&S Act 2003

Tenderers are required to study the published risk assessment and provide Annexure Y his Health and Safety Plan. Generic document will be disregarded. Such H&S plan should give details regarding the tenderers intention of dealing with the risks.

Failure to submit such H&S plan will result in disqualification of the tender.

Tenderers are informed that the client is bound by law not to accept a tender should he be reasonable sure that the tenderer will not be able to execute the work safely.

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GUIDELINES FOR CONTRACT ADMINISTRATION
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HEALTH & SAFETY ACT 1993

SECTION 11

11. **CONCLUSION**

The Construction Regulations 2003 was long overdue in the South African Civil Engineering Construction Industry. Role players will now be forced to implement them and an awareness of safe working environments will be cultivated.

Clients might initially detect a contemptuous attitude particularly from contractors and even designers or consultants. This should not deter clients since acts and omissions from these parties will bring clients in confrontation with the law.

Contract cost will certainly escalate due to the additional specifications but this should be weighed against the value of human lives improved and saved.

The construction industry, particularly the Civil Engineering Sector, will have to accept and embrace these regulations and then seriously look at its productivity to curb the cost of the implementation process.

1.0 **SCOPE**

This part of the specification has the objective to assist principal contractors entering into contracts with The Employer that they comply with the Occupational Health and Safety (OH&S) Act, No 85 of 1993. Compliance with this document does not absolve the principal contractor from complying with minimum legal requirements, and the principal contractor remains responsible for the health and safety of his employees and those of his Mandataries. Principal and other contractors should therefore insist that this part of the specification form part of any contract that he may have with other contractors and/or suppliers.

This section covers the development of a health and safety specification that addresses all aspects of occupational health and safety as affected by this contract. It provides the requirements that the principal contractors and other contractors shall comply with in order to reduce the risks associated with this contract that may lead to incidents causing injury and/or ill health.

2.0 **GENERAL OCCUPATIONAL HEALTH AND SAFETY PROVISIONS**

2.1 **Hazard Identification and Risk Assessment (Construction Regulation 7)**

2.1.1 **Risk Assessments**

Paragraph 4 contains a generic list of risk assessment headings that have been identified by The Employer as possibly applicable to this contract. It is, by no means, exhaustive and is offered as assistance to contractors intending to bid.

2.1.2 **Development of Risk Assessment**

Every principal contractor performing construction work shall, before the commencement of any construction work or work associated with the aforesaid construction work and during such work, cause a risk assessment to be performed by a competent person, appointed in writing, and the risk assessment shall form part of the OH&S plan and be implemented and maintained as contemplated in Construction Regulation 5(1).

The risk assessment shall include at least:

- the identification of the risks and hazards to which persons may be exposed
- the analysis and evaluation of the risks and hazards identifies
- a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards that have been identified.
- a monitoring plan and
- a review plan

Based on the risk assessment, the principal contractor shall develop set site-specific OH&S rules that shall be applied to regulate the OH&S aspects of the construction. The risk assessment, together with the site-specific OH&S rules shall be submitted to The Employer before construction on site commences.

Despite the risk assessment listed in paragraph4, the principal contractor shall conduct a baseline risk assessment and the aforesaid listed risk assessment shall be incorporated into the baseline risk assessment. The baseline assessment shall further include the standard working procedures and the applicable method statements based on the risk assessments.

All variations to the scope of work shall similarly be subjected to a risk assessment process.

2.1.3 Review of Risk Assessment

The principal contractor shall review the hazard identification, risk assessments and standard working procedures at each production planning and progress report meetings as the contract work develops and progresses and each time changes are made to the designs, plans and construction methods and processes. The principal contractor shall provide The Employer, other contractors and all other concerned parties with copies of any changes, alterations or amendments as contemplated in paragraph 2.1.3.

2.2 Legal Requirements

A principal contractor shall, as minimum, comply with:

The Occupational Health and Safety Act and Regulations (Act 85 of 1993), an up to date copy of which shall be available on site at all times.

The Compensation or Occupational Injuries and Diseases Act (Act 130 of 1993), an up to date copy of which shall be available on site at all times.

Where work is being carried out on a “mine”, the contractor shall comply with the Mines Health and Safety Act and Regulations (Act 29 of 1960) and any other OH&S requirements that the mine may specify. An up-to-date copy of the Mine’s Health and Safety Act and Regulations shall be available on site at all times.

2.3 Structure and Responsibilities

It is a requirement that the principal contractor, when he appoints contractors (Sub-contractors) in terms of Construction Regulations 5(3), 5(5), 5(10), and 5(12) includes in his agreement with such contractors the following:

- OH& S Act (85 of 1993), Section 37(2) agreement: “Agreement with Mandatory”
- OH&S Act (85 of 1993), Section 16(2) appointee/s as detailed in his / her/ their respective appointment forms.

2.2.3 Further (Specific) Supervision Responsibilities for OH & S

The contractor shall appoint designated competent employees and/or other competent persons as required by the Act and Regulations. Below is a generic list of identified appointments and may be used to select the appropriate

appointments for this contract. The contractor shall note it is a generic list only and is intended for use as a guideline.

Ref. Section/ Regulation in OHS Act	
Batch Plant Supervisor	(Construction Regulation 6(1))
Construction Vehicles/ Mobile Plant/ Machinery Supervisor	(Construction Regulation 21)
Demolition Supervisor	(Construction Regulation 12)
Drivers/Operators of Construction Vehicles/ Plant	(Construction Regulation 21)
Electrical Installation and Appliances Inspector	(Construction Regulation 22)
Emergency/Security/Fire Control	(Construction Regulation 27)
Excavation Supervisor	(Construction Regulation 11)
Explosive powered Tool Supervisor	(Construction Regulation 19)
Fall Protection Supervisor	(Construction Regulation 8)
First Aider	(Construction Regulation 3)
Fire Equipment Inspector	(Construction Regulation 27)
Formwork & Support work Supervisor	(Construction Regulation 10)
Hazardous Chemical Substances Supervisor	(HCS Regulations)
Incident Investigator	(General Admin Regulation 29)
Ladder Inspector	(General Safety Regulation 13A)
Lifting Equipment Inspector	(Construction Regulation 20)
Material Hoist Inspector	(Construction Regulation 17)
OH&S Committee	(OH&S Section 19)
OH&S Officer	(Construction Regulation 6(6))
OH&S Representatives	(OHS Act Section 17)
Person Responsible for Machinery	(General Machinery Regulation 2)
Scaffolding Supervisor	(Construction Regulation 14)
Stacking & Storage Supervisor	(Construction Regulation 26)
Structures Supervisor	(Construction Regulation 9)
Suspended Platform Supervisor	(Construction Regulation 15)
Tunneling under Pressure Supervisor	(Construction Regulation 13)
Vessel under Pressure Supervisor	(Vessel under Pressure Regulations)
Working on/next to Water Supervisor	(Construction Regulation 24)
Welding Supervisor	(General Safety Regulation 9)

In addition The Employer requires that a Traffic Safety Officer be appointed (see COLTO Section 1500). The above appointments shall be in writing and the responsibilities clearly stated together with the period for which the appointment is made. This information shall be communicated and agreed with the appointees. Notice of appointments shall be submitted to The Employer. All changes shall also be communicated to the Employer.

The principal contractor or shall, furthermore, provide The Employer with an organogram of all contractors that he/she has appointed or intends to appoint and keep this list updated and prominently displayed on site.

Where necessary, or when instructed by an inspector of the Department of Labour, the principal contractor shall appoint a component safety officer.

2.3.3 Designation of OH&S Representatives (Section 17 of the OH&S Act)

Where the principal contractor employs more than 20 persons (including the employees of other contractors (sub-contractors) he has to appoint one OH&S representatives for every 5 employees or part thereof. General Administrative Regulation 6 requires that the appointment or election and subsequent designation of the OH&S representatives be conducted in consultation with employee representatives or employees. (Section 17 of the Act and General Administrative Regulation 6 & 7). OH&S representatives shall be designated in writing and the designation shall include the area of responsibility of the person and term of the designation.

2.3.4 Duties and Functions of the OH&S representatives (Section 18 of the OH&S Act)

The principal contractor shall ensure that the designated OH&S representatives conduct continuous monitoring and regular inspections of their respective areas of responsibility using a checklist and report thereon to the principal contractor. OH&S representatives shall be included in accident or incident investigations. OH&S representatives shall attend all OH&S committee meetings.

2.3.5 Appointment: of OH&S Committee (Section 19 and 20 of the OH&S Act)

The principal contractor shall establish an OH&S committee, which shall meet as specified in the Regulations.

2.4 Administrative Controls and the Occupational Health & Safety File

2.4.1 The OH&S File (Construction Regulation 5(7))

As required by the Construction Regulation 5(7), the principal contractor and other contractors shall each keep an OH&S file on site. The following list is not exhaustive and shall only be used as a guide:

- Notification of construction work (Construction Regulation 3)
- Latest copy of OH&S Act (General Administrative Regulation 4)
- Proof of registration and good standing with COID Insurer (Construction Regulation 4(g))
- OH&S plan agreed with the client including the underpinning risk assessment/s and method statements (Construction Regulation 5(1))
- Copies of OH&S committee and other relevant minutes
- Designs/Drawings (Construction Regulation 5(8))
- A list of contractors (sub-contractors) including copies of the agreements between the parties and the type of work being done by each contractor (Construction Regulation 9)
- Appointment/designation forms as per paragraphs 2.1.1 and 2.1.2
- Registered as follows:
 - Accident/incident register (Annexure 1 of the General Administrative Regulations)
 - OH&S representatives' inspection register
 - Asbestos demolition and stripping register
 - Batch plant inspections
 - Construction vehicles and mobile plant inspections by controller
 - Daily inspection of vehicles, plant and other equipment by the operator/driver/user
 - Demolition inspection register
 - Designer's inspection of structures record
 - Electrical installations, equipment and appliances including portable electrical tools)
 - Excavations inspector
 - Explosive powered tool inspection, maintenance, issue and returns register (incl. Cartridges and nails)
 - Fall protection inspection register
 - First aid box contents
 - Fine equipment inspection and maintenance
 - Formwork and support work inspections
 - Hazardous chemical substances record
 - Ladder inspections
 - Lifting equipment register
 - Materials hoist inspection register
 - Machinery safety inspection register (incl. Machine guards, lock-outs etc.)
 - Scaffolding inspections
 - Stacking and storage inspection
 - Inspection of structures
 - Inspection of suspended platforms
 - Inspection of tunnelling operations
 - Inspection of vessels under pressure

- Welding equipment inspections
- Inspection of work conducted near water
- All other applicable records including traffic safety officer reports.

The Employer will conduct an audit on the OH&S file of the principal constructor from time-to time.

2.5 Notification of Construction Work (Construction Regulation 3)

The principal constructor shall, where the contract meets the requirements laid down in Construction work and use the form (Annexure A in the Construction Regulations) for the purpose. A copy shall be kept on the OH&S file and a copy shall be forwarded to The Employer for record keeping purposes.

2.6 Training and Competence

The contents of all training required by the Act and Regulations shall be included in the principal contractor's OH&S plan. The principal contractor shall be responsible for ensuring that all relevant training is undertaken.

Only accredited service providers shall be used for OH&S training. The principal contractor shall ensure that his and other contractor's personnel appointed are competent and that all training required to do the work safely and without risk to health, has been completed before work commences. The principal contractor shall ensure that follow-up and refresher training is conducted as the contract progresses and the work situation changes. Records of all training must be kept on the OH&D file for auditing purposes.

2.7 Consultations, Communication and Liaison

OH&S liaison between the client, the principal contractor, the other contractors, the designer and other concerned parties will be through the OH&S committee as contemplated in paragraph 2.3.5. In addition to the above, communication may be directly to the client or his appointed agent, verbally or in writing, as and when the need arises.

Consultation with the workforce on OH&S matters will be through their supervisions, OH&S representatives and the OH&S committee. The principal contractor shall be responsible for the dissemination of all relevant OH&S information to the other contractors e.g. design changes agreed with the client and the designer, instructions by the client and/or/his/her agent, exchange of information between contractors, the reporting of hazardous/dangerous conditions/situations etc. The principal contractor's most senior manager on site shall be required to attend all OH&S meetings.

2.8 Checking Reporting and Corrective Actions

2.8.1 Monthly Audit by Client (Construction Regulation 4(1) (d))

The Employer will conduct monthly audits to comply with Construction Regulation 4(1)(d) to ensure that the principal contractor has implemented and is maintaining the agreed and approved OH&S plan.

2.8.2 Other Audits and Inspections by The Employer

The Employer reserves the right to conduct other hoc audits and inspections as deemed necessary. This will include site safety walks.

2.8.3 Contractor's Audits and Inspections

The principal contractor is to conduct his own monthly internal audits to verify compliances with his own OH&S management system as well as this specification.

2.8.4 Inspections by OH&S Representatives and other Appointees

OH&S representatives shall conduct weekly inspections of their areas of responsibility and report thereon to their foreman or supervisor whilst other appointees shall conduct inspections and report thereon as specified in their appointments e.g. vehicle and machinery drivers, operators and users must conduct daily inspections before start-up.

2.8.5 Recording and Review of Inspection Results

All the results of the above mentioned inspections shall be in writing at OH&S committee meetings, endorsed by the chairman of the meeting and placed on the OH&S File.

2.9 Accidents and Incident Investigation (General Administrative Regulation 9)

The principal contractor shall be responsible for the investigation of all accidents/incidents where employees and non-employees were injured to the extent that he/she/they had to be referred for medical treatment by a doctor, hospital or clinic. The results of the investigations shall be entered into an accident/incident register listed in paragraph 2.4.1

The principal contractor shall be responsible for the investigation of all minor and non-injury incidents as described in Section 24 (1) (b) & (c) of the Act and keeping a record of the results of such investigations including the steps taken to prevent similar accidents in future.

2.10 Reporting

The principal contractor shall provide the Employer with copies of all statutory reports required in terms of the Act within 7 days of the incident occurring.

3.0 OPERATIONAL CONTROL

3.1 Operational Procedures

Each construction activity shall be assessed by the principal contractor so as to identify operational procedures that will mitigate against the occurrence of an incident during the execution of each activity. This specification requires the principal contractor:

- to be conversant with Regulations 8 to 29 (inclusive)
- to comply with their provisions
- to include them in his OH&S plan where relevant

3.2 Emergency Procedure

Simultaneous with the identification of operational procedures (per paragraph 3.1 above), the principal contractor shall similarly identify and formulate emergency procedures in the event an incident does occur. The emergency procedures thus identified shall also be included in the principal contractor's OH&S plan.

3.3 Personal & Other Protective Equipment (Section 8/ 15/ 23 of the OH&S Act)

The contractor shall identify the hazards in the workplace and deal with them. He must either remove them or, where impracticable, take steps to protect workers and make it possible for them to work safely and without risk to health under the hazardous conditions.

Personal protective equipment (PPE) should, however, be the last resort and there should always first be an attempt to apply engineering and other solutions to mitigating hazardous situations before the issuing of PPE is considered.

Where it is not possible to create an absolutely safe and healthy workplace the contractor shall inform employees regarding this and issue, free of charge, suitable equipment to protect them from any hazards being present and that allows them to work safely and without risk to health in the hazardous environment.

It is a further requirement that the contractor maintain the said equipment, that he instructs and trains the employees in the use of the equipment and ensures that the prescribed equipment is used by the employee/s.

Employees do not have the right to refuse to use/wear the equipment prescribed by the employer and, if it is impossible for an employee to use or wear prescribed protective equipment through health or any other reason, the employee cannot be allowed to continue working under the hazardous condition/s for which the equipment was prescribed but an alternative solution has to be found that may include relocating or discharging the employee.

The principal contractor shall include in his OH&S plan the PPE he intends issuing to his employees for use during construction and the sanctions he intends to apply in cases of non-conformance by his employees. Conformance to the wearing of PPE shall be discussed at the weekly inspection meetings.

3.4 Other Regulations

Wherever in the Construction Regulations or this specification there is reference to other regulations (e.g. Construction Regulation 22: Electrical and Machinery on Construction Sites) the principal contractor shall be conversant with and shall comply with these regulations.

3.5 Public Health and Safety (Section 9 of the OH&S Act)

The principal contractor shall be responsible for ensuring that non-employees affected by the construction work are aware of the dangers likely to arise from said construction work as well as the precautionary measures to be observed to avoid or minimize those dangers. This includes:

- *Non-employees entering the site for whatever reason*
- *The surrounding community*
- *Passers by to the site*

4.0 PROJECT/S SPECIFIC REQUIREMENTS

4.1 List of Risk Assessments

- Clearing and Grubbing of the areas/site
- Site establishment including:
 - Offices
 - Secure/safe storage for materials and equipment
 - Ablutions
 - Sheltered eating area
 - Maintenance workshop
 - Vehicle access to the site
- Dealing with existing structures
- Location of existing services
- Installation and maintenance of temporary construction electrical supply, lightning and equipment
- Adjacent land uses/surrounding property exposures
- Boundary and access control/public liability exposures (NB: the employer is also responsible for the OH&S of the non-employees affected by his/her work activities)
- Health risks arising from neighbouring as well as own activities and from the environment e.g. threats by dogs, bees, snakes and lightning etc.
- Exposure to noise
- Exposure to vibration
- Protection against dehydration and heat exhaustion
- Protection from wet and cold conditions

- Dealing with HIV/AIDS and other diseases
- Use of portable electrical equipment including
 - Angle grinder
 - Electrical drilling machine
 - Still saw
- Excavation including
 - Ground/soil conditions
 - Trenching
 - Shoring
 - Drainage of trench
- Welding including
 - Arc welding
 - Gas welding
 - Flame cutting
 - Flame cutting
 - Use of LP gas torches and appliances
- *Loading and offloading of truck*
- *Aggregate/sand and other materials delivery*
- *Manual and mechanical handling*
- *Lifting and powering operators*
- *Driving and operation of construction vehicles and mobile plant including.*
 - Trenching machine
- Use and storage of flammable liquids and other hazardous substances
- Layering and bedding
- Installation of pipes in pipelines
- Backfilling trenches
- Protection against flooding
- Gabion work
- Use of explosive
- Protection form overhead power lines
- As discovered by the principal contractor's hazard identification exercise
- As discovered from any inspection and audits conducted by the client of by the principal contractor or any other contractor on site
- As discovered from any accident/incident investigation

FORM C1.5 SUPPLY CHAIN MANAGEMENT POLICY

Please refer to O.R. Tambo District Municipality's Procurement Policy.

C2 PRICING DATA

C2.1 Pricing Instructions

C2.2 Bill of Quantities

FORM C2.1 PRICING INSTRUCTIONS
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1. The Tender Data, the Scope of Work and the Drawings are to be read in conjunction with the Schedule of Quantities.
2.
 - a. The Schedule comprises items covering the Consortium's profit and costs of general liabilities and of the construction of temporary and permanent Works.
 - b. Although the Tenderer is at liberty to insert a rate of his own choosing for each item in the Schedule, his attention is drawn to the fact that the tenderer has the right, under various circumstances, to payment for additional works carried out and that the Client is obliged to base his assessment of the payment to be paid for such additional work on the rates inserted in the Schedule by the tenderer.
 - c. Clause 8 of each Standardized Specification and the measurement and payment clause of each Particular Specification, read together with the relevant clause of the Project Specification, set out what ancillary or associated activities are included in the rate for the operations specified.
3. Descriptions in the Schedule of Quantities are abbreviated. The schedule has been drawn up generally in accordance with the latest issue of "Civil Engineering Quantities". Should any requirement of the measurement and payment clause of the applicable Standardized Specification, or the Project Specification, or the Particular Specification(s) conflict with the terms of the Schedule or, when relevant "Civil Engineering Quantities", the requirement of the Standardized, Project or Particular Specification, as applicable, shall prevail.
4. Unless otherwise stated, items are measured net in accordance with the Drawings, and no allowance has been made for waste.
5. The prices and rates to be inserted in the Schedule of Quantities are to be the full inclusive prices to the Employer for the work described under the several items. The prices and rates shall be exclusive of Value Added Tax. Such prices shall cover all costs and expenses that may be required in and for the construction 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.
6. A price or rate is to be entered, in **BLACK INK**, against each item in the Schedule of Quantities.
7. In the event of the Tenderer failing to price any item it will be held that the Tenderer has made adequate allowance under other items for all labour, material and costs required for the execution, not only of the quantum of work covered by the unpriced item but also for any increase in the said quantum which may have to be undertaken during the course of the Contract.

8. An amount or rate shall be entered against each item in the Bill of Quantities, whether or not quantities are stated. An item against which no amount or rate is entered will be considered to be covered by the other amounts or rates in the Bill.

The Bidder shall also fill in a rate against the items where the words "rate only" appears in the amount column. Although no work is foreseen under these items and no quantities are consequently given in the quantity column, the bid rates should apply should work under these items actually be required.

9 The quantities set out in the schedule of quantities are only approximate quantities. The quantities of work finally accepted and certified for payment, and not the quantities given in the schedule of quantities, will be used to determine payments to the contractor.

10 For the purposes of this Bill of Quantities, the following words shall have the meanings hereby assigned to them:

- Unit : The unit of measurement for each item of work as defined in the Standardized, Project or Particular Specifications
- Quantity : The number of units of work for each item
- Rate : The payment per unit of work at which the Bidder bids to do the work
- Amount : The quantity of an item multiplied by the bid rate of the (same) item
- Sum : An amount bid for an item, the extent of which is described in the Bill of Quantities, the Specifications or elsewhere, but of which the quantity of work is not measured in units

11 The units of measurement indicated in the Bill of Quantities are metric units. The following abbreviations may appear in the Bill of Quantities:

- mm = millimetre
- m = metre
- km = kilometre
- km-pass = kilometre-pass
- m² = square metre
- m²-pass = square metre-pass
- ha = hectare
- m³ = cubic metre
- m³-km = cubic metre-kilometre
- kW = kilowatt
- kN = kilonewton
- kg = kilogram
- t = ton (1 000 kg)
- % = per cent
- MN = mega Newton

CONTRACT NO.: ORTDM SCMU 30-21/22

Lukwethu RWSS & Surrounding Villages (Phase 1): New Rest and Ngcanasini – ward 29

C2.2 Bill of Quantities

FORM C2.2 BILL OF QUANTITIES

O.R. TAMBO DISTRICT MUNICIPALITYLUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI
RETICULATION IN WARD 29

ORTDM SCMU 30-21/22

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
1	SANS 1200 A	PRELIMINARY AND GENERAL				
1.1	8,3	<u>Scheduled Fixed-Charge and Value-Related Items</u>				
1.1.1	8.3.1	Contractual Requirements <u>Provision for the site facilities:</u>	Sum	1		
1.1.2	8.3.2.1	a) Facilities for the Engineer (Facilities to be Made COVID-19 Safe). Items A to C	Sum	1		
1.1.3	8.3.2.2	b) Facilities for the Contractor (Facilities to be Made COVID-19 Safe). Items A to J	Sum	1		
1.1.4	8.3.3	General responsibilities and other fixed charge obligations including other obligations for COVID-19	Sum	1		
1.1.5	8.3.4	Removal of site establishment on completion of the project	Sum	1		
1.1.6		Compliance with the OHS Act regulations (Rate to include for risk assessment specific to the COVID-19 Ependemic and other adjustments to ensure compliance for the assignment including maintenance of a register for workers contacts.)	Sum	1		
1.1.7		Preparation of a OHS Plan	Sum	1		
		<u>Costs of medical certificate and Medical Surveillance including Screenings for Employees with COVID-19Symptoms</u>				
1.1.8		a) Initial (baseline) medical examinations	No.	50		
1.1.9		b) Exit examinations	No.	50		
1.1.10		Allowance for Health and Safety Officer	Sum	1		
		<u>Environmental Managemant</u>				
1.1.11		a) Compliance with Environmental Management plan including waste management for COVID-19 - Waste Bins	Sum	1		
1.1.12		Provision of survey equipment for the use of the Engineer	No	1		
1.2	8.4	SCHEDULED TIME-RELATED ITEMS				
1.2.1	8.4.1	Contractual requirements	Sum	1		
1.2.2	8.4.2	Occupation and maintainance of the site facilities				
1.2.3	8.4.2.1	a) Facilities for the Engineer (Facilities to be Made COVID-19 Safe). Items A to C	Sum	1		
1.2.4	8.4.2.2	b) Facilities for the Contractor (Facilities to be Made COVID-19 Safe). Items A to J	Sum	1		
Carried Forward						

O.R. TAMBO DISTRICT MUNICIPALITYLUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI
RETICULATION IN WARD 29

ORTDM SCMU 30-21/22

SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
1.2.5		General responsibilities and other time related obligations including other obligations for COVID-19	Sum	1		
1.2.6		Compliance with the OHS Act regulations (Rate to include for risk assessment specific to the COVID-19 Ependemic and other adjustments to ensure compliance for the assignment including maintenance of a register for workers contacts.)	Sum	1		
1.2.8	8.4.3	Fulltime OHS supervision for the duration of the contract by an independed OHS Agent	Prov. Sum	1	R216 000,00	R216 000,00
1.2.9		Contractors supervision for the duration of the contract	Sum	1		
1.3		SUMS STATED PROVISIONALLY BY THE ENGINEER				
1.3.1	PSA3	Employment of CLO for the duration of the Contract (R4500 pm plus R500 pm cellphone allowance)	Prov. Sum	1	R60 000,00	R60 000,00
1.3.2		Contractors markup on item 1.3.1	%			
1.3.3		Allow for senior Project Manager for the full duration of the contract	Prov. Sum	1	R144 000,00	R144 000,00
1.3.4		Allow for full time site supervision (Resident Engineer and Assistant Resident Engineer) for the full duration of the contract	Prov. Sum	1	R384 000,00	R384 000,00
1.3.5		Contractors markup on item 1.3.3 and 1.3.4	%			
1.3.6		Allow for Civil Engineering trainee	Prov. Sum	1	R78 000,00	R78 000,00
1.3.7		Contractors markup on item 1.3.6	%			
1.3.8		Allow for accommodation for site personnel for the full duration of the contract	Prov. Sum	1	R54 000,00	R54 000,00
1.3.9		Contractors markup on item 1.3.8	%			
1.3.10		Provision of Laptop computers and printer for the use of the RE and ARE for the full duration of the contract	Prov. Sum	1	R14 500,00	R14 500,00
1.3.11		Contractors markup on item 1.3.10	%			
1.3.12		Allow for Data and Airtime to the Engineers site personnel for the duration of the Contract	Prov. Sum	1	R24 000,00	R24 000,00
1.3.13		Contractors markup on item 1.3.12	%			
1.3.14		Provision of Engineering Survey as instructed by the Engineer	Prov. Sum	1	R45 000,00	R45 000,00
1.3.15		Contractors markup on item 1.3.14	%			
Carried Forward						

O.R. TAMBO DISTRICT MUNICIPALITYLUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI
RETICULATION IN WARD 29

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SECTION 1: PRELIMINARY AND GENERAL

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
1.3.16		Allow for the provision of the Engineer's Bakkie for the duration of the Contract. The amount allowed for is inclusive of fuel	Prov. Sum	1	R102 000,00	R102 000,00
1.3.17		Contractors markup on item 1.3.16	%			
1.3.18		Payment of PSC members for attendance of meetings for the duration of the contract (5 No members at R200 per member per meeting)	Prov. Sum	1	R12 000,00	R12 000,00
1.3.19		Contractors markup on item 1.3.18	%			
		<u>Temporary Works</u>				
1.3.20		Maintain all roads where construction activities will take place	Prov. Sum	1	R25 000,00	R25 000,00
1.4	8.7	<u>Dayworks</u>				
1.4.1		Foreman	hr	100		
1.4.2		Skilled	hr	100		
1.4.3		Semi-skilled	hr	100		
1.4.4		Unskilled	hr	100		
Total Carried Forward To Summary						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI

RETICULATION IN WARD 29

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SECTION 2 : SITE CLEARANCE

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
2	SANS 1200 C & PSC	SITE CLEARANCE				
2,1		<u>CLEAR SITE</u>				
2.1.1	8.2.1	Clear and grub vegetation in strip 2m wide on pipe route. Rate to include for trees of girth up to and including 1m.	m	6 065		
2.1.2	8.2.2	<u>Where instructed remove and grub large trees and tree stumps of girth:</u>				
2.1.2.1	8.2.2(a)	over 1m and up to 2m.	No.	10		
2.1.3	8.2.10	Remove topsoil in 600mm wide strip to depth of 150mm, stockpile, maintain and reinstate.	m ³	546		
2.1.4	PSC 8.2.13	<u>Remove existing gravel layer works to stockpile and maintain (for use as selected layers) as instructed by the Engineer.</u>				
2.1.4.1		Gravel layer works to District Roads.	m ³	150		
2.1.4.2		Fill material	m ³	75		
2.1.4.3		Relocation of existing fences	km	1		
2.1.4.4		Working adjacent to existing services (stormwater pipes, stormwater v-drains, water pipes and electrica and telecommunication services)	m	500		
2.1.4.5		Working parallel to existing services (stormwater pipes, stormwater v-drains, water pipes and electrica and telecommunication services)	No	10		
Total Carried Forward To Summary						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI
RETICULATION IN WARD 29

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SECTION 3 : PIPE TRENCHES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
3	SANS 1200 D & 200 DB	PIPE TRENCHES				
3,1	PSDB 8.3.2	<u>Excavation</u>				
3.1.1	8.3.2(a)	<u>Excavate in all materials for trenches backfill, compact, and dispose of surplus/unsuitable material, for pipes:</u>				
3.1.1.1		<u>Up to and including 200mm ND for total trench depth:</u>				
3.1.1.1.1		Exceeding 0,0m but not exceeding 1.5m	m ³	5 459		
3.1.1.1.2		Exceeding 1.5m but not exceeding 3.5m	m ³			Rate Only
3.1.1.1.3		Extra over item for 3.1.1.1.1 for hard rock (Prov)	m ³	2 729		
3.1.1.1.4		Extra over item for 3.1.1.1.1 for bolder excavation (Prov)	m ³	546		
3.1.1.1.5		Extra over item for 3.1.1.1.1 for blasting to remove rock	PSum	1	R180 000,00	R180 000,00
3.2		<u>Slope Protection (Provisional)</u>				
3.2.1		Earth diversion berms as instructed by the Engineer	No.	8		
Total Carried Forward to Summary						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI

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SECTION 4: GABIONS AND PITCHING

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
4	SANS 1200 DK	GABIONS AND PITCHING				
4,1	8,2	Excavate materials for gabions	m ³	30		Rate Only
4,2	8.2.1	<u>Surface preparation for bedding of gabions.</u>				
4.2.1	8.2.1	Cavities filled with approved excavated material or rock (Provisional Quantity)	m ²	100		Rate Only
4.2.2	8.2.1	Cavities filled with 15MPa concrete	m ²	20		Rate Only
4,3	8.2.2 PSDK 3.1.2	<u>Construct gabions using double twisted hexagonal mesh type 80 with 3.4mm OD frame wire and 2.7mm OD mesh wire to SANS 1480:2005:</u>				
4.3.1		Supply and install the following rock filled gabion baskets complete :				
4.3.1.1		2 x 1 x 1m with 80 x 100mm galv. mesh	m ³	50		Rate Only
4.3.1.2		3 x 2 x 1m with 80 x 100mm galv. mesh (Reno Mattress)	m ³	20		Rate Only
4,4	8.2.4 PSDK 3.1.3	<u>Geotextile (Type AG 200) placed where ground water seepage occurs:</u>				
4.4.1	8.2.4	Below gabion mattresses	m ²	100		Rate Only
Total Carried Forward To Summary						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI

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SECTION 5 : BEDDING

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
5	SANS 1200 LB & PS LB	BEDDING				
5,1	8.2.1 & PS LB 3.1	<u>Provision of Bedding from Trench Excavation</u>				
5.1.1	8.2.1 (a)	Selected granular material	m ³	1 954		
5.1.2	8.2.1 (b)	Selected fill material	m ³	3 505		
5,2	8.2.2	<u>Supply only of Bedding by Importation</u>				
5.2.1	8.2.2.1	<u>From other necessary excavations (Provisional)</u>				
5.2.1.1	8.2.2.1 (a)	Selected granular material	m ³	586		
5.2.1.2	8.2.2.1 (b)	Selected fill material	m ³	1 051		
5.2.2	8.2.2.3	<u>From Commercial sources</u>				
5.2.2.1	8.2.2.3 (a)	Selected granular material	m ³	195		
5.2.2.2	8.2.2.3 (b)	Selected fill material	m ³	350		
5,3	8.2.3	<u>Concrete Bedding Cradle (Provisional)</u>				
5.3.1		15/19 Grade concrete	m ³	6		
5,4	8.2.4	<u>Encasing of Pipes in Concrete (Provisional)</u>				
5.4.1		Encasement of Pipe in 25/19 Grade concrete including all formwork and reinforcement (100kg steel per m ³ concrete) for water crossings. Refer to standard detail	m ³	18		
5,5	8.2.4	<u>Thrust Blocks</u>				
5.5.1		Construct thrust blocks in 25/19 Grade concrete including all preparation work and formwork required. Refer to standard detail	m ³	12		
Total Carried Forward To Summary						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI

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SECTION 6 : MEDIUM PRESSURE PIPELINES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
6	SANS 1200 L	MEDIUM PRESSURE PIPELINES				
6,1	8.2.1	<u>Supply, bed, lay, disinfect, join and test potable water pipelines. All works inclusive in the rate, except where specific items are provided. All activities in accordance with project specifications.:</u>				
		<u>HDPe Pipes</u>				
6.1.1		50 mm dia. PN 10	m	5 540		
6.1.2		50 mm dia. PN 12.5	m	0		Rate Only
6.1.3		63 mm dia. PN 10	m	500		
6.1.4		63 mm dia. PN 12.5	m	0		Rate Only
6.1.5		75 mm dia. PN 10	m	25		
6.1.6		75 mm dia. PN 12.5	m	0		Rate Only
		<u>uPVC Pipes</u>				
6.1.7		75 mm dia. CL 9	m	0		Rate Only
6.1.8		75 mm dia. CL 12	m	0		Rate Only
6.1.9		90 mm dia. CL 9	m	0		Rate Only
6.1.10		90 mm dia. CL 12	m	0		Rate Only
6.1.11		110 mm dia. CL 9	m	0		Rate Only
6.1.12		110 mm dia. CL 12	m	0		Rate Only
6,2	PSL 8.2.16	Pipeline Markers as per standard detail	No.	20		Rate Only
6.2.1		Supply and install standpipe complete including HDPE saddle, 32mm HDPE pipe(20m), tap and galvanised riser pipe, concrete work including shuttering, elbows, nipples, etc, as per standard drawings. Work to be executed by a nominated SMME sub contractor	Prov Sum	23		Rate Only
6.2.2		Install Aqua Flow limiters where instructed by the Engineer complete as per detailed drawings. Work to be executed by a nominated SMME sub contractor	Prov Sum	23		Rate Only
6,3		Connect into existing reservoir/s and make good.	Prov Sum	1	80 000,00	R80 000,00
Total Carried Forward to Summary						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI

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SECTION 7 : PIPE SPECIALS AND FITTINGS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
7	SANS 1200 L	PIPE FITTINGS AND SPECIALS				
	8.2.2 PSL 8.2.4 PSL 8.2.5	<u>Extra-over 8.2.1 for the Supplying, Laying and Bedding of Specials complete with Couplings as follows:-</u>				
	8.2.4 PSL 8.2.6	<u>Supply, lay, joint and bed including cutting pipes where required for the following:</u>				
7.1.		<u>HDPE Pipe Bends (PN 10)</u>				
7.1.1		50mm dia. x 45° bends.	No.	56		
7.1.2		50mm dia. x 90° bends.	No.	23		
7.1.3		63mm dia. x 45° bends.	No.	5		
7.1.4		63mm dia. x 90° bends.	No.	2		
7.1.5		75mm dia. x 45° bends.	No.	1		
7.1.6		75mm dia. x 90° bends.	No.	1		
7,2		<u>uPVC Pipe Bends (CL 9)</u>				
7.2.1		75mm dia. x 11.25° bends.	No.	0		Rate Only
7.2.2		75mm dia. x 22.5° bends.	No.	0		Rate Only
7.2.3		75mm dia. x 45° bends.	No.	0		Rate Only
7.2.4		75mm dia. x 90° bends.	No.	0		Rate Only
7.2.5		90mm dia. x 11.25° bends.	No.	0		Rate Only
7.2.6		90mm dia. x 22.5° bends.	No.	0		Rate Only
7.2.7		90mm dia. x 45° bends.	No.	0		Rate Only
7.2.8		90mm dia. x 90° bends.	No.	0		Rate Only
7.2.9		110mm dia. x 11.25° bends.	No.	0		Rate Only
7.2.10		110mm dia. x 22.5° bends.	No.	0		Rate Only
7.2.11		110mm dia. x 45° bends.	No.	0		Rate Only
7.2.12		110mm dia. x 90° bends.	No.	0		Rate Only
7,3		<u>Socketed Reducers (PN10)</u>				
7.3.1		110mm x 90mm	No.	0		Rate Only
7.3.2		90mm x 75mm	No.	0		Rate Only
7.3.3		75mm x 63mm	No.	1		
7.3.4		63mm x 50mm	No.	3		
Carried Forward						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI

RETICULATION IN WARD 29

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SECTION 7 : PIPE SPECIALS AND FITTINGS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward						
7,4		<u>Equal Tees (PN10)</u>				
7.4.1		50mm x 50mm	No.	10		
7.4.2		63mm x 63mm	No.	1		
7.4.3		75mm x 75mm	No.	0		Rate Only
7.4.4		90mm x 90mm	No.	0		Rate Only
7.4.5		110mm x 110mm	No.	0		Rate Only
Total Carried Forward To Summary						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI
 RETICULATION IN WARD 29
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SECTION 8 : VALVES

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
8		VALVES				
8,1	8.2.3	<u>Extra-over 8.2.1 for the supplying, fixing and Bedding of Valves as indicated below:</u>				
		<u>Isolation Valves Complete</u>				
8.1.1	PSL 3.13.2	Supply and install the following flanged Resilient seal Gate valves complete with prefabricated valve chamber, PN 10 with non-rising spindle, Clockwise closing, including all gaskets, bolts, nuts and washers as per detailed drawings. All valve chambers will be installed by SMME contractors				
8.1.1.1		50mm	No.	2		
8.1.1.2		63mm	No.	1		
8.1.1.3		75mm	No.	1		
8.1.1.4		90mm	No.	0		Rate Only
8.1.1.5		110mm	No.	0		Rate Only
		<u>Bulk Water Meter Complete</u>				
8.1.2	8.2.5	Supply and install Bulk Water Meter assemblies complete with prefabricated meter chamber as per detailed drawings. All valve chambers will be installed by SMME contractors				
8.1.2.1		90mm	No.	1		
8.1.2.2		110mm	No.	0		Rate Only
8.1.2.3		160mm	No.	0		Rate Only
8.1.2.4		200mm	No.	0		Rate Only
Total Carried Forward to Summary						

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SECTION 9 : RESERVOIRS

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
9		RESERVOIRS				
9,1		Construct 0.5kl prefabricated Break Pressure Tank complete as per detail drawings. Work to be executed by SMME contractor	Prov Sum	1	R 161 253,74	R161 253,74
Total Carried Forward to Summary						R161 253,74

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SECTION 10 : PROVISIONAL SUM FOR SMME CONTRACTOR

ITEM NO	PAYMENT	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
10		PROVISIONAL SUMS				
10,1		Provision for works to be executed / subcontracted to local SMME contractors	Prov. Sum	1	R 865 761,10	R 865 761,10
10,2		Contractors mark-up for supervision of SMME Contractor	%			
Total Carried Forward to Summary						

O.R. TAMBO DISTRICT MUNICIPALITY

LUKWETHU REGIONAL WATER SUPPLY AND SURROUNDING VILLAGES (PHASE 1) - NEW REST AND NGCANASINI RETICULATION IN WARD 29

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SUMMARY OF SECTIONS

SECTION	DESCRIPTION	AMOUNT (RAND)
1	PRELIMINARY AND GENERAL	
2	SITE CLEARANCE	
3	PIPE TRENCHES	
4	GABIONS AND PITCHING	
5	BEDDING	
6	MEDIUM PRESSURE PIPELINES	
7	PIPE FITTINGS AND SPECIALS	
8	VALVES	
9	RESERVOIRS	
10	PROVISIONAL SUMS	
11	TOTAL OF SECTIONS (VAT EXCLUDED)	
12	ADD: CONTINGENCIES @ 10%	
13	SUB-TOTAL	
14	ADD: VAT @ 15%	
15	TOTAL PROJECT COST	

C3 SCOPE OF WORKS

All definitions, interpretations and general provisions for the General Conditions of Contract for Construction Work (2015) (3rd edition) are applicable.

C 3.1 DESCRIPTIONS OF WORKS

C3.1.1 Client's Objective

The Client's objective is to supply water to Lukwethu and Surrounding villages (Phase 1) – NEW REST AND NGCANASINI villages in KSD Ward 29. The contractor shall use the reasonable resources. These resources include local labour, sub-contractors, and plant hire. The specification of the material should be specified by the engineer.

It is a specific goal of this project that the labour component where possible be maximised where it is economically feasible, and that the use of this labour goes hand in hand with on the job training of the labour force. The project is thus process and product orientated, and it is expected that the contractor will pursue these goals in the execution of the project.

C3.1.2 Overview of the Works

The Works entails the construction of Lukwethu Regional Water Supply Scheme & Surrounding Villages (Phase 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 of the King Sabata Dalindyebo Local Municipality within the jurisdiction of the O.R. Tambo District Municipality. This includes the construction of the reticulation networks, break pressure tanks, pressure pipeline and associated fittings, at NEW REST AND NGCANASINI villages, connecting to an existing pipeline as a source and associated reticulation network

C3.1.3 Extent of the Works

The work to be carried out by the Tenderer under this Contract comprises mainly of the following:

ITEM	TASKS
<p>Civil Works</p> <ul style="list-style-type: none">• Water Mains • Water points	<ul style="list-style-type: none">• Excavation of pipeline trenches in all types of materials;• Gabions and Pitching• Reticulation network; Supply, bed, lay, join and pressure testing in all pipe sizes• Installation of pipeline markers• Construct Break Pressure Tanks• Installation of valves with associated fittings and manhole chambers• Refurbishment of existing boreholes and associated works • Supply and construct communal standpipe(s) complete• Connect into existing reservoir(s)

C3.1.4 Construction program

It is specifically brought to the notice of the Contractor that time is critical on this project, and the construction period will be a major factor in the award of the tender.

C3.1.5 Change in works

The ORTDM may, from time to time by order in writing without in any way vitiating the Contract or giving to the Contractor any claim for additional payment, require the Contractor to proceed with the execution of the works in such order as in his opinion may be necessary, and may alter the order of or suspend any part of the Works at such time and times as he may deem desirable and the Contractor shall not, after receiving such written order, proceed with work ordered to be suspended until he shall receive a written order to do so from the ORTDM. Where the work must of necessity be carried out in conjunction with work of other Contractors, or with that of the Employer, it shall be co-ordinated and arranged in such a manner as to Interfere as little as possible with the progress of such other work so as to offer every reasonable facility to other Contractors or to employees of the Employer.

C3.1.6 TEMPORARY WORKS

The Contractor will be responsible for all Temporary works necessary to undertake this project. The areas where temporary works are anticipated but not limited to are benching along the pipeline route, river and stream diversions. All areas where temporary works are undertaken are to be rehabilitated to their natural state on completion of the project.

C3.2 ENGINEERING

C3.2.1 DESIGN SERVICES

Works designed by, per design stage:

Concept, feasibility and overall process Engineer Basic engineering and detail layouts to tender stage Engineer

Final design to approved for construction stage Temporary works

Preparation of as-built drawings Engineer Contractor Engineer

- (a) The Engineer is responsible for the design of the permanent Works as reflected in the Contract Documents unless otherwise stated.
- (b) The Contractor is responsible for the design of the temporary Works and their compatibility with the permanent Works.
- (c) The Contractor shall supply all details necessary to assist the Engineer in the compilation of the as-built drawings

C3.2.2 EMPLOYER'S DESIGN

Not applicable

C3.2.3 DESIGN BRIEF

Not applicable

C3.2.4 DRAWINGS

Drawings for the project are listed in Annexure C3.6.5. The drawings issued to Tenderers as part of the Tender Document must be regarded as provisional and preliminary for the Tenderer's benefit to generally assess the scope of the work.

The Contractor shall use only the dimensions stated in figures on the Drawings in setting out the Works, and no dimension shall be scaled from the Drawings, unless required by the Engineer. The Engineer will, on the request of the Contractor and 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 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.

Where the Contractor is to supply the design of temporary Works he shall supply the consulting engineer for this project with full working drawings supported by a professional engineer's design certificate.

The Drawings prepared by the Engineer for the Permanent Works of this Contract are listed below and contained in Annexure B or C3.6.5. The Engineer reserves the right to issue amended and/or additional drawings during the Contract.

C3.3 PROCUREMENT

C3.3.1 PREFERENTIAL PROCUREMENT PROCEDURES

C3.3.1.1 REQUIREMENTS

All works to be completed in this contract shall be executed in accordance to the OR Tambo District Municipality's preferential procurement policies and procedures.

C3.3.1.2 RESOURCE STANDARD PERTAINING TO TARGETED PROCUREMENT

Preferential procurement will be applied as per OR Tambo District Municipality's preference policy.

PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT NO 5, 2000 (PPPFA) POINTS WILL BE AWARDED AS FOLLOWS:-

The bids will be evaluated in three stages, namely:

- Stage 1- Compliance with bid rules and other requirements
- Stage 2- Functionality
- Stage 3- Price and BBBEE Points

C3.3.2 SUB-CONTRACTING

Bidders are required to Sub-Contract a minimum of 10% of the contract to previously disadvantaged companies, within the area of jurisdiction of the OR Tambo District Municipality.

C3.3.2.1 Tenderers must comply with the requirement to subcontract a portion of these works to either of the following enterprises:

- (i) an EME or QSE which is at least 51% owned by black people;
- (ii) an EME or QSE which is at least 51% owned by black people who are youth;
- (iii) an EME or QSE which is at least 51% owned by black people who are women;
- (iv) an EME or QSE which is at least 51% owned by black people with disabilities;
- (v) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;
- (vi) a cooperative which is at least 51% owned by black people;
- (vii) an EME or QSE which is at least 51% owned by black people who are military veterans.

C3.3.2.2 CPG APPLICABILITY

The Contract Participation Goals (CPG) target is applicable to all contracts to be adjudicated through the OR Tambo District Municipality procurement process and shall be achieved through the following mechanisms:-

- Main Service Provider may propose a suitable targeted enterprise or CPG partner/s but OR Tambo District Municipality reserves the right to provide or arrange a targeted enterprise or CPG partner/s to work with the successful company.
- The CPG shall be at least **10% (minimum)** of the total contract value excluding VAT.

- In cases where CPG works has been already identified, the successful tenderer will be allocated a CPG partner/s as deemed necessary by the Engineer.

Professional Service Providers						
Type Of Enterprise		Annual Turnover	Black Ownership	Tax Clearance Certificate	Minimum Full Time Technical Employees	CPG Target
Targeted Enterprise (TE)	Qualifying Small Enterprise	R5 m ≤ TE ≤ R15 m	> 50%	Required	>6	10% Min.
	Emerging Micro Enterprise	TE < R5 m	> 50%	Required	>3	

For each monthly invoice submitted by the Service Provider, the Targeted Enterprise(s) hours and costs per function must be clearly articulated to enable the CPG targets to be easily and regularly monitored.

The Service Provider must withhold 10% retention of the Targeted Enterprise(s) fees until the acceptance of the project.

The Service Provider must pay the amount due to the Targeted Enterprise(s) within 3 days of receiving payment from the Employer.

C3.3.2.3 The Scope of Works to be carried out by the SUBCONTRACTOR under this Contract will be detailed on award of the contract.

C3.3.2.4 A formal tender process will be followed to appoint the Subcontractor which will be facilitated by the Employer, Employer’s Agent and Main Contractor.

C3.4 CONSTRUCTION

C3.4.1 Works Specifications

The following applicable standardized and particular specifications are relevant to this contract:

SABS 1200 A	General
SABS 1200 C	Site Clearance
SABS 1200 DAH	Earthworks (small works)
SABS 1200 DB	Earthworks (Pipe trenches)
SABS 1200 L	Medium Pressure Pipelines
SABS 1200 GA	Concrete (small works)
SABS 1200 LB	Bedding (pipes)
SABS 1200 GB	Concrete (Ordinary building)

C3.4.2 Plant and Materials

All materials shall comply with the requirements of the South African Bureau of Standards and shall bear the official standardization mark. Where SABS standard does not exist for a certain material, or a material does not bear the official standardization mark, the Engineers approval of such material must be gained before use thereof.

C3.4.3 Construction Equipment

All equipment on site shall be in a good working order and is to be in such a condition that it can achieve production rates which are typical of the industry standards.

Should any equipment, in the opinion of the Engineer, be substandard or breaks down frequently to such an extent that it affects the progress on the project, the Engineer may instruct the Contractor to replace such equipment.

C3.4.4 Health & Safety

All work is to be carried out in accordance with the Occupational Health and Safety Act and Regulations (Act 85 of 1993) (a copy of which must be kept on site), the Explosive Material Act of (Act 26 of 1956), the Minerals Act of 1991, and the Factories Machinery and Building Work Act (No 22 of 1941).

Two items relating to the fixed cost and time related cost of complying with these regulations have been provided in the Schedule of Quantities (items 1.1.9 and 1.2.9).

The Contractor is to ensure that **at least** the following is allowed for in his/ her rates:-

- (i) Provision of a full-time safety officer (and assistants if necessary) for the duration of the contract.
- (ii) Provision of all safety equipment required in terms of the Act (e.g. gloves, hard hats, safety boots, harness, masks, goggles, etc.).

C 3.6

Contractor

Witness 1

Witness 2

Employer

Witness 1

Witness 2

- (iii) Provision for all other costs necessary for conforming with the Regulations (e.g. management, risk assessments, etc.)

- Accommodation of traffic

It is expected of the Contractor to ensure that the free flow of traffic is possible throughout the construction period.

The Contractor is to provide all necessary barricades, signs and lighting in accordance with the stipulations of the South African Road Signs Traffic Manual, and the Protective Services of the OR Tambo District Municipality. All work is to be to the satisfaction of the Engineer.

- Inspection by engineer

No stage of construction shall be proceeded with until the Engineer or his representative has examined and approved the previous stage. If any work is covered or hidden from view before the Engineer has inspected same, the Contractor shall at his own cost open the covered work for inspection. The Contractor shall also be responsible for making good any work damaged by such uncovering.

- Employment of local labour

It is a specific criterion of this project that should as far as possible adheres to RDP principles, and to meet these principles the following procedures will be followed:

All labour is to be sourced from the OR Tambo District Municipality area of jurisdiction and the Contractor may only bring in key personnel from outside this area.

C3.4.5 Existing Services

C3.4.5.1 Known Services

The positions of existing services, insofar as they are known, are shown on the existing drawings. Items have been allowed in the Schedule of Quantities for dealing with and protecting services.

C3.4.5.2 Treatment of Existing Services

The Contractor shall ensure that none of the existing services are damaged during the implementation of this Contract.

C3.4.5.3 Use of Detection Equipment for the Location of Underground Services

The Contractor may use detection equipment to locate underground services prior to exposing such by hand.

C3.4.5.4 Damage To Services

The Contractor shall exercise care in the vicinity of existing services, and shall take all necessary measures to protect such services. Repairs to existing services damaged by the Contractor shall be for his own account.

C3.4.5.5 Reinstatement of Services and Structures Damaged During Construction

In the event of a service being damaged, the Contractor shall immediately notify the authority concerned, as well as the Employer's Agent. Where the authority concerned elects to effect the repair, the Contractor shall co-operate with and allow such authority reasonable access and sufficient space and time to effect the repair.

C3.4.6 Site Establishment

C3.4.6.1 Services and Facilities Provided by the Employer

The O.R Tambo District Municipality is the Water Supply Authority.

No services or facilities will be provided by the Employer. The Contractor is to provide his own services and facilities, and to make allowance for the cost thereof in Section 1 of the Schedule of Quantities.

C3.4.6.2 Facilities Provided by the Contractor

The Contractor is to provide the facilities indicated in the Schedule of Quantities.

C3.4.6.3 Storage And Laboratory Facilities

The Contractor is to provide the facilities indicated in the Schedule of Quantities.

Storage areas are to be contained within the Contractor's designated, fenced off construction camp(s).

C3.4.6.4 Other Facilities and Services

The Contractor is responsible for the provision of all necessary temporary facilities which are not provided by the Employer, including power, water, telecommunications, security services, medical, fire protection, sanitation and toilets and solid waste disposal.

The Contractor shall make his own provisions for the collection, storage and disposal of all construction waste (i.e. whether it be in the camp or on the construction site); all in conformance with the Environmental Management Plan and with approval of the Employer's Agent, the Local Authority and the Environmental Officer. Payment for the clearing, loading, transport, dumping fees and any other requirement or costs incurred shall be included in the scheduled rates.

The Contractor shall provide suitable and adequate portable chemical latrines for his employees and his sub-contractors. Latrines shall be maintained by the Contractor in a clean and sanitary condition to the Employer's Agent's satisfaction. The use of latrines shall be enforced and fouling of the site will not be permitted.

The Contractor shall be permitted to house Key Personnel only within the construction camp site(s). At the commencement of the Contract, the Contractor shall inform the Employer's Agent of his intentions regarding the housing of Key Personnel on site, and he shall thereafter ensure that such accommodation is kept neat, hygienic, and properly controlled at all times. At any stage of the Contract, should the Employer's Agent be of the opinion that the housing of Key Personnel within the construction camp(s) is causing disturbance, or inconvenience to the land owner or nearby residents, the authority granted in this clause for the housing of Key Personnel within the construction camp(s) may be withdrawn, either partially or entirely.

The Contractor is to comply with all requirements contained in law or local bylaws, as well as any other requirements set by the local authority.

C3.4.6.5 Notice Boards

The Contractor is to provide notice boards as indicated in the Schedule of Quantities, the layout of which is to match the template issued in the Tender Document.

The boards are to be erected at locations approved by the Employer's Agent. The Employer's Agent reserves the right (at no cost to the Employer) to have any sign, notice or advertisement moved to another location, or to have such removed from the site entirely, should such signs, notices or advertisements prove in any way unsatisfactory, or an inconvenience or danger to the general public.

These boards are to be maintained for the duration of the Contract. Any damage to the boards shall be repaired within fourteen (14) days of a written instruction issued by the Employer's Agent.

The notice boards and supporting structures are to be removed fourteen (14) days prior to the issue of the Final Approval Certificate.

C3.4.7 Site Usage

Access to site shall be limited to the Contractor and his personnel. The Contractor shall be responsible for the control of unauthorized entry to the site and shall inform the Employer's Agent of any breach of such rules. The site shall be managed and used for its intended purpose. The Contractor is required to keep a visitors log and ensure full compliance with site safety standards.

C3.4.8 Permits and Way Leaves

While the Engineer is responsible for obtaining all the necessary wayleaves, permissions and permits applicable to working near any existing services or other infrastructure on Site, the Contractor is responsible for abiding by the safety and other conditions imposed by such wayleaves, permissions and permits.

The Contractor shall ensure that all wayleaves, permissions and permits (furnished by the Engineer) are kept on site and are available for inspection by the relevant services authorities on demand.

The Contractor shall also ensure that any wayleaves in respect of electricity services are renewed timeously every three months.

C3.4.9 Alterations, Additions, Extensions and Modifications to Existing Works

The Contractor is to satisfy himself as to the dimensional accuracy, alignment, levels and setting out of existing structures or components thereof to ensure compatibility with the proposed works. Any concerns are to be raised timeously with the Employer's Agent.

C3.4.10 Inspection of Adjoining Properties

In the event that blasting is required on site, inspection of potentially affected buildings and properties is to be conducted with the owners of such buildings/properties, along with representatives of the local authority. This is to be completed before commencing with blasting.

The Contractor shall record the condition as well as photograph all adjoining structures before commencing with blasting.

C3.4.11 Water for Construction Purposes

The Contractor is responsible for procuring, transporting, storing, distributing and applying the water needed for construction purposes. Consultation with the local community or the local authority may be required, depending on the proposed source of such water.

C3.4.12 Survey Control and Setting Out of the Works

Control points in the form of benchmarks and pegs have been established at critical points.

C3.4.13 Workmanship and Quality Control

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced Employer's Agents, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

The cost of supervision and process control, including testing and mix designs carried out by the Contractor, will be deemed to be included in the rates tendered for the related items of work.

The Contractor's attention is drawn to the provisions of the various Standardized Specifications regarding the minimum frequency of testing required. The Contractor shall, at his own discretion, increase this frequency where necessary to ensure adequate control.

On completion and submission of every part of the work to the Employer's Agent for examination and measurement, the Contractor shall furnish the Employer's Agent with the results of the relevant tests, mix designs, measurements and levels to demonstrate the achievement of compliance with the Specifications.

C3.4.14 Features Requiring Special Attention

The onus to produce work that conforms in quality and accuracy of detail to the requirements of the Specifications and Drawings rests with the Contractor, and the Contractor shall, at his own expense, institute a quality control system and provide suitably qualified and experienced Employer's Agents, foremen, surveyors, materials technicians, other technicians and technical staff, together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

C3.4.14.1 Supporting Documents

Refer Section PS.8.1 of this document

C3.4.14.2 Monthly Reporting

Refer Section PS.8.7 of this document

C3.4.14.3 Existing, Operational Bulk Mains

The reservoirs each end of the pipeline are in current use. When effecting the connections to the reservoirs, the Contractor is to at all times, ensure that the supply of potable water is not affected by the construction activities.

C3.4.14.4 Accommodation of Traffic

The Contractor will be required to make provision for the accommodation of traffic along all public roads for the full duration of construction.

C3.5 Management

C3.5.1 Management of the Works

C3.5.1.1 Applicable SANS 1921 Standards

- SANS 1921-1:2004 Part 1 General Engineering and Construction Works
- SANS 1921-2:2004 Part 2 Accommodation of Traffic on Public Roads Occupied by the Contractor
- SANS 1921-3:2004 Part 3 Structural Steelwork
- SANS 1921-5:2004 Part 5 Earthworks Activities which are to be Performed by Hand
- SANS 1921-6:2004 Part 6 HIV/AIDS Awareness

C3.5.1.2 Particular Specifications (refer to Annex C3.6)

Refer to C3.6 – Annexures for particular (purpose written) specifications.

C3.5.1.3 Planning and Programming

The Contractor shall submit a detailed programme within fourteen (14) days of the acceptance of the tender as stipulated in the General Conditions of Contract 2015.

The Contract period shall include all Saturdays, Sundays, non-working days (public holidays), special non-working days, as well as an allowance for anticipated inclement weather (as per Clause Clause 5.12.2.2: Extension of Time) during normal working hours. The programme shall be agreed between the Employer and the Contractor prior to the implementation of the construction works.

The programme shall be updated monthly, for discussion at the monthly progress (site) meeting, to indicate planned versus actual progress.

The Contractor shall review his progress each month and should progress lag behind the latest accepted programme, by more than 2 weeks, he shall submit a revised programme and method statement of how he proposes to make up the lost time. If, in the opinion of the Employer's Agent, such revised programme will not make up the lost time, the Employer's Agent shall have the right to request the Contractor to reorganize his work in a manner which will ensure an acceptable programme. Claims for additional payment to meet any costs incurred due to such reorganisation will not be accepted.

Should the Contractor wish to work outside normal working hours (as defined in the Contract Data) for any reason, he shall first seek permission to do so from the Employer's Agent. Attending to emergency situations or making-safe the Works are exempt from requiring prior approval, but notification shall still be sent to the Employer's Agent.

Site handover and commencement of execution of the Contract will only take place once all the necessary documentation (details given in Contract Data) has been submitted and approved. Before any site work is undertaken, an introductory meeting with the local community has to be held. The latter is arranged by the Employer's Agent.

C3.5.1.4 Programme Format and Content

Programmes shall be submitted in Microsoft Project format in hardcopy and softcopy. The Contractor is to provide the detailed programme such that it is legible.

The programme of construction shall be submitted to the Engineer within the time period stipulated in these documents. The programme shall clearly show all activities related to the works and shall indicate which activities are on the critical path.

In compiling the programme the Contractor shall take into account the following:

- The requirements and effects of employing labour intensive construction methods.
- The lead-time for training of local labour.
- The accommodation and safeguarding of public access and traffic
- Accommodation of and notification for temporary water shut down
- Establishment and de-establishment times.
- Time to obtain all permits and way-leaves.
- Appointment of Community Liaison Officer (CLO).
- All public and Contractor close down periods.
- All other activities required in terms of this document.

The Contractor's programme shall show:

- a) The various activities, related to a time scale, for each element of the Works, including those of Subcontractors, in sufficient detail to be able to assess construction progress.
- b) Water testing
- c) Critical path activities and their dependencies,
- d) Key dates in respect of information to be provided by the Employer's Agent and/or others.

C3.5.1.5 Methods And Procedures

Where requested in writing by the Employer's Agent, the Contractor shall submit Method Statements for constructing specific aspects of the Works. Such work shall not be started until the Contractor receives approval of the Method Statement in writing from the Employer's Agent.

C3.5.1.6 Quality Plans and Control

The Contractor is required to have in place, and follow, an approved Quality Assurance System for the execution of this Contract. To this end, the Contractor shall submit his proposed Quality Management Plan (QMP) to the Employer's Agent for approval along with his up-front documentation required before the commencement of the Works. The QMP shall include the Contractor's proposed Quality Control Plan (QCP) which shows how conformance to the QMP is to be documented.

In addition to this, the Contractor is required to follow the Employer's Agent's Site Quality Control procedures which entails the following:

- Contractor's submission of Request for Inspection of Work;
- Employer's Agent's signing-off of 'hold points' at each stage of the work (thereby authorising the

Contractor to proceed with the next stage of the work). This may take several iterations should the Employer's Agent require further work before signing-off. Work may not proceed on the next stage until the previous stage has been signed-off.

Claims for particular items of completed work for each interim Payment Certificate will not be certified for payment where the required sign-offs have not been obtained.

No claims for extension of time, nor any other form of compensation, will be entertained for delays in receiving the Employer's Agent sign-offs on 'hold points' where, in the opinion of the Employer's Agent, insufficient notice has been given to inspect and approve the Works. The default notice required is 48 hours.

The Contractor shall submit copies of all his conformance documentation to the Employer's Agent on a monthly basis and proof of recent calibration of all measuring devices that are to be used.

C3.5.1.7 Environment

The Contractor shall comply with the Construction Environmental Management Plan (attached in Annexures). The Environmental Control Officer shall liaise directly with the Contractor on general environmental matters. Where such matters affect construction works, the Environmental Control Officer will be required to address such concerns with the Employer's Agent.

The Contractor shall plan the work in such manner that wind-blown dust is kept to a minimum. Earthworks shall commence immediately after a section is cleared and approved. The Contractor will have a water truck or other means of dust suppression on standby for spraying the cleared areas. The cost of this process will be deemed to have been included in the clearing and excavation rates entered in the Schedule of Quantities.

Burning of any materials on site will not be allowed.

The Contractor is required to progressively and systematically finish and tidy the work as it proceeds. This will be monitored against the latest approved programme. The Employer's Agent shall have the right to not certify full payment of particular scheduled items where such items are largely complete, but finishing and tidying is deemed still outstanding.

Under no circumstances shall spoil, rubble, materials or equipment be allowed to unnecessarily accumulate on Site. If, in the opinion of the Employer's Agent, this is occurring, the Employer's Agent shall have the right to make an

allowance for the estimated cost of rectifying the above by reducing particular measured quantities from claims being processed for payment.

C3.5.1.8 Accommodation of Traffic on Public Roads Occupied by the Contractor

All work within the road reserve is to be conducted strictly in accordance with the wayleaves issued for such work.

C3.5.1.9 Other Contractors On Site

There are no other Contractors on Site.

C3.5.1.10 Testing and Quality Control

- (i) Contractor to engage services of an independent laboratory

Notwithstanding the requirements of the Specifications pertaining to testing and quality control, the Contractor shall engage the services of an approved independent laboratory to undertake all testing of materials, the results of which are specified in, or may reasonably be inferred from, the Contract. These results will be taken into consideration by the Employer's Agent in deciding whether the quality of materials utilised, and workmanship achieved by the Contractor comply with the requirements of the Specifications. The foregoing shall apply irrespective of whether the specifications indicate that the said testing is to be carried out by the Employer's Agent or by the Contractor.

The Contractor shall be responsible for arranging with the independent testing laboratory for the timeous carrying out of all such testing specified in the Contract, at not less than the frequencies and in the manner specified. The Contractor shall promptly provide the Employer's Agent with copies of the results of all such testing carried out by the independent laboratory.

For the purposes of this clause, an "independent laboratory" shall mean an "approved laboratory" (as defined in subclause PSA 7.2) which is not under the management or control of the Contractor and in which the Contractor has no financial interest, nor which has any control or financial interest in the Contractor.

- (ii) Additional testing required by the Employer's Agent

In addition to the provisions of subclause C3.4.2.5(b)(i): Contractor to engage services of an independent laboratory, the Employer's Agent shall be entitled at times during the Contract to require that the Contractor arrange with the independent laboratory to carry out any such tests, additional to those described in subclause C3.4.2.5(b)(i), at such times and at such locations in the Works as the Employer's Agent shall prescribe. The Contractor shall promptly and without delay arrange with the independent laboratory for carrying out all such additional testing as required by the Employer's Agent, and copies of the test results shall be promptly submitted to the Employer's Agent.

- (iii) Costs of testing

- (a) Tests in terms of subclause C3.4.2.5(b)(i)

The costs of all testing carried out by the independent laboratory in accordance with the requirements of subclause C3.4.2.5(b)(i), above shall be borne by the Contractor and shall be deemed to be included in the tendered rates and prices for the respective items of work as listed in the Bill of Quantities and which require testing in terms of the Specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of subclause C3.4.2.5(b)(i).

Where, as a result of the consistency of the materials varying or as a result of failure to meet the required specifications for the work, it becomes necessary to carry out additional tests (e.g. re-tests on rectified work and/or replacement materials), the costs of such additional testing shall be for the Contractor's account.

- (b) Additional tests required by the Employer's Agent

The costs of any additional tests required by the Employer's Agent in terms of subclause C3.4.2.5(b)(ii): Additional testing required by the Employer's Agent, shall be reimbursed to the Contractor against substitution of the

Provisional Sum allowed therefore in the Bill of Quantities; provided always that the costs of any such additional tests ordered by the Employer's Agent, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.

C3.5.1.11 Recording of Weather

The Contractor is to provide and correctly install a rain gauge and maximum/minimum thermometer at the construction camp. The Contractor shall record and keep a record of the daily rainfall and maximum/minimum temperatures, and supply the data to the Employer's Agent on a daily basis. Readings are to be recorded daily at 08:00 unless otherwise agreed to by the Employer's Agent.

The Contractor shall take all necessary precautions to ensure that the rain gauge cannot be interfered with by unauthorised persons.

C3.5.1.12 Format of Communications

All requests for information or requests for inspections are to be recorded in writing.

All instructions are to be issued in writing as a Site Instruction.

C3.5.1.13 Key Personnel

The Contractor is to compile and submit to the Employer's Agent a schedule of Key Personnel, including titles, names, designations and contact numbers of such personnel. This document is to be updated immediately in the event of any changes.

C3.5.1.14 Management Meetings

Formal project meetings will be held on site in the Employer's Agent's office (or similar suitable office). Representatives of the Employer, Employer's Agent and Contractor will be required to attend. The representatives are to have the necessary authority in respect of aspects such as planning and health and safety. The Contracts Manager and Construction Manager (Site Agent) are required to attend all such meetings.

The Contractor shall attend the following meetings during the Contract:

- a) An inaugural site meeting at the BM Infrastructure offices or as called by the Employer's Agent
- b) Monthly site meetings, at BM Infrastructure East London offices and on Site or as called by the Employer's Agent, from the commencement of the Works until the issue of the Practical Completion Certificate (or where necessary as determined by the Employer's Agent).
- c) Monthly technical meetings called by the Employer's Agent (or where necessary as determined by the Employer's Agent).
- d) Meetings during the Defects Notification Period called by the Employer's Agent (only if warranted)
- e) The following reports shall be submitted by the Contractor before the monthly Site Meetings:
 - Progress Report
 - Plant & Labour returns
 - Updated Programme vs Baseline Programme
 - Updated cashflow projection.

The cost of these requirements shall be included in the rates tendered for Time Related Items.

C3.5.1.15 Forms for Contract Administration

The Employer's Agent's Representative will have a full set of contract administration forms for use on site. This includes forms for recording test results, claims, inspections and the like. The Contractor may use such as a basis for his documentation should he not have adequate similar templates.

C3.5.1.16 Electronic Payments

The Employer will make payments by electronic means only.

C3.5.1.17 Daily Records

The Contractor is required to keep daily records of resources (people and construction equipment) as well as of work performed on the site. A signed copy of the previous day's record must be provided to the Employer's Agent on a daily basis.

Information relating to construction equipment shall be recorded in the Daily Site Diary. In addition, the Contractor shall deliver to the Employer's Agent, on a monthly basis, a detailed schedule of construction equipment present on the site for that month. Full particulars are to be recorded, identifying each piece of equipment, including whether the equipment is in working order or out-of-order. This schedule is to be submitted by the first day of the month following the month to be reported.

C3.5.1.18 Bonds And Guarantees

Bonds and guarantees are to be submitted to the Employer from whom they can be collected once they are released, in accordance with the contract.

C3.5.1.19 Payment Certificates

Measurements for interim and final certificates must be agreed with the Employer's Agent prior to the issuing of a Tax Invoice by the Contractor.

The Contractor is to provide all invoices, vouchers and receipts in respect of payments made by him in connection with provisional or prime cost items when he requires payment for such.

The Contractor is to provide all invoices or receipts in respect of materials purchased and delivered to the site when he requires payment for such. Invoices or receipts are to clearly identify the material, the unit rate thereof, and the quantity/number purchased.

It is a specific requirement of this Contract that the Contractor shall collect and record all relevant information for the completion of end-of-month documentation to be submitted with each payment claim. The Payment Certificate (prepared by the Employer's Agent) will not be accepted by the Employer unless accompanied by the following:

- Local Labour Schedule (in EPWP format; ie giving employee names, IDs, gender, age group and disability status if applicable)
- Contract Participation Goal expenditure to date vs target (details of labour wages and salaries paid and payments to Targeted Enterprises vs value of work certified to date)
- Monthly Progress Report (from Site Meeting).

C3.5.1.20 Proof of Compliance with the Law

The Contractor shall insure his employees against accident in terms of the Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993), as amended. A Letter of Good Standing with the Compensation Fund, as issued by the Department of Labour, must be submitted as part of the Tender.

Where the Letter of Good Standing expires during the contract period, the Contractor will be required to submit new, valid documentation. Failing to do so will result in work being stopped.

C3.5.1.21 Insurance Provided by the Employer

No insurance will be provided by the Employer.

C3.5.2 Health and Safety

C3.5.2.1 Health and Safety Requirements and Procedures

The Contractor is to comply in all respects with the Occupational Health and Safety Act (Act 85 of 1993), as amended, as well as with the Construction Regulations 2014 and the Electrical Machinery Regulations.

The Health and Safety Officer appointed by the Employer shall liaise directly with the Contractor on safety matters but shall be required to channel safety matters affecting construction work through the Employer's Agent.

The Contractor shall take special care of the following during construction :

- Flooding of trenches or excavations
- Possibility of collapse of excavations in sandy soils
- Protection of deep excavations and adjacent structures
- Protection of existing services
- Accommodation of traffic and pedestrians
- Proper storage and stacking of materials
- Good housekeeping and site tidiness
- Provision of welfare facilities
- Dust control

The Contractor's Health and Safety plan is to be approved and the Contractor's Safety Officer is to be appointed prior to the commencement of any construction activities. It is specifically noted that the person officially appointed as the Contractor's Safety Officer shall be properly qualified and experienced and be based full-time at the site while activities are taking place.

Time lost due to delayed commencement or suspension of the work as a result of the Contractor's failure to submit the safety plan timeously, shall not be used as a reason to claim for extension of time or standing time and related costs.

C3.5.2.2 Protection of the Public

Any excavations left open during the builder's holiday or other non-working days shall be adequately safeguarded at all times. Safe trench-crossings shall be provided where necessary. The length of trench left open at any one time may be restricted by the Employer's Agent, should he consider such restriction to be in the interest of public safety.

C3.5.2.3 Barricades and Lighting

The Contractor is responsible for the safety of the site and shall provide all necessary watching, barricading and lighting. This is especially significant at excavations.

C3.5.2.4 Community Participation

Although there is very limited scope for the employment of unskilled workers from the surrounding communities, there will be a strong expectation among the community that at least some people are employed while on-site activities are taking place (eg providing 24h security, assisting with lifting / carrying / holding in position during assembly etc).

Such persons are to be selected and employed via a Community Liaison Officer.

A Provisional Sum allowance has been made for the short-term employment of CLOs in accordance with the following Terms of Reference (ToR) for the CLO (*Refer Section PS.8.6*)

C3.5.2.5 Employment of the Local Community

The Contractor is to limit the import of labour to skilled personnel only. Semi-skilled and unskilled labour is to be sourced from the local community.

The human resources of the local community are generally underdeveloped, underutilised and underemployed. The Contract Participation Goals set for Targeted (local) Labour and Targeted (local) Enterprises are to encourage both skills and economic development by requiring a minimum level of local resources participation on all construction work in the OR Tambo District Municipal (ORTDM) area of jurisdiction. Details are given in Part C1: Contract Data and the CPG Returnable Schedules.

It is therefore a condition of Contract that the Contract Participation Goals set for Targeted Labour and Targeted Enterprises (minimum percentages of the value of work executed) are achieved. The measure of Targeted Labour Participation comprises the sum of wages and salaries paid to all locally-based (ORTDM) South African Citizen residents for any work done on this Contract (irrespective of level of skills, race, gender or who they are employed by). The measure of Targeted Enterprise Participation comprises the sum of monies paid by the Main Contractor to all locally-based (ORTDM) enterprises irrespective of race or gender of the enterprise ownership).

It is a requirement that, at least, all unskilled labour taken-on by the Main Contractor and his sub-Contractors are sourced from the local community and that such employment is arranged through the CLO and PSC.

Employment of all temporary labour, whether employed directly or through a Subcontractor, shall comply in all respects with the National Government Department of Labour's regulations; including the minimum wage applicable to construction work in the Eastern Cape.

C3.5.2.6 Certificate of Service

An employee shall, upon termination of his services, be entitled to a Certificate of Service showing the full names of his employer (i.e. the Contractor) and the employee, the type of work done by the employee, the date of commencement, a record of training received and the date of termination of his services.

C3.6 ANNEXURES

C3.6.1 Variations and Additions to the Standard SANS 1200 Specifications: General, Civil and Structural Works

C3.6.2 Particular Specifications

C3.6.3 Health and Safety Specifications by the Employer

C3.6.4 Construction Environmental Management Plan

Variations and Additions to the Standard SANS 1200 Specifications: General, Civil and Structural Works

NOTE: Numbering in the Project Specifications corresponds with the numbering of clauses in the Standard Specifications (SANS 1200).

Tenderers must make provision for all the relevant Project Specification requirements to be included when calculating the prices of the various items in the schedule of quantities.

In addition, the sum tendered shall cover all initial costs incurred in complying with the requirements of C1.2 Contract Specific Data

PSA GENERAL (SANS 1200A)

PSA 2 INTERPRETATIONS

PSA 2.2 Applicable Edition of Standards

Add at the beginning of the first sentence of Sub-clause 2.2:

"Unless a specific edition is specified (see the List of Applicable Specifications),..."

PSA 2.3 Definitions

Add the following:

The term "Engineer" shall be replaced by "Employer's Agent".

The Employer's Agent shall be FLUX DEVELOPMENT SCIENTISTS

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

GCC: General Conditions of Contract (2015)

The terms "plant" and "construction equipment" shall be defined as contained in the GCC:2015. Hence, the term "plant" as contained in the SANS 1200 suite is replaced by "construction equipment".

PSA 2.4b Abbreviations

Add to Sub-clause 2.4(b):

"MAMDD: Modified AASHTO maximum dry density".

PSA 2.8.1 Principle

In the fourth line of Sub-clause 2.8.1, after the word "specification", add: "or in the measurement and payment clause of the standard specification, particular specification or project specification".

Add the following to this clause:

Items which are designated as provisional quantities or provisional sums in the Schedule of Quantities are intended to provide for works, the need or extent of which shall be established by the Employer's Agent during construction. Work scheduled as such shall only be undertaken on the written instruction of the Employer's Agent and, where applicable, shall be paid for at the tendered rate or in the absence of rates shall be valued in accordance with Clause 6.4 of the General Conditions of Contract.

The Schedule of Quantities shall not be used for ordering purposes and no liability or responsibility shall be admitted by the Employer's Agent in respect of materials ordered or procured by the Contractor on the basis of the Schedule of Quantities.

PSA 3 MATERIALS

PSA 3.1 Quality

Add the following to this clause:

Where a material to be used in this Contract is specified to comply with the requirements of an SABS Standard Specification, and such material is available with the official SABS mark, the material used shall bear the official mark.

The Contractor shall submit in good time, before any construction commences, to the Employer's Agent on site, samples of all materials intended to be incorporated into the works. The samples shall be accompanied by results of tests undertaken by an approved independent laboratory on the samples in question on behalf of the Contractor and at his cost, before consideration by the Employer's Agent

The Employer's Agent, during construction, will take independent samples from stockpiles of proposed construction materials on site and from the completed works. Approval will not be granted for samples delivered by the Contractor directly to the Employer's Agent's office. The Contractor shall be responsible for the cost of all failures on test samples and control testing.

All pipes, fittings and materials used in the Works, must bear the official standardisation mark of Standards South Africa where applicable. The mark on a pipe shall be visible from above after the pipe is laid.

Rubber articles, including pipe insertion or joint rings shall be stored in a suitable shed and kept away from sunlight, oil or grease.

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

Every precaution shall be taken to keep cement dry and prevent access of moisture to it from the time it leaves the place of manufacture until it is required for use on the Site. Cement is to be used on a first in/first out basis. Bags of cement which show any degree of hydration and setting shall be removed from the site of the Works and replaced at the Contractor's own expense. Any cement older than six weeks is to be removed from site.

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

Where propriety materials are specified it is to indicate the quality or type of materials or articles required, and where the terms "or other approved" or "or approved equivalent" are used in connection with proprietary materials or articles, the Contractor is to supply with their tender the name of the manufacturer and supporting documentation that show that the materials or articles comply with the relevant specifications. It is understood that the approval shall be at the sole discretion of the Employer and the Employer's Agent.

Irrespective of any approval granted by the Employer's Agent or the Employer, the Contractor shall be deemed responsible for quality of all materials used for construction and their specified performance.

PSA 4 CONSTRUCTION EQUIPMENT

PSA 4.2 Contractor's Offices, Stores and Services

After the second paragraph add the following:

The suitable first aid services required in terms of Sub-clause 4.2 shall include, inter alia, a First Aid cabinet fully equipped and maintained with at least the minimum contents as listed in Regulation 3 of the General Safety Regulations of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), to deal with accidents and ailments which are likely to occur during the construction period.

PSA 5 CONSTRUCTION

PSA 5.1.1 Setting Out of the Works

Add the following to this clause:

The Contractor shall be fully responsible for the setting out of the works, and where labour-intensive work is specified, for the setting out of the daily construction tasks.

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The Contractor, within two (2) weeks after the site has been handed over to him, is to ascertain the correctness of all pegs and bench marks. Any discrepancy shall immediately be reported in writing to the Employer's Agent. Any costs or subsequent costs arising from discrepancies which had not been reported to the Employer's Agent, within the aforementioned period, shall be the sole responsibility of the Contractor.

Tender drawings shall not be used for construction purposes.

PSA 5.2 Watching, Barricading, Lighting and Traffic Crossings

Add the following to this clause:

The Contractor shall employ competent watchmen to guard the Works both by day and night.

From the time any portion of the Works commences, until the Completion of the Works and the issue of the Certificate of Completion of the Works, the Contractor shall be responsible for protecting the property of the Employer and all persons having business on the Site from anything dangerous or likely to cause damage or injury. The Contractor shall take all practical precautions to avoid nuisance or inconvenience to the owners or occupiers of properties near to the Site and to the public generally whilst carrying out the Works and shall at all times keep the Site clean and in a safe and satisfactory condition.

Temporary traffic signs shall be erected when work is being done within and adjacent to roadways. The number and layout of the traffic signs shall comply with the Site Manual entitled "Safety at Roadworks in Urban Areas", as published by the Department of Transport

The Contractor shall control all access to the site, for authorised persons only, and shall ensure that the approved conditions of the Health and Safety Management Plan are adhered to.

PSA 5.4 Protection of Overhead and Underground Services

Add the following to this clause;

Before construction of the Works, or any phase of the Works, the Contractor shall contact all relevant parties and authority officials to establish the existence of existing services on site. The Contractor shall be responsible for obtaining all necessary wayleaves. No claims shall be lodged by the Contractor for delays in obtaining such wayleaves or permits.

PSA 5.7 Safety

Add the following to this clause:

Compliance with

- 1) OHS Act and Regulations and
- 2) Construction Environmental Management Plan (CEMP)

Lump sums are provided in the Bill of Quantities to cover the contractor's cost for compliance with the requirements of the Construction Environmental Management Plan and the Occupational Health and Safety Act, 1993, the Construction Regulations, 2014 and the Health and Safety Specification respectively.

In addition, Sums are included under Time Related Items in the Preliminary and General Section of the Schedule of Quantities. The lump sums shall include full compensation for the provision of the necessary site official, the training, PPE, plans, audits, assessments, administration, etc. and all other costs required for compliance. Fines issued for non-compliance will be deducted from these Provisional Sums, but are not limited to the value of the Provisional Sum stated.

Add the following clauses:

PSA 5.10 Record Drawing Information

As the Works are progressing, the Contractor shall mark on a special set of drawings, all as-built details and submit them to the Employer's Agent's Representative for approval. No extra payment shall be made for preparation of these as-built plans.

All valves, chambers and the like shall be co-ordinated together with their invert and cover/ground levels on the as-built drawings.

The Certificate of Completion shall only be issued once all the as-built information has been received and verified by the Employer's Agent.

PSA 5.11 Clearance of Site on Completion

The Contractor shall obtain, from each property owner directly affected by the Works, a certificate to the effect that the property owner is satisfied with the standard of reinstatement of any fences, boundary walls or structures, compensation paid for loss

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or damage to stock, crops or property, material spoiled on their properties or any other condition affecting their properties as a result of the operations of the Contractor. The Contractor shall further obtain a Clearance Certificate from each authority whose services have been affected during the construction of the Works.

All such certificates must be lodged with the Employer's Agent before the Certificate of Completion will be issued.

PSA 5.12 Project Reporting

The following forms are required to be completed and submitted monthly with the payment certificate to the Employer's Agent :

Expanded Public Works (EPWP) forms

- Municipal Infrastructure Grant (MIG) forms
- Templates will be provided to the successful tenderer.

The following data is to be submitted monthly, at the site meeting, to the Employer's Agent :

- Updated programme
- Construction equipment schedule
- Rainfall records

No additional payment will be made for reporting – tendered rates are to incorporate such costs.

PSA 6 TOLERANCES

PSA 6.2 Degree of Accuracy

Add the following to this clause:

Degree of Accuracy II shall apply, except in the case of the reservoir walls (both internal and external) and the pump station walls (both internal and external) and roof, where Accuracy I is required.

PSA 7 TESTING

PSA 7.1 Testing Principles

Add the following to this clause:

When giving notice, the Contractor shall provide the Employer's Agent with the results of the check testing indicating that the work is to specification. The Employer's Agent shall be given 48 hours' notice of when testing or inspections are required.

The Employer's Agent may from time to time carry out his own check tests on the work performed by the Contractor. Should such check tests show that the Contractor's control testing be such that the quality of the Contractor's work can be called into question, then the Employer's Agent may order further check tests to be carried out on work already completed. All costs associated with such check tests shall be for the Contractor's account, as also the costs of any other check test whose results to not comply with the specification.

Failure by the Contractor to notify the Employer's Agent or to provide the required information or, where specified, to perform the required test, will be grounds to exempt the Employer from payment for the associated work and for all subsequent work which would be affected by the failure of the Work to be tested.

The Employer's Agent will be under no obligation to the Contractor to perform the tests. If the Employer's Agent elects not to perform a particular test after notification by the Contractor, the Contractor will be issued with a written instruction to proceed with the relevant works without the acceptance test being performed.

Nothing contained in this clause will relieve the Contractor of any responsibilities under the specification or in any way limit the tests, which the Employer's Agent may call for or perform in terms of the specification.

Where the Employer's Agent is called to witness certain control tests, such as the pressure testing of a pipeline, and the results of such tests do not comply with the specifications, then the Employer reserves the right to recover costs for the Employer's Agent's presence at the unsuccessful test from the Contractor.

PSA 7.2 Approved Laboratories

Add the following to this clause:

Acceptance testing shall be done by a laboratory selected by the Employer's Agent. The Employer's Agent requires twenty-four hours' notice from the Contractor in order to perform the relevant acceptance test.

All acceptance testing by the Employer's Agent shall be paid for by the Contractor. The costs of such tests which meet the specification requirements will be reimbursed to the Contractor in the monthly payment certificate. This payment shall consist of a billed amount plus the tendered mark-up. A Provisional Sum has been provided in the Schedule of Quantities to allow for the cost of such testing.

The Contractor shall make due allowance for testing procedures in the construction programme.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.2.1 Fixed-charge and Value-related Items

Add the following to this clause:

The fixed charge items will include all costs associated with dealing with compulsory sub-contracts.

PSA 8.2.2 Time-related Items

Replace the contents of this clause with the following:

Payment for time-related items will be effected as follows only after payment for the relevant fixed-charge item has been made : Subject to the provision of 8.2.3 and 8.2.4 payment will be made monthly in equal amounts, calculated by dividing the sum tendered for the item by the tendered contract period in months, multiplied by the months completed, provided always that the total of the monthly amounts so paid for the item is not out of proportion to the value of the progress of the works as a whole.

PSA 8.4.1 Contractual Requirements

Add the following to this clause:

The Contractor shall tender rates in the Schedule of Quantities to cover his time-related establishment costs. The amount tendered and paid shall be full compensation to the Contractor for:

- i) The maintenance of his whole organization as established for this Contract.
- ii) The maintenance of all insurances, indemnities and guarantees required in terms of the Conditions of Contract or Tender where applicable.
- iii) Compliance with all general conditions and requirements which are not specifically measured elsewhere for payment in these Contract Documents.

Payment of the lump sum shall be made monthly in compliance with the method laid down in Sub-clause 8.2.2.

The Contractor will not be paid Time-Related Preliminary and General Charges for any Special Non-Working Days, which shall be deemed to have been allowed for in his rates.

PSA 8.4.2.2 Facilities for the Contractor

Add the following to this clause:

Facilities for the Contractor shall include all the costs of providing water for construction other than the water required for water tightness testing of water retaining structures. Water for such tests will be measured according to [PSG8-12 Water tightness test](#).

The costs for providing security against theft and vandalism will be included in the rates tendered for Contractor facilities. No separate payment will be made for the provision of security.

PSA 8.5 Sums Stated Provisionally by Employer’s Agent

Replace the penultimate sentence of Sub-clause 8.5 to read:

"The percentage rate for (b) (2) above shall cover the Contractor's overheads, charges and profit on the work covered by the sums provisionally stated for (b)(1) above. Payment will be made on the basis of the sums actually paid for such work, exclusive of VAT."

PSA 8.5.1 Community Liaison Officer

A provisional sum is included to allow for the salary of a person working full time as the Community Liaison Officer (CLO). The Contractor shall ensure that the salary and other expenses due are paid timeously in accordance with the payment dates of his own staff.

A separate item for overheads, charges and profit on the above item is applicable.

PSA 8.6 Prime Cost Items

Replace the penultimate sentence of Sub-clause 8.6 to read:

"The percentage rate for (b) shall cover the Contractor's overheads, charges for taking delivery and profit on the supply of materials or goods covered by the sums stated in (a) above. Payment will be made on the basis of the sums actually paid for such materials or goods, exclusive of VAT."

PSA 8.7 Daywork

Add the following to this clause:

The rates submitted by the Tenderer in the relevant schedule of the Contract shall be applicable.

Provisional items for Daywork are scheduled as follows:

- a) Labour at hourly rates for skilled, semi-skilled and unskilled labourers.
- b) Purchase cost of Material with a percentage allowance on the net cost for delivery to Site and all Contractors charges.
- c) The Contractor's own construction equipment as a Provisional Sum. Where not listed in the BoQ, rates shall be agreed with the Engineer before such work is put in hand.

Tendered unit rates or unit rates that are agreed in terms of Sub-clause 6.5.1.3 of the General Conditions of Contract for the Contractor's own construction equipment used for Daywork shall cover the full cost of the use of such construction equipment and shall, in addition, cover the cost of operators, consumable stores, fuel and maintenance.

The Contractor will be paid the actual net cost of construction equipment hired by him for Daywork and in addition will be paid a percentage allowance on the net cost of such hire, which allowance will cover the Contractor's own overhead costs and profit.

PSA 8.8.4 Existing Services

The tendered rate shall further cover the cost of backfilling the excavation with selected material compacted to 90% Mod. AASHTO density, keeping the excavation safe, and taking care that the services are not damaged in any way. The rate shall include for all negotiations with the authorities, notification to all affected parties and any other requirement to protect and complete the work.

Add the following clauses:

PSA 8.9 Survey Control and Setting out of Works Unit: sum

Before commencement of work, the Contractor is to liaise with the Employer’s Agent to establish exactly the status of all survey pegs. If any pegs are missing, he shall immediately inform the Employer’s Agent in writing.

On completion of the Contract the pegs that have been unavoidably disturbed will be replaced by the Employer. Pegs which have, in the opinion of the Employer’s Agent, been disturbed due to the negligence of the Contractor will be replaced by a registered Land Surveyor at the Contractor’s cost.

PSA 8.10 Compliance with OHS Act and Regulations

(Including the Construction Regulations 2014)..... Unit: sum

The tendered sum shall include full compensation to the Contractor for compliance with all the requirements of the OHS Act and Regulations (including the Construction Regulations 2014), Health and Safety Officer/s, medical examinations, accommodation, transport, communication implements, consultations, meetings and any other thing necessary for the completion of the aspect, at all times, for the full duration of the Contract. The successful tenderer shall provide the Employer's Agent with a complete breakdown of this tendered sum.

This sum will be paid to the Contractor, in equal monthly amounts, subject to proper and accepted compliance.

PSA 8.11 Compliance with Environmental Requirements..... Unit: sum

The tendered sum shall include full compensation to the Contractor for compliance with all the environmental requirements.

This sum will be paid to the Contractor, in equal monthly amounts, subject to proper and accepted compliance.

PSA 8.12 Alterations to Existing Services

Temporary and permanent alterations made to existing services by the Contractor upon instruction of the Employer's Agent will be measured and paid under this item. Payment for works so ordered will be made on the basis of sums actually paid for materials, construction equipment and labour, exclusive of VAT.

PSA 8.13 Miscellaneous Items

An item which refers to this clause will be measured in the unit scheduled.

The sum or rate for such item shall cover the cost of all materials, labour and construction equipment required to execute and complete the work, as specified, as described in the Schedule of Quantities or shown on the drawings.

PSAB EMPLOYER'S AGENT'S OFFICE (SANS 1200AB)

PSAB 3 MATERIALS

PSAB 3.1 Name-boards

Add the following:-

Employer's name boards shall be erected within one month of the commencement of construction and shall be placed where ordered by the Employer's Agent. Any damage to these boards shall be repaired within 14 days of a written instruction received from the Employer's Agent. For details of the board refer to the Standard Drawings contained in this document.

Two Contractor's name-boards shall be erected in the area of the Works, at positions approved by the Employer's Agent, who may at any time order their removal if any objections are received.

The boards shall be manufactured from materials specified in Clause 3.1 of SANS 1200 AB.

All name-boards shall be removed 14 days prior to the date of the Final Approval Certificate.

PSAB 3.2 Office Building

Delete the first sentence and substitute the following:

The Contractor shall supply and furnish two air-conditioned "Kwikjack" (6 m x 3 m) offices, (one for the use of the Engineer and his/her staff and one for the Employers' inspectors) and one air-conditioned "Kwikjack" (9 m x 3.4 m) conference facility for conducting meetings.

Add to the Sub-clause:

In addition to the furnishings listed under sub-items (a) to (i), the following shall be provided and properly maintained:

- (j) electrical installation to include a light and two 15A plug points plus two adequately sized air conditioning units (for heating and cooling) for each unit
- (k) one refrigerator of at least 100 litre capacity
- (l) one kettle of at least 2 litre capacity
- (m) one tea set comprising six cups and saucers, six teaspoons, one teapot, one sugar bowl and one milk jug
- (n) covered parking for four vehicles
- (o) un-covered parking space for two vehicles
- (p) two "Barhold" or similar wall mounted racks each with 6 clamps suitable for hanging A0 sized drawings
- (q) one large meeting table
- (r) ten additional chairs

The Contractor shall supply one (1) lockable toilet for the exclusive use of the Employer's Agent's staff.

PSAB 4 CONSTRUCTION EQUIPMENT

PSAB 4.1 Telephone

Delete the Sub-Clause and substitute the following:

The Contractor will be required to supply the Engineer's Site Staff with pre-paid air-time to the value of R500.00 each per month for their mobile phones as soon as the Contract commences.

Add the following new clauses:

PSAB 4.2 Covered Parking Bay

The Contractor shall also supply and maintain four corrugated iron (or similar approved) covered carports with closed sides and gravelled floor for the sole use of the Employers Agents Representative and the Employer.

PSAB 4.3 All other specified facilities

The Contractor will be required to supply the Engineer's Representative and Site Staff with the following:

- i) Digital Camera
- ii) Laptop
- iii) Printer
- iv) Wi-Fi Internet Connection
- v) Access to a photocopier and associated consumables
- vi) Hired vehicles.

The camera, laptop and printer are to be as specified by the Engineer and are to be supplied as Prime Cost items.

The vehicles are to be hired under a Provisional Sum item. The hire agreement shall allow for fully comprehensive insurance.

PSAB 5 CONSTRUCTION

PSAB 5.2 Engineer's Office (Refer SANS 1921-1 Clause 4.14)

Add to the Sub-Clause:

The toilet facilities provided for the sole use of the Engineer or his representative(s), the Employer's inspectors, CLO and PSC shall be maintained in a hygienic and sanitary condition and shall be removed on completion of the Works. The facilities provided shall conform to the local health authority's requirements as applicable and the Contractor shall pay all sanitary fees and charges.

PSAB 5.5 Survey Assistants

Delete the first sentence and substitute the following:

The Contractor shall make available to the Engineer two suitably educated labourers for use on and about the site on survey and other work directed by the Engineer at all reasonable times.

Add the following new clauses:

PSAB 5.6 Survey Equipment

Add new Sub-Clause:

The Contractor shall provide the following survey equipment on the Site from the commencement to the completion of the Works:

- One automatic reading Engineer's level plus tripod
- One levelling staff (5 m long, 1 cm graduations)
- One staff angle bubble
- One metal change-point for levelling
- One separate plumb-bob
- One spirit level (one metre long)
- One hammer (2 kg) with steel or wooden pegs as necessary
- One 50 m steel or glass fibre tape
- One 5,0 m (or longer) retractable steel tape.

The equipment may be shared by arrangement between the Contractor and the Engineer or his representative on Site. The Contractor shall keep the equipment continuously insured against any loss, damage, or breakage and he shall indemnify the Engineer and the Employer against any claims in this regard. Upon completion of the Works the survey equipment as listed above shall revert to the Contractor.

The Contractor shall maintain the equipment in good working order and keep it clean until the completion of the Works.

PSAB 5.7 Site Instruction Books

The Engineer shall supply a site instruction book for specific use on the Site. All instructions given by the Engineer's Representative must be confirmed and countersigned by the Engineer. The instruction shall be countersigned by the Contractor before implementation.

The Contractor shall supply a triplicate book for site correspondence and inspection requests to the Engineer's Representative. Reasonable notice shall be allowed prior to inspections. All inspections requests and approval/disapproval thereof shall be recorded by the Site staff in writing. All requests must be signed and dated by the Engineer's Representative before implementation.

The Contractor in conjunction with the Engineer must ensure that a suitable site quality record system is put in place to record that each section, or work item, complies with the relative works specification.

PSAB 8 MEASUREMENT AND PAYMENT

PSAB 8.1 Scheduled Items

Delete the 1st sentence and substitute the following:

Items will be scheduled in terms of Sub-Clauses 8.3.2 and 8.4.2 of SANS1200 A.

PSAB 8.2.1 Fixed and Time-related Charges

Delete the 1st sentence and substitute the following:

The terms of Sub-Clause 8.2 of SANS 1200 A shall apply.

Add the following clauses:

PSAB 8.2.2 Furnished Office and Meeting Room

The Contractor shall supply, erect, maintain and service for the sole use of the Engineer's staff facilities as defined in PSAB 3.2 and PSAB5.2.

Payment will be made for the supply and erection of the above facilities under the provided fixed rate.

Payment will be made for the maintaining the above facilities in a suitable condition under the provided time related rate.

PSAB 8.2.3 Telephone

The Contractor shall provide air time as defined in Clause 4.1, as amended.

Payment will be made for supplying 1 x R500 monthly pre-paid airtime and data for the mobile telephone under the time related rate. The cost of making the airtime available shall be included in the tendered monthly rate rather than as a percentage mark-up (which would otherwise require invoices as proof of payment).

PSAB 8.2.4 Nameboards

The Contractor shall supply and erect nameboards in accordance with SANS 1200AB Clause 3.1. Payment will be made for the supply and erection of the nameboards under the provided fixed rate.

Payment will be made for maintaining the nameboards in a suitable condition under the relevant time related rate.

PSAB 8.2.5 Survey Assistants

Payment will be made for the employment of the survey assistants specified in Clause PSAB 5.5 under the provided fixed rate on verification of their availability by the Engineer. Should the survey assistants be removed from site during the course of the Contract then any payments made for the survey assistants will be reversed in the next interim payment certificate.

Payment will be made for the monthly cost of the survey assistants under the provided time related rate for as long as they are required to be available to assist the Engineer or his representatives.

PSAB 8.2.6 Survey Equipment

Payment will be made for the supply of the equipment specified in Clause PSAB 5.6 under the provided time-related rate on verification by the Engineer that the equipment specified is on site. No payment will be made if any of the items listed are not available to the Engineer.

The time-related rate is deemed to include maintaining the above equipment in a suitable condition.

PSAB 8.2.7 Covered Parking Bay

Payment will be made for the supply and installation of covered parking bay specified in Clause PSAB 4.2 under the provided fixed rate on verification by the Engineer that the parking bay specified is erected on site. Should the parking bays be removed from site during the course of the contract then any payments made for the supply of this equipment will be reversed in the next interim payment certificate.

Payment will be made for the maintaining of the above parking bays in a suitable condition under the provided time related rate.

PSAB 8.2.8 All other specified facilities for the Engineer

The supply of laptops, printers and cameras are to be provided under a separate Prime Cost item with associated mark-up.

The vehicles are to be hired under a Provisional Sum item. The hire agreement shall allow for fully comprehensive insurance.

The cost of providing and maintaining all other facilities for the Engineer's Site Staff (such as cell phone airtime, access to WiFi and photocopying facilities) shall be included in the relevant fixed and time-related scheduled rates.

PSAB 8.2.3 Survey Equipment

Payment will be made for the supply of the equipment specified under the fixed P&G rate on verification by the Employer's Agent that the equipment specified is on site. Should any of this equipment be removed from site during the course of the contract then any payments made for the supply of this equipment will be reversed.

Payment will be made for maintaining the survey equipment in a suitable condition under the time-related P&G rate

PSC SITE CLEARANCE (SANS 1200C)

PSC 3 MATERIALS

PSC 3.1 Disposal of Material

Add the following:

Unless otherwise ordered by the Employer's Agent, the Contractor shall dispose of material resulting from clearing and demolition operations at a site to be determined by the Contractor. Such a site shall have the approval of the Employer's Agent, the Local Authority and the Environmental Control Officer.

PSD EARTHWORKS (SANS 1200D)

PSD 3 MATERIALS

PSD 3.1.2 Classes of Excavation

Replace Sub-clauses 3.1.2 (a), (b) and (c) with the following:

All material encountered in any excavations for any purpose including restricted excavations will be classified as follows:

1. Excavation in all materials,
2. Extra-over excavation in all materials for excavation in hard rock by one of three means: blasting, excavator-mounted hydraulic breaker and splitting using expansive chemical grouts. The method to be employed for excavation in hard rock shall be as agreed with the Employer's Agent on Site.

Other earthworks

Non-plastic sandy material from excavations shall be used in the following order:

1. As selected granular material for pipe bedding.

2. As blanket and backfill to pipe trenches.
3. As backfill to structures.
4. As spoil stockpiled in selected areas indicated by the Employer's Agent.

The Contractor shall employ selective methods of excavation in order to preserve uncontaminated topsoil and material suitable for backfill, embankments, pipe bedding and selected granular material.

PSD 5 CONSTRUCTION

PSD 5.1.1.2 Safeguarding of Excavations

Replace Clause 5.1.1.2 (b) with the following:

Deep vertical faces of excavations could collapse during construction causing injury or death; hence the Contractor must either:-

1. provide a shoring system, designed by the Contractor and signed off by a suitably qualified Professional Engineer, OR
2. reduce the slope of excavations to the safe angle as determined by a suitably qualified Professional Geotechnical Engineer employed by the Contractor.

PSD 5.1.3 Stormwater and Groundwater

Add the following to this Clause:

The Contractor shall provide, operate and maintain sufficient pumping equipment, pipes and other equipment on site as may be necessary to dispose of stormwater and groundwater for the proper execution of the Works.

PSD 5.1.4.1 Dust nuisance

Add the following to this Clause:

The Contractor is responsible for dust control and is liable for all claims that may result from dust nuisance on all parts of the site and surrounding areas at all times, from the date of handing over of the Site, to the completion date of the Contract.

The Contractor shall plan the Works accordingly and shall use sufficient water or other methods to keep the level of dust to a minimum. This shall be done in consultation with the Employer's Agent and to the Employer's Agent's approval. The Contractor must make allowance for the above in the rates tendered for excavation.

PSD 5.1.4.3 Excavated Material not to Endanger or Interfere

Add the following to this Clause:

All surplus material and unsuitable material not required for backfilling shall be disposed of at suitable sites to be located by the Contractor. All such sites shall require the approval of the Employer's Agent, the Local Authority, the Environmental Control Officer and local community. No additional payment will be made for the transportation of such material.

Dumping shall proceed in an orderly manner with coarse material placed at the bottom and covered with finer material, where possible. Upon completion of dumping, the material shall be shaped to provide free-draining surfaces and shall be finished off to the satisfaction of the Employer's Agent.

PSD 5.2.2.1.(c) Excavation for General Earthworks and for Structures

Add the following to this Clause:

The Contractor shall excavate to the net outlines of the structures plus an allowance for work space. Vertical concrete walls shall not be cast against excavated surfaces, except in the case of concrete encasement to pipes and footings for brick walls.

PSD 5.2.2.1.(e) Excavation for General Earthworks and for Structures

Add the following to this Clause:

The Contractor shall inform the Employer's Agent, in writing, at least 14 days before commencing any work which will result in a change in the topography of the site, whether such work is for the permanent works or for temporary works which the Contractor intends to execute for his own convenience. Thereupon, before commencing the work, the Contractor shall take cross-sections of the original ground profiles or another approved method to determine the ground profiles of the entire area to be worked. In addition all rock and/or foundation levels shall be recorded as the work proceeds.

The information so obtained shall be permanently recorded on a drawing or drawings which shall each be signed by both the Contractor and the Employer's Agent. The Contractor shall then provide the Employer's Agent with a reproducible copy of each drawing to serve as a permanent record both for the purpose of determining the quantities of excavation and earthworks carried out in the construction of the permanent works and the extent to which temporary works shall be removed or temporary excavations shall be refilled upon completion of the Works.

Where the Contractor excavates to dimensions in excess of those shown on the drawings or ordered by the Employer's Agent or if the material in the bottom of an excavation is loosened before concrete has been cast, or if there is any over-excavation, or any loose or disturbed soil, it shall be removed and the over-excavation shall be replaced by mass concrete of prescribed mix Grade 15/20 mm.

Where blinding, mass or structural concrete is to be cast or where precast elements are to be placed on surfaces established by restricted excavation, the Contractor shall, in the case of rock surfaces, over excavate to 100 mm below the bottom of the structure and use mass concrete Grade 15/20 mm to bring the level to the bottom of the blinding.

Excavations to final level, ready to receive a blinding layer or concrete footing, shall be completed not less than 24 hours before such layer or footing is cast.

The Contractor shall arrange for the inspection by the Employer's Agent of all surfaces immediately before casting concrete.

PSD 5.2.3.1 Embankments

Add the following to this Clause:

The areas over which earth fills are to be constructed shall, after site clearance and removal of 150mm topsoil, be ripped to a depth of 150 mm and compacted to 90% of Mod AASHTO density. Should the topsoil layer be in excess of 150mm the Contractor is to notify the Employer's Agent in writing and request a directive as to how to proceed.

The Contractor shall plan his operations and particularly his cut and fill operations in such a manner that all cut material may be used to the best advantage of the Employer. This would mean that no material shall be unnecessarily spoiled.

The Contractor shall therefore not spoil any materials without the Employer's Agent's approval and without satisfying the Employer's Agent that this is necessary and that the most economical method of constructing the works is proposed.

Where filling is required on ground slopes greater than 1:10 the Contractor shall submit proposals for benching for approval by the Employer's Agent.

Fill in shall be compacted to the densities specified in Sub-clause 5.2.3.1.

PSD 5.2.3.2 (a) General Backfilling

Add the following to this Clause:

Backfill measured under the various items in the Schedule of Quantities shall be compacted to a density as stipulated in the scheduled item.

Material for backfilling around structures must be selected so that no clay, boulders or rock is used for backfilling within 300 mm of the structure.

PSD 5.2.4.2 Topsoiling

Add the following to this Clause:

Topsoil shall not be stockpiled higher than 2,0 m. Care shall be exercised to prevent the compaction of topsoil in any way especially by vehicles travelling over such material.

Topsoil shall be placed as directed in Sub-clause 5.2.4.2 on the faces of cut slopes and embankments and other flatter areas, as shown on the drawings or ordered by the Employer's Agent, to a nominal thickness of 100 mm after light compaction. The cut and embankment surface shall be raked or lightly scarified before laying of the topsoil to assist with adhesion between the surfaces.

PSD 7 TESTING

PSD 7.2 Taking and Testing of Samples

Replace this Clause with the following:

The Contractor shall carry out sufficient process control checks (one test per five cubic metres of backfill) on the compaction of all backfill layers before calling the Employer's Agent to inspect the work completed. The costs of testing shall be deemed to be included in the rates for backfilling.

PSD 8 MEASUREMENT AND PAYMENT

PSD 8.1 Basic Principles

Add the following Sub-clauses:

PSD 8.1.4 Backfilling of Over-Excavation

Backfilling over-excavation with concrete as specified in PSD 5.2.2.1(e), will not be measured for payment unless the over-excavation is ordered by the Employer's Agent to remove unsuitable material, in which case the additional excavation will be measured and paid as excavation in all materials and the concrete will be measured by volume, all to the additional dimensions ordered by the Employer's Agent.

PSD 8.2 Computation of Quantities

Add the following to Clause 8.2.1:

The volume of excavated material will be measured from the net outline of the structures and the average depth of excavation unless otherwise approved by the Employer's Agent.

PSD 8.3 Scheduled Items

PSD 8.3.2 Bulk Excavation

PSD 8.3.2(b) Extra-over for

Replace the contents of this Sub-clause with the following:

No extra-over payment will be made for excavation in material classified in terms of Sub-clause 3.1.2, as amended, as intermediate excavation. The tendered rate for excavation in all materials shall include for the cost of such excavation. Refer to PSD 3.1.2.

Extra-over item will be made for:

- a) Material classified as "hard rock". Refer to PSD 3.1.2.

PSD 8.3.3 Restricted Excavation

PSD 8.3.3 (b) Extra-over for

Replace the contents of this Sub-clause with the following:

No extra-over payment will be made for excavation in material classified in terms of Sub-clause 3.1.2, as amended, as intermediate excavation. The tendered rate for excavation in all materials shall include for the cost of such excavation. Refer to PSD 3.1.2

Extra-over item will be made for:

a) Material classified as “hard rock”. Refer to PSD 3.1.2

Extra-over payment will be made for hard rock excavation provided the surface levels of the hard rock have been recorded on drawings signed by the Employer’s Agent before it is excavated.

PSD 8.3.6 Overhaul

Replace the contents of this Clause with the following:

All movement of cut to fill material shall be regarded as freehaul. In addition, all movement of topsoil, overburden soil or any other material within the boundary of the site and less than 5 km from the site boundary shall be regarded as freehaul.

Overhaul will only be paid for disposal of topsoil, overburden, spoil or any other material where the transportation is beyond 5 km of the boundary of the site.

PSD 8.3.10 Topsoiling

Add the following to this Sub-clause:

The topsoiling will be measured by surface area covered.

The rate for topsoiling shall cover the cost of loading, hauling, spreading to a lightly compacted thickness of 100 mm and making suitable provision to avoid the topsoil slipping down the slopes of embankments and cut-slopes, all to the approval of the Employer’s Agent.

Add the following Clause:

PSD 8.3.14 ShoringUnit: m²

Trenches must be safeguarded as per clause PSD 5.1.1.2.

The area of shoring measured for payment will be the actual area of excavation side shored, calculated from the perimeter of structure plus adequate working space and the height of shoring actually used. (The maximum additional working space for shoring measurement will be 1.5 m)

The rate shall cover all the cost of the design, supply, placing, maintenance and removal of the shoring system and other support measures together with any cost that results from the inconvenience of working in the supported excavation and the cost of any risks inherent in the operation.

PSDB EARTHWORKS (PIPE TRENCHES) (SANS 1200DB)

PSDB 3 MATERIALS

PSDB 3.3 Selected Granular Material

(for bedding material (padding) for steel pipes see PSLB 3.3)

PSDB 3.4 Selected Fill Material

Not required. All material up to the underside of backfill shall be measured as selected granular. (for bedding material (padding) for steel pipes see PSLB 3.3)

PSDB 3.5(a) Backfill Material

In the third line delete "150 mm" and substitute "100 mm".

PSDB 3.5(b) Backfill Material

In the second line delete "PI not exceeding 12" and substitute "PI not exceeding 6".

PSDB 3.5(c) Cement Stabilised Backfill

Add the following new Sub-Clause:

Where scheduled, or directed by the Engineer, backfill shall be stabilised with 8% cement by mass. The backfill material shall have a plasticity index not exceeding 10 and all material must pass through a sieve of aperture size not exceeding that specified in SABS 1200 LB, Sub-Clause 3.2, as amended.

The dry materials shall first be mixed in a concrete mixer thereafter sufficient water is to be added to produce the stiffest consistency available for placing and compacting with vibrators.

PSDB 5 CONSTRUCTION

PSDB 8 MEASUREMENT AND PAYMENT

PSDB 8.3.2 Excavation

Add the following sub-items to Sub-Clause 8.3.2.(b):

- (3) Hand excavation and backfill where ordered by the Engineer Unit : m³
- (4) Backfill stabilised with 8 % cement where directed by the Engineer Unit : m³
- (5) Boulder excavation Class A Unit : m³
- (6) Boulder excavation Class B Unit : m³

• The tendered rates for (4) above shall include full compensation for selecting, mixing, backfilling and compacting of the stabilised material to 90% of modified AASHTO density.

Measurement of Extra Over for (5) and (6) above will not apply to any length of trench **in soft material more than 2m long**. Surplus boulder material from trench excavation shall where applicable, be disposed of to the designated spoil areas situated within the freehaul distance from the source of such material except where shown otherwise on the drawings.

PSDB 8.3.3.1 Deficiency in Backfill Materials

Payment for imported, graded stone laid under pipelines in accordance with PSDB 5.5 shall be paid for under either Sub-Clause 8.3.3.1(c) or as scheduled.

**PSDK GABIONS AND
PITCHING (SANS 1200DK)**

PSDK 3 MATERIALS

PSDK 3.1.1 Stone

Add the following to this clause and its sub-clauses:

The stone shall be clean, hard, unweathered and free from fissures and flaking. It shall have a relative density of 2.65 and should pass the requirements of the standard specification in terms of size, durability and finish.

No stone shall be of a size such that it will pass through a ring of diameter 88 mm.

No stone shall be of a size:

- exceeding 250 mm, and at least 85% of the stones shall be of a size equal to or exceeding 120 mm, in the case of gabion boxes, and,
- exceeding 150 mm, and at least 85% of the stones shall be of a size equal to or exceeding 100 mm, in the case of mattresses.

The stone shall be subjected to the weathering test. The stone shall be subjected to the durability test.

PSDK 3.1.2 Gabion Cages

Replace Clause 3.1.2 with the following:

Gabion boxes shall consist of double twisted, hexagonal wire mesh, Mesh Type 80, with 4.4 mm o/d frame wire and 2.7 mm o/d mesh wire, complete with partitions at 1 m centres. All wire to be mild steel to SANS 1580, zinc coated by hot-dip galvanizing to SANS 675.

Mattresses shall consist of double twisted, hexagonal wire mesh, Mesh Type 60, with 4.0 mm o/d frame wire and 2.5 mm o/d mesh wire, complete with partitions at 1 m centres. All wire to be mild steel to SANS 1580, zinc coated by hot-dip galvanizing to SANS 675.

PSDK 3.1.3 Geotextile Material

Add the following to Clause 3.1.3:

Filter fabric for groundwater drains shall be a non-woven continuous filament, spun-bonded polyester geotextile having the following physical characteristics:

Mass per unit surface	150 g/m ² (min)
Porosity under 0,5 kPa	93%
Porosity under 200 kPa	82%
Normal permeability under 2 kPa	3 x 10 ⁻³ m/s
Normal permeability under 200 kPa	7 x 10 ⁻⁴ m/s
Normal through-flow under constant head of 400mm.....	270 ℓ /m ² /s

The material shall be placed as directed and shall not be exposed to direct sunlight for prolonged periods.

PSDK 5 CONSTRUCTION

PSDK 5.1.3 Type of cage

New Sub-Clause:

The size of cages for gabions shall be a maximum of 3 000 x 1 000 x 1 000 mm and shall be divided into cells having a volume not greater than one cubic metre. The size of cages for mattresses shall be a maximum of 2 000 x 1 000 x 300 mm and shall be divided into cells having a volume not greater than 0,3 m³.

PSDK 5.1.4 Diaphragms

New Sub-Clause:

Each diaphragm shall be connected in the same manner to the sides and top panels in addition to the bottom panel.

PSDK 5.2.3 Assembly

Add to the Sub-Clause:

All gabion and mattress cages shall be connected to adjacent gabion and/or mattress cages by lacing the adjacent selvages together with 2,0 mm dia. galvanised steel wire. The lacing shall be in accordance with Sub-Clause 5.1.2.

PSDK 5.2.4 Rockfilling

Particular care shall be taken in the filling gabions and mattresses so as to ensure that the voids in the rockfill are reduced to the minimum that can be reasonably achieved. In order to minimise the voids in the rockfilling, the filling shall proceed in layers not exceeding 300 mm deep and each layer shall be rodded and barred so as to compact the rockfill before filling of the next layer commences. Where appropriate, hand packing of selected rock particles shall be carried out.

PSDK 5.2.4.2 Mattresses used in revetments and aprons

Add to the Sub-clause:

Where gabions and mattresses are placed in exposed positions the rock particles forming the exposed faces shall be specially selected so as to present a fair and even surface.

PSDK 5.3.4 Wired Pitching

Add to the Sub-Clause:

The areas in which wired or grouted wire pitching is to be used will be indicated on site by the Engineer.

PSDK 8 MEASUREMENT AND PAYMENT

PSDK 8.2.3 Extra Over 8.2.2 for Packing Selected Stone for Exposed Face

Add to the Sub-Clause:

The method of selecting and packing stone for exposed faces as scheduled shall be as specified in Sub-clause 5.2.7 - Special Finish.

PSG 7 TESTS

PSG 7.1.2 Frequency of sampling

Add the following to this clause:

One sample shall consist of three concrete test cubes.

For each sample taken the position in the structure shall be recorded where the batch represented by that sample is placed as also the date sampled.

Sampling of concrete of a particular grade shall be as specified in Sub-clause 7.1.2 with the following frequency of sampling referred to in Sub-clause 7.1.2.2 being amended to read as follows:

"A minimum of 4 samples per day of each grade of concrete placed or 6 samples for pours in excess of 10 m³ shall be taken."

PSG 7.2 Testing

Add the following Sub-clause:

PSG 7.2.5 Watertightness Testing of Concrete

The Clear/potable water retaining structures shall be disinfected before testing. Any re-testing that may be required shall be at the Contractor's expense.

The entire inside surface of the reservoir including columns and roof shall be thoroughly hosed down with water and brushed until properly cleaned off all dirt and other foreign matter.

The floor of the structure shall then be flooded to a depth of 150 mm with chlorinated water and dosed at the rate of 150 grams of chloride or lime to every cubic meter of water. The entire inside surface shall again be scrubbed using this water. The workers engaged in this operation shall wear clean rubber boots. On completion the floor of the structure shall be swept clean.

The chlorinated water shall be stored until the free chlorine level has dropped to an acceptable level. Excess dirt swept from the floor into the sump may be discharged subject to written approval being obtained from the Local Authority.

Payment shall be a lump sum. The rate shall cover the costs of all materials and water used.

The reservoir shall be tested for water tightness in accordance with BS 8007 1987 Section 9.

(a) Testing of the Structure:

For testing the liquid retention, the structure shall be cleaned and initially filled to the normal maximum level with the water at a uniform rate of not greater than 2 m in 24 hours.

When first filled, the water level should be maintained by the addition of further water for a stabilising period while absorption and autogenous healing take place. After a stabilization period of 21 days, refill (top up) and record the water level at 24 hour intervals for a test period of 7 days. During this 7 day test period the total permissible drop in level, after allowing for evaporation and rainfall, should not exceed 10 mm.

Notwithstanding the satisfactory completion of the test, any evidence of seepage of the liquid to the outside faces of the liquid-retaining walls shall be assessed by the Engineer against the requirements of the specification. Any necessary remedial treatment of the concrete, cracks, or joints shall be carried out from the liquid face where practicable. If a lining is used for this purpose, it shall be sufficiently flexible and not be in any way detrimental to the water quality.

In the event of any leakage or dampness being evident at any stage of the filling or testing or in the event of the Engineer considering the final degree of water-tightness to be unsatisfactory, the Contractor when ordered by the Engineer shall discontinue such filling or testing and shall, at his own expense, immediately take approved steps to rectify the leakage and to make the work thoroughly sound to the complete satisfaction of the Engineer. All such rectification work shall be continued assiduously until a satisfactory test is obtained, which shall prove to the Engineer that water-tightness has been obtained.

If required by the Engineer, the structure shall be retested before the expiry of the Defects Liability Period.

The Works will not be certified complete until the structure has been proved by testing to be watertight to the satisfaction of the Engineer.

(b) Testing of the Roof of water retaining structures

The roof shall be tested on completion by using a hose or sprinkler system to obtain a sheet flow over the whole area of the roof for a period of not less than 6 hours.

The roof shall be considered satisfactory if no leaks or damp patches appear on the soffit.

PSG7.2.6 Durability Testing:

Concrete shall comply with the durability parameters defined below:

(a) Water Sorptivity:

Sorptivity is sensitive to surface effects and may be used to assess the effectiveness of initial curing.

PSL MEDIUM-PRESSURE PIPELINES (SANS 1200L)

PSL3 MATERIALS (Clause 3.1)

PS L 3.1 GENERAL

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- Substitute the first sentence of L 3.1 with the following:
- Types and classes of pipes shall be as scheduled.

L 3.7 OTHER TYPES OF PIPES

PS L 3.7.1 uPVC Pipes

- Substitute 'SABS 966' with 'SABS 966: Part 1'

The pressure rating, stiffness and diameter shall be as detailed in the bill of quantities and drawings.

PSL 3.4 STEEL PIPES, FITTINGS AND SPECIALS

PSL 3.4.4 Fittings and Specials

Add to the Sub-Clause:

All steel bends, fittings and specials shall be fabricated to the dimensions and details shown on the drawings and/or described in the Bill of Quantities.

The sides of taper pieces shall diverge at an angle of not more than 11° to each other.

The bend, fitting, and special fabricator shall supply written confirmation that all hand welding was carried out by coded welders.

Bends, fittings, shall have the internal lining and external coating made continuous ("made good") as specified elsewhere for welded joints on coated and lined pipes.

L 3.8 JOINTING MATERIALS

PS L 3.8.3 Flanges and Accessories

Replace "insertion piece" in the first sentence with the following:

"EPDM elastomer or equivalent in accordance with ISO 4633 – 1996 reinforced rubber gasket with a minimum thickness of 3mm".

Add the following to L 3.8.3:

Flanges shall be drilled according to SABS 1123, Table 1600/3

PS L 3.8.4 Loose Flanges

Substitute the first sentence of the last paragraph of L 3.8.4 with the following:

Bolts and nuts shall comply with the requirements of SABS 135.

PS L 3.8.6 Spigot and Socket Pipes

Add the following to L 3.8.6:

Socketed joints for DI pipes shall be push-on type. The material used for the rubber gaskets shall be EPDM elastomer or equivalent in accordance with ISO 4633 – 1966.

PS L 3.9 CORROSION PROTECTION

PS L 3.9.5 Joints, Bolts, Nuts And Washers

Substitute L 3.9.5 with the following:

All bolts, nuts and washers shall be heavy duty galvanised.

PS L 3.9.7 DI Pipes

PS L 3.9.7.1 Internal lining

Pipes shall be internally lined with a cement mortar in accordance with the European Standard EN 545 : 2002

PS L 3.9.7.2 External coating

Pipes shall be externally protected with metallic zinc coating in accordance with the European Standard EN 545 : 2002. The mass of sprayed metal shall be not less than 200g/m². After zinc coating, pipes shall be coated with bituminous paint, the mean thickness of the bituminous paint shall not be less than 70 microns, in accordance with the above specification.

Polyethylene sleeve shall be supplied and fitted in accordance with NF EN 545 and ISO 8180.

PS L 3.9.7.3 DI Fittings

Fittings shall be electro-deposited coating with minimum thickness of 50 microns applied on a blast cleaned surface and phosphate surface.

PS L 3.10 VALVES

PS L 3.10.1 Gate Valves

All gate valves shall comply with the requirements of SABS 664 and shall be suitable for a working pressure of 1,6 MPa. All gate valves must be supplied with a square spindle nut, suitable to be used with a valve key.

Gate valves shall have socketed ends for uPVC pipes unless shown differently on the drawings and shall open clockwise. The direction for opening and closing shall be permanently displayed on the valves. Valves shall have non-rising spindles.

Compression shut-off valves with rubber protected gate and smooth finish without recess inside, may be used.

All flanged gate valves shall be drilled according to SABS 1123 Table 1600/3. Pipes shall not be tested against a closed valve.

Thrust blocks for test sections shall be approved by the Engineer prior to testing of pipes.

The cost shall include the chamber. Gate valves to detail, see drawing annexures.

PS L 3.10.4 Air Valves

Air valves for potable water shall be suitable for a working pressure of 1,6 Mpa for uPVC pipes. All air valves shall be double action air valves of Vent-o-mat series RBX air release and vacuum brake or similar. The branch of the tee on the main pipe shall be minimum 0,67 (2/3) of the diameter of the main pipe.

T-pieces for air valves shall be as follows:

Main pipe	Branch
mm dia	mm dia
75	75
110	80
160	100
200	150

All air valve installations shall be supplied with an isolating valve suitable for a working pressure of 1,6 Mpa and a distance piece between the air valve and the branch of the tee, and other fittings shown on the drawings.

The cost shall include the construction of the chamber. Air valves to detail, see drawing annexures.

PS L 3.10.5 Scour valves

Scour valves shall be suitable for a working pressure of 1,6 Mpa for uPVC pipes.

Scour valves shall consist of a flanged gate valve (size specified on drawings), coupled horizontally to a GMS flanged equal tee. The outlet pipe shall be galvanised flanged steel pipe section and a 45 deg galvanised flanged bend (as detailed on drawing no. 19-112. The outlet shall discharge above ground level in the direction of the fall of the natural ground surface, perpendicular to the main pipe.

PS L 3.10.6 Bulk Water Meter

The rate for water meters shall cover the cost of the supply of a water meter, with the necessary couplings to be connected to the appropriate pipes, gate valve, strainer, the installation, testing and putting into operation of the complete meter, including the construction of the chamber, as indicated on drawing.

Technical requirements for the meters

The bulk water meters shall be of the free-flow type manufactured from corrosion resistant material in a cast-iron casing. A distance of 10 times the diameter of the pipe before and 5 times the diameter after the water meter must be kept free of any obstructions such as bends, valves, reducers, etc.

The flow reading shall be given on a dial face and totalising shall occur by means of a roller counter and shall be accurate within $\pm 2\%$.

The meter shall be manufactured in such a way that all moving parts can be removed and replaced from the top without removing the whole meter. Replacement parts should be freely available. Each water meter installation shall be supplied with a gate valve on the upstream side of the water meter at a distance of 10 times the diameter of the pipe. This gate valve shall be provided for under the relevant item in the schedule of quantities.

Installation of meter

The meter shall be installed by a person approved by the supplier in order to validate the guarantee. All accessories for the complete installation shall be supplied by the Contractor.

All metal work shall be painted according to specifications after the testing and completion of the installation.

L 3.11 MANHOLES AND SURFACE BOXES

PS L 3.11.4 Step Irons

Substitute L 3.11.4 with the following:

Step irons shall consist of polypropylene coated 12 mm high tensile steel such as Calcamite or similar. The installation of the step irons shall be in accordance with the specification of the manufacturer.

PS L 3.11.6 Surface Boxes

Add the following to L 3.11.6:

The type of boxes shall be as specified on the drawings.

PSL 4 PLANT

PSL 4.4 Packing (New Sub-Clause)

Goods should be suitably packed in such manner as will ensure safe and efficient transport by road or rail, and the Contractor shall include in his prices for whatever packing may be necessary in this respect. Small items particularly liable to damage or loss in transit should be crated. All crates and packing material shall, after use, become the property of the Employer, unless distinctly specified otherwise, or if returnable, shall be so at the Contractor's expense.

PSL 5 CONSTRUCTION

PSL 5.1 LAYING

PSL 5.1.3 Keeping Pipelines Clean

Add to the sub-clause:

The Contractor shall take all of the steps necessary to prevent flooding of the Works and hence ensure that all work is carried out in the dry, and that the ingress of dirt and or dirty water into the pipes is prevented.

PSL 5.1.3.1 Cleaning Pipe Internals (New Sub-Clause)

Add new Sub-Clause:

The Contractor shall ensure that all pipe work is installed internally free of any contaminants. All traces of dirty water, dirt and debris are to be removed from the inside of the pipe as it is installed.

The Contractor shall take note that flushing of the completed pipeline may not be allowed after construction has been completed and therefore clean house keeping practices will be required under all circumstances during construction. The tendered rates for pipe laying shall include for the clean house keeping practices required.

Each section of the pipeline is to be internally inspected and passed by the Engineer once construction has been completed. If the pipework is not satisfactory, the Contractor shall re clean the pipe at his own expense until the pipe is passed clean. The Engineer reserves the right to utilize cameras or any other means to inspect inaccessible areas.

PSL 5.1.3.2 Cleaning of Valves and Fittings (New Sub-Clause)

Add new Sub-Clause:

All flanges, valves, fittings and equipment are to be installed in pipework only after they have been thoroughly cleaned. Flange faces shall be checked for damage before being incorporated into the permanent works and any damage shall be reported to the Engineer.

PS L 5.1.4 Depths and Cover

Add the following clause 5.1.4.6

The following cover will be allowed for:

- Trunk mains 800 mm
- Reticulation 600 mm
- Under cultivated land 1000 mm
- Road crossing 1000 mm
- Main road crossing uPVC sleeve

Backfill shall be executed to a depth of 0, 21 m by an average able-bodied labourer or group of such labourers, at a rate of not less than 34 m per 9,25 hour working day per labourer, using only picks, shovels, stumpers and similar hand tools.

PSL 5.1.8 End Caps (New Sub-Clause)

Add new Sub-Clause:

The Contractor shall, at the end of each days work, fit end caps to the open ends of the pipeline under construction. The end caps shall be manufactured in such a manner that it can be fitted to seal off the pipeline to the extent that it is totally dust and water proof. The end cap must be able to withstand a pressure of 1 m head of water externally when fitted.

End caps shall be maintained during non working periods.

The tendered rates for the laying of pipe shall be deemed to include for the supply, fitment, and maintenance of the end caps.

PSL 5.1.9 Marker Posts (New sub-Clause)

Pre-cast concrete marker posts as shown on the drawings and painted white in colour shall be set at all horizontal direction changes and where otherwise indicated by the Engineer.

The standard marker post rate shall include the supply and erection of painted, inscribed posts. The rate shall be inclusive of erection and shall include for all necessary excavation, mass concrete footing and formwork.

PSL 5.2 JOINTING METHODS

PSL 5.2.2 Flanged Joints

Add to the Sub-Clause:

Before being brought together, the ends of the pipes, fittings, couplings and flanges are to be inspected and cleaned to ensure that all parts forming the joint are undamaged and clean.

When jointing flanges, the faces shall be cleaned thoroughly and approved jointing material (compressed asbestos cement fibre or other approved gaskets on flanged joints), cut properly to size, is to be inserted immediately before bringing the two flanges together. Before closing the joints, the flanges must be parallel to each other, with all bolts inserted in the bolt holes. After the fittings have thus been aligned and well supported, the joint shall be bolted up to a uniform tightness using torque wrenches to achieve the required compression force on the gasket.

If and where full face gaskets are used, the jointing material shall be flush with, or protrude beyond, the outer circumference of the flange (this is not applicable to raised face flanges). On completion of the joint, the flanges and bolts shall be protected as described in Clause PSL 3.9.3.8.

L 5.6 VALVE AND HYDRANT CHAMBERS

PS L 5.6.1 General

Substitute the first sentence of L 5.6.1 with the following:

The drawings of valve and hydrant chambers, which are bound into the document, shall supersede the corresponding drawings in the standard specification.

PSL 5.11 Cement Stabilising Bedding and Selected Fill around Pipes

Where shown on the drawings or directed by the Engineer, the bedding and selected material around the pipe shall be stabilized with 8% by mass of OPC. This is applicable to water course crossings, under trafficked areas and on steep slopes.

In all cases, the cement shall be added to the bedding / selected fill material outside the trench and in such a manner so as to achieve full dispersion of the cement in the material and achieve Optimum Moisture Content when placed and compacted around the pipe. Excess water content is to be avoided so as not to create a 'concrete encasement' of the pipe.

PSL 7.3 STANDARD HYDRAULIC PIPE TEST

Add new Sub-clause:

Water used for one filling of the pipeline for hydraulic testing will be provided by the Employer free of charge. Additional water used due to unsuccessful hydraulic tests will be charged at the Employer's bulk rate per kilolitre that is charged to the employer by DWS. Filling of the pipeline for hydraulic testing shall be carried out slowly to enable air to escape and under the direction of the Engineer.

GRP pipelines shall be tested in approximately 2km lengths for which standardised hydraulic test points have been specified.

PSL 7.3.1 Test Pressure and Time of Test

Add to the Sub-clause:

The separate sections of pipeline to be pressure tested and the test pressure for each section (expressed as an elevation above sea level) shall be as shown on the construction drawing.

The Contractor shall make due allowance in the construction programme and in the tendered rates for the entire testing operation including for the provision of temporary end stops and any other costs incurred associated with testing the pipeline in intermediate sections.

The pipe shall not be tested until the associated structural concrete for anchorage has cured for 14 days or until such concrete has attained the specified design strength.

The section to be tested shall be pressurised to the specified pressure and left for 2 hours, during which period, the pressure drop (if any) and the quantity of water required to be pumped in to restore the test pressure shall be measured and recorded. In addition, all flexible and flanged joints shall be visually inspected and there shall be no sign of leakage.

The test pressure for field testing for uPVC pipes shall be 1,5 times the rated maximum working pressure of the pipe e.g. class 9 uPVC pipe (0,9 MPa rated working pressure) shall be tested to 1,35 MPa and class 12 uPVC pipe (1,2 MPa rated working pressure) to 1,8 MPa.

The test pressure applied according to L 7.3.1.2, must, with allowance for any level differences along the pipeline, be such that the pressure at any point in the pipeline will be at least 1,25 times and not more than 1,5 times the rated working pressure of the pipe.

At all times when there is water in the pipeline, and particularly during filling, testing and draining of the pipeline, all air valves shall be in operation and their individual isolating valves shall be open.

PSL 7.3.1.2 Delete the Sub-Clauses 7.3.1.2

PSL 7.3.1.3 Delete the Sub-Clauses 7.3.1.3

PSL 7.3.4 Initial Filling of Pipeline (New clause)

Add new Sub-Clause:

The entire process for filling the pipeline at any time during testing or disinfection shall be carried out under the supervision of the Engineer. Under no circumstances will the Contractor be allowed to carry out filling of the pipeline without the supervision of the Engineer, neither shall he/she permit any other persons to carry out such filling without the written permission of the Engineer.

Any damage to the pipeline caused by non-compliance with this clause shall be rectified at the Contractor's expense.

PSL 7.3.5 Connections After Testing (New Sub-Clause)

Add new Sub-clause:

The connections of the new pipework to the existing pipework shall only be carried out after the pipeline testing has been completed and accepted by the Engineer.

PSL 7.3.6 Remedial Measures (New Sub-Clause)

Add new Sub-clause:

In the event that a pipe section fails a test, the Contractor shall carry out all remedial measures necessary to obtain a successful test of each individual section and the entire pipeline, at his/her own expense. Such remedial measures shall in no way compromise the original pipeline specifications.

PSL 7.3.7 Draining of the Pipeline (New Sub-Clause)

Add new Sub-clause:

The pipeline may have to be drained to carry out remedial measures. The pipeline shall be drained via the scour valves in a manner that does not cause erosion of the streambeds or negatively impact on the environment in any way. All such drainage of the pipeline shall be carried out under the supervision of the Engineer.

PSL 7.6 Commissioning (New Sub-Clause)

Add new Sub-clause:

The pipeline will be considered to have been commissioned and practically complete once all the associated structures are sufficiently complete to carry out their structural and hydraulic function and the hydraulic test of the entire pipeline has been successfully completed.

PSL 8 MEASUREMENT AND PAYMENT

PS L 8.2.3 **Extra-over 8.2.1 For The Supplying, Fixing And Bedding Of Valves**
..... Unit : No

Add the following to L 8.2.3:

Valves are measured and paid for per item, complete with the inclusion of the cutting of pipes, couplings, extra excavation and all extra material and labour that is required, including tees, fittings, isolating valves (e.g. under air valves), complete as shown on the drawings.

PS L 8.2.10 **Temporary Valves, Etc.** Unit : Sum or No

Substitute L 8.2.10 with the following:

Temporary valves, end caps or blank flanges testing shall be included in the rate for the laying of pipes except where separate items are included in the schedule of quantities

PS L 8.2.11 Anchor/Thrust Blocks And Pedestals Unit : m³

Anchor and thrust blocks shall be measured per cubic metre concrete and the tendered rate shall include for all excavation, formwork and reinforcement (where specified) for the required dimensions.

PS L 8.2.13 Valves and Hydrant Chambers, etc Unit : No

Valve and hydrant chambers, manholes, etc., will be measured as a complete unit. The rate shall cover additional excavation (see Sub clause 8.2.2 and 8.2.3 of SANS 1200 DB), materials, plant and labour necessary for the complete construction including the installation of the surface bases or covers.

Valves are measured and paid for per item, complete with the inclusion of the cutting of pipes, couplings, extra excavation and all extra material and labour that is required, including tees, fittings, isolating valves (e.g. under air valves), complete as shown on the drawings.

PSL 8.2.17 Cutting into and Connecting to Existing Pipeline (New Sub-Clause)

"Cutting into and connecting to existing pipeline Unit : Sum

The rate for cutting into and connecting to existing pipelines shall cover the cost of exposing the existing pipeline, making arrangements with the Employer's staff to temporarily shut off the existing pipeline whilst effecting the connection, cleaning and preparing the pipe for cutting, cutting, dealing with all water (including that from possible leaking valves), preparing the pipe ends for jointing, welding / jointing and connecting the new pipework, making good internal linings and external coatings, re-commissioning the pipeline, and including all temporary supports, bedding and backfilling.

PSL 8.18 Cement Stabilising Bedding and Selected Fill around Pipes

An item, extra-over laying and bedding pipes, will be measured for payment for cement stabilising the bedding and selected fill around the pipes where directed by the Engineer. Separate items will be scheduled for stabilising on steep slopes and for stabilizing at watercourse crossings.

The tendered rates shall cover all additional costs associated with supplying the cement at the percentage specified and mixing it in and achieving Optimum Moisture Content for compaction around the pipe.

PS L 8.2.19 Pipeline markers Unit : No

The rate shall include the cost of all labour, material and equipment necessary to install pipeline markers according to drawing no. 19-004.

PS L 8.3 Water Meters Unit : No

The rate for water meters shall cover the cost of the supply of a water meter, with the necessary couplings to be connected to the appropriate pipes, gate valve, strainer, the installation, testing and putting into operation of the complete meter as described in PS L 3.10.6 and including the construction of the chamber, as indicated on drawing no. 19-114 for 40-150mm and drawing no. 19-115 for 200-300mm.

PSLB BEDDING (PIPES) (SANS 1200LB)

PSLB 2.3 DEFINITIONS

Main fill:

Delete "150 mm" in second line and substitute "300 mm".

PSLB 3 MATERIALS

PSLB 3.1 Selected Granular Material

(For bedding material for steel pipes see PSLB 3.3 below)

In the second line delete "19 mm" and substitute "10 mm".

Add to the Sub-Clause:

The maximum compactibility factor shall be 0,4.

PSLB 3.2 Selected Fill Material

Not required. All material up to the underside of backfill shall be measured as selected granular. (for bedding material for steel pipes see PSLB 3.3)

PSLB 3.3 Bedding

Add to the Sub-Clause:

All steel pipes and fittings laid under this Contract will be considered as being flexible pipes. Bedding (selected granular and selected fill material) for steel pipes shall be fine sand or fine non-cohesive soil, carefully selected, with maximum particle size of 5 mm and which shall not cake nor form lumps when drying. Samples of bedding sand shall be submitted by the Contractor to the Engineer for approval well in advance of construction. Only after the Contractor has received written approval from the Engineer, may he/she proceed with placing sand as selected granular material.

No sharp-edged stones shall be allowed to come into contact with the pipes or fittings. Joint holes (pockets) shall be provided in the trench bottom and bedding, at each pipe joint to facilitate welding, and no extra payment will be made for forming or filling the joint holes (pockets) with padding sand.

All bedding used for the cradle beneath and surrounding the coated steel pipes shall comply with the following requirements:

GRADING ANALYSIS RANGE	
SIEVE SIZE (mm)	PERCENTAGE PASSING
6,7	98 to 100
4,76	85 to 100
2,36	55 to 95
1,18	30 to 75
0,60	20 to 50
0,425	16 to 38
0,30	13 to 27
0,15	5 to 18
0,075	0 to 12

The material shall be free of organic matter and shall have a compatibility factor of not more than 0.4. The material should be classified as silty to fine sand having a stiffness ratio of not less than 5,0 MPa. Furthermore, the origin of the materials should, preferably, be river transported since it is preferable that the larger grains (3,0 to 4,8 mm in size) be rounded and not sharp and angular.

The Contractor will be required to carry out his/her own quality control testing of the material to ensure that it meets the padding sand requirements and complies with this specification at all times. At least one grading analysis shall be carried out for every 100 lineal metres of bedding placed. The results of these tests shall be forwarded to the Engineer within 24 hours of completion of the test. Should the material not comply with the specification, the Contractor shall remove and replace it with approved material at his/her own cost.

Depending on the actual material supplied by the Contractor, the moisture content may be critical to enable satisfactory placing and compaction and the Contractor will be deemed to have allowed in his tendered rate for any and all adjustments required to the moisture content of the bedding material at all times.

Items have been provided in the Bill of Quantities for the provision of approved bedding sand from approved Commercial or other approved off-site sources for bedding sand.

No extra payment will be made for forming or filling joint holes (pockets).

PSLB 3.4 Selection

PSLB 3.4.1 Suitable Material Available from Trench Excavation

PSLB 3.4.1 Suitable Material Available from Trench Excavation

Delete the Sub-Clause and substitute the following:

The excavation of a pipe trench shall comply with the requirements of Sub-Clause 5.4 of SANS 1200 DB and the provisions of Sub-Clause 3.7 of SABS 1200 DB (in terms of which, for the purposes of providing bedding materials, the Contractor is not required to use selective methods of excavating) shall apply. Nevertheless the Contractor shall take every reasonable precaution to avoid burying or contaminating material that is suitable and is required for bedding or covering the pipeline. If, in the opinion of the Engineer, bedding material can be produced from the excavated material, the Contractor shall, if so ordered by the Engineer, screen or otherwise treat (as scheduled) the excavated material in order to produce material suitable for bedding (see also Sub-Clause PSLB 8.1.2).

PSLB 5 CONSTRUCTION

PSLB 5.1 GENERAL

PSLB 5.1.4 Compacting

Delete the second line and substitute: top of the pipeline) shall be 93% mod AASHTO.

Add to Sub-Clause 5.1.4:

Steps will have to be taken by the Contractor to ensure that flexible pipes do not deform excessively in cross-section during and after construction and backfilling operations. The maximum deflection which will be acceptable at any stage during or after construction is 2% of the pipe diameter horizontally or vertically. The Contractor will be required to provide the necessary apparatus and to monitor deflection during construction.

Pipe deformations will only be maintained within the specified tolerances by correct backfilling practice. No heavy compaction equipment will be permitted for compaction of any pipe bedding, only pneumatic or hand rammers being acceptable. To this end, and to achieve the 93% compaction specified it is required that the bedding material be brought up evenly on either side of the pipe. The use of complete saturation of the material as a method of achieving the specified compaction may, subject to the Engineer's approval, be used. However, in this regard, Tenderers are advised that the presence of excessive quantities of water in the pipe trench could lead to flotation of the pipe.

Prior to the commencement of pipe laying the Contractor will be required to submit, to the Engineer, for his approval, his proposed methods of placing, and compacting methods which he proposes to implement in order to ensure compliance with the specification.

PSLB 5.1.5 Testing (New Sub-Clause)

Flexible and flanged joints shall be left exposed with a minimum of 300 mm clearance around the bottom of the pipe during hydraulic pressure testing of the pipe to facilitate inspection.

PSLB 5.2.5 Stone Bedding (New Sub-Clause)

In areas where waterlogged conditions exist or where ordered by the Engineer, special drains consisting of a 150 mm thickness (See PSDB 5.5) of single sized stone with a geofabric filter surround ("Bidim" Grade A4 or similar approved) extending the full width of the trench shall be provided below the bedding to the pipes. The excavation for these drains will be measured in cubic metres at the contract rate applying to unsuitable excavation below the bottom of the trench. The stone filling will be paid for per cubic metre and the geofabric filter will be paid for per square metre. All measurements in this connection will be to a width equal to the base widths and depths ordered.

PSLB 5.3 Placing and Compacting Flexible Pipes

PSLB 5.3 (a) Bedding Cradle

Delete the sub-clause and substitute the following:

The pipes shall be bedded on a minimum 100 mm thick layer of compacted granular bedding material on which a 50 mm thick layer of uncompacted granular bedding material has been placed and spread. Loose granular bedding material lying next to the pipe shall be placed into the haunch area and compacted with suitable hand tools (covered with rubber to prevent damage to the pipe coating), and additional selected granular material shall be added and compacted in 150 mm thick layers up to the mid point of the pipe diameter in the vertical plane. The remainder of the bedding i.e. the selected fill blanket, shall be placed in layers up the sides of the pipe, each layer being compacted until a level of 300 mm above the crown of the pipe is reached.

All bell (fox) holes shall be filled with bedding material.

PSLB 5.3(b) Selected Fill Blanket

Delete "200 mm" from title.

PSLB 6 TOLERANCES

PSLB 6.1 Moisture Content and Density

Add to the Sub-Clause:

The permissible deviations applicable are to be those for Degree of Accuracy II class of work.

PSLB 8 MEASUREMENT AND PAYMENT

PSLB 8.1.3 Volume of Bedding Materials

Add to the Sub-Clause:

- (c) The volume of bedding material shall be measured net i.e. the volume of the pipe is to be deducted.
- (d) No additional payment will be made for bedding material placed in bell (fox) holes

PSLB 8.1.6 Freehaul

Delete the Sub-Clause and substitute the following:

All haul will be regarded as free haul. No overhaul will be paid for under this Contract.

PSLB 8.2.2 Provision of Bedding by Importation

Delete the sub-clause and substitute the following:

Including for screening and/or other treatment:

- a) Selected granular material..... Unit : m³
- b) Bedding sand to specified bedding dimensions..... Unit : m³

The rates shall cover the cost of acquiring, loading, transporting, offloading, screening or otherwise treating excavated material in order to produce bedding that complies with the relevant specification, delivering it to points alongside the trench spaced to suit the Contractor's methods of working and of disposing of displaced material.

NOTE: The rate for the supply and laying of pipelines covers the cost of handling the bedding material from alongside the trench, placing it under the pipeline, forming joint holes and completing the bedding around and over the pipeline.

PSLB 8.2.3 Concrete Bedding Cradle

Add the following paragraph to the Sub-Clause:

All concrete bedding to pipes will require formwork. The rate for concrete bedding shall include for the supply, installation and stripping of all formwork.

PSLB 8.2.4 Encasing of Pipes in Concrete

Delete the fifth and sixth lines and substitute the following:

encasing the pipe in concrete 150mm thick each side of the pipe and to 150mm above the crown of the pipe including the cost of formwork, (if any), etc. and the cost of formwork to form stop ends on either side of collars, couplings, joints etc if instructed by the Engineer.

The rate for concrete encasing shall include for the supply, installation and stripping of all formwork.

PSLB 8.2.6 Drainage Layer (New Sub-Clause)

Add the new sub-clause:

Supply and place beneath pipe, 150mm crushed stone layer as ground water drainage layer. The excavation for these drains will be measured in cubic metres at the tendered rate applying to unsuitable excavation below the bottom of the trench (SABS 1200 DB 8.3.2 c).

The rate for stone filling shall be per cubic metre of stone fill, measured according to a width equal to the base widths and depths ordered.....Unit : m³

Supply and installation of geofabric filter material (BIDIM Grade A4 or similar) around stone. The rate shall be per square metre of geofabric to enclose the stone material, measured net according to a width equal to the base widths and depths ordered

C4 SITE INFORMATION

The following is a brief description of work to be done for Lukwethu Regional Water Supply Scheme & Surrounding Villages (Phase 1): NEW REST AND NGCANASINI villages.

No.	LM	TOWN	SCHEME NAME	ACTIVITY
1	KSD	Mthatha-Mqanduli and Surroundings	LUKWETHU REGIONAL WATER SUPPLY SCHEME & SURROUNDING VILLAGES (PHASE 1): NEW REST AND NGCANASINI RETICULATION IN WARD 29 – CONTRACT 13	Construction of reticulation gravity mains, break pressure tanks, valves and associated chambers, route markers, communal standpipes, gabions and pitching, refurbishment of existing boreholes etc.

CONTRACT NO.: ORTDM SCMU 30-21/22

Lukwethu RWSS & Surrounding Villages (Phase 1): New Rest and Ngcanasini – ward 29

Tender Drawings

TENDER DRAWINGS