



HEAD: SUPPLY CHAIN MANAGEMENT
MRS D. N. GAMBU

333 Church Street, Private Bag X 205, Pietermaritzburg, 3200
Telephone No. 033 – 392 2597

**CONTRACT No. SCM 29 OF 24/25 :APPOINTMENT OF A CONTRACTOR (6CE) FOR
THE CONSTRUCTION OF THE COPEVILLE PHASE 3C – RUPAR CRESCENT
RESERVOIR PROJECT & AC WATER PIPELINE REPLACEMENT WITHIN WARD 30**

21 November 2024

**ADDENDUM No. 1
NOTICE TO TENDERERS**

Tenderers for the abovementioned Contract are hereby notified as follows:

PLEASE ACKNOWLEDGE RECEIPT OF THIS ADDENDUM AS FOLLOWS:

1. Complete the form below and email a scanned copy of pages 1 and 2, to olwethum@jtnconsulting.co.za, cc. dgengan@jtnconsulting.co.za for the attention of Ms. O. Madiya by 25 November 2024 to confirm that you have received this notice.
2. Complete the attached acknowledgment of receipt and submit the completed form with your tender.
3. No Addendums will be issued within (5) working days of the close of Tender.

A handwritten signature in black ink, appearing to read 'D. Gengan', written over a dotted line.

**Mr. D. Gengan
for JTN Consulting Pty (Ltd)**

I/We herewith hereby acknowledge receipt of **ADDENDUM No. 1** (One) for **CONTRACT No. SCM 29 OF 24/25: APPOINTMENT OF A CONTRACTOR (6CE) FOR THE CONSTRUCTION OF THE COPEVILLE PHASE 3C – RUPAR CRESCENT RESERVOIR PROJECT & AC WATER PIPELINE REPLACEMENT WITHIN WARD 30**

Name of Tenderer:

Full Name of Signatory:

Capacity of Signatory:

Contact No.

E-Mail Address:

Signature:Date:

**THIS ACKNOWLEDGEMENT OF RECEIPT OF
ADDENDUM MUST BE SUBMITTED TOGETHER
WITH THE TENDER DOCUMENT**

MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 29 OF 24/25

**APPOINTMENT OF A CONTRACTOR (6CE) FOR THE CONSTRUCTION OF THE
COPESVILLE PHASE 3C – RUPAR CRESCENT RESERVOIR PROJECT & AC WATER
PIPELINE REPLACEMENT WITHIN WARD 30**

ADDENDUM No. 1

1. The Tender Notice in respect of the above contract which was advertised on 29 October 2024, in the Witness newspaper, CIDB, E-Tenders and this Municipality's websites, refers.
2. Following the **non-compulsory** Tender Briefing and Site Inspection Meetings held on 14 November 2024, in respect of the above tender, this addendum serves to inform all prospective bidders that the original tender document issued from Wednesday, 30 October 2024, is hereby retracted and replaced with a Revised Tender Document.
3. The revised tender document is available on National Treasury e-Tender Publication Portal on www.etenders.gov.za and can be downloaded and printed at the Tenderers cost.

DETAILS OF THE REVISION

1. The original tender document is hereby withdrawn in its entirety.
2. The Revised Tender Document contains updates and/or changes that supersede the original document.
3. All bidders must submit their proposals based on the Revised Tender Document. Submissions based on the original tender document will **not** be considered.

INSTRUCTIONS TO BIDDERS

4. The Revised Tender Document is available on National Treasury e-Tender Publication Portal on www.etenders.gov.za
5. The deadline for submission of tenders has been extended to **12h00 on Thursday, 12 December 2024. The terms and conditions pertaining to the submissions of tenders shall continue to apply.**
6. Any queries regarding the Revised Tender Document must be submitted in writing to Ms. O. Madiya via email: olwethum@jtnconsulting.co.za
7. For any technical related enquiries regarding the Specifications and drawings, Tenderers must contact either:

Name	Contact No.	E-Mail Address	Organisation
Duran Gengan	072 615 485 9	dgengan@jtnconsulting.co.za	JTN Consulting
Ms. Fathima Mota	081 450 2060	fathima.mota@msunduzi.gov.za	Msunduzi Municipality

THE MSUNDUZI MUNICIPALITY



HEAD: SUPPLY CHAIN MANAGEMENT
MRS D. N. GAMBU

333 Church Street, Private Bag X 205, Pietermaritzburg, 3200
Telephone No. 033 – 392 2597

CONTRACT No. SCM 29 OF 24/25

APPOINTMENT OF A CONTRACTOR FOR THE COPEVILLE WATER SCHEME PHASE 3C – RUPAR CRESCENT BULK WATER PIPELINE AND 750kL ELEVATED STEEL TANK PROJECT WITHIN WARD 30

CIDB CATEGORY: 6CE OR HIGHER

Tenderer's Name:
Postal Address:
Telephone No:
Fax No:
Cellular No:
E-Mail Address:
Contact Person:

Tenders contained in sealed envelopes and marked with “**CONTRACT No. SCM 29 OF 24/25**” and the **Contract Description** must be placed in the Tender Box located AT THE Central Stores, 2 Abattoir Road, (Off Kershaw Road), Pietermaritzburg, 3201, not later than **12h00 on Thursday, 12 December 2024**, when they will be opened in public. **Only Tenders placed in the Tender Box before the closing time above will be accepted.**



INDEX

DOCUMENTS THAT RELATE TO THE TENDER			
DOC No.	DOCUMENT	PAGE No.	COLOUR
T1.1	TENDER NOTICE AND INVITATION TO TENDER		White
T1.2	TENDER DATA	T1.2/1 - T1.2/30	Pink
T2.1	LIST OF RETURNABLE DOCUMENTS	T2.1/1 – T2.1/2	Yellow
T2.2	RETURNABLE SCHEDULES	T2.2/1 - T2.2/41	Yellow

DOCUMENTS THAT RELATE TO THE CONTRACT			
DOC No.	DOCUMENT	PAGE No.	COLOUR
	PART 1: AGREEMENTS AND CONTRACT DATA	C1.1/ 1	
C1.1	FORM OF OFFER AND ACCEPTANCE	C1.1/2 - C1.1/6	Yellow
C1.2	CONTRACT DATA	C1.2/1 - C1.2/10	Yellow
	PART 2: PRICING DATA	C2.1/1	
C2.1	PRICING INSTRUCTIONS	C2.1/2 - C2.1/4	Yellow
C2.2	BILL OF QUANTITIES	C2.1/5 - C2.1/38	Yellow
	PART 3: SCOPE OF WORK	C3.1/1	
C3.1	WORKS	C3.1/ 3 - C3.1/ 76	Blue
	PART 4: ANNEXURES	C4.1/1	
C4.1	ANNEXURES	C4.1/3 - C4.1/13	White

The Tenderer shall satisfy himself that this document is complete in accordance with the above schedule and if any pages are found to be missing, or duplicated, shall immediately request the Employer's Agent to rectify the discrepancy. No liability will be admitted by the Employer in respect of errors in the Tenderer's tender due to the foregoing.

THE MSUNDUZI MUNICIPALITY

TENDER NOTICE

CONTRACT No. SCM 29 OF 24/25

**APPOINTMENT OF A CONTRACTOR (6CE) FOR THE CONSTRUCTION OF THE
COPESVILLE PHASE 3C – RUPAR CRESCENT RESERVOIR PROJECT & AC WATER
PIPELINE REPLACEMENT WITHIN WARD 30**

The Msunduzi Municipality hereby invites tenders from suitably qualified and experienced Tenderers for the above works. ***Only Tenderers who have a CIDB grading of 6 CE or higher will be considered for appointment.***

Tender documents will be made available to tenderers from **12h00 on Wednesday, 30 October 2024**. Tender documents can be downloaded and printed at the Tenderer's cost from the National Treasury e-Tender Publication Portal on www.etenders.gov.za.

Printed copies of the tender documents shall also be available from the Supply Chain Management Unit Offices, 5th Floor, A S Chetty Centre, 333 Church Street, Pietermaritzburg, as from the abovementioned date and time, at a non-refundable tender deposit fee of **R1 264.62 (including VAT)** for each document drawn. Only cash or EFT payments will be accepted.

For any technical related enquiries regarding the Specifications, please contact Ms. Fathima Mota (Water Section) on either Contact No. 081 450 2060 or e-mail fathima.mota@msunduzi.gov.za.

For any procurement related enquiries, please contact Vinesh Govender (Supply Chain Management Sub-Unit) on Telephone No. 033 – 392 2027 or e-mail address vinesh.govender@msunduzi.gov.za.

A **non-compulsory** Tender Briefing Meeting will be held at **10h00 prompt on Thursday, 14 November 2024, in Auditorium No. 1, 1st Floor, Bessie Head Library, 260 Church Street, Pietermaritzburg, 3201**, from where all will travel in convoy to the site of works. Only one Tender Briefing Meeting will be held. An official will chair the meeting and answer queries raised by prospective Tenderers.

Sealed tenders containing the original hand written priced tender document and a digital copy of the same on a CD/USB Flash Drive and endorsed on the envelope with the appropriate **“CONTRACT No.”** and **“CONTRACT DESCRIPTION”**, must be placed in the Tender Box located at the Central Stores, 2 Abattoir Road, (Off Kershaw Road), Pietermaritzburg, 3201, (Co-ordinates: -29.6126297,30.3610014) not later than **12h00, Thursday, 12 December 2024**, when they will be publicly opened. Only tenders placed in the Tender Box shall be accepted. Under no circumstances whatsoever will any extension of time be allowed for submission of tenders.

Tender Validity Period: Four (4) months commencing from the closing date of tender.

Tender Evaluation & Adjudication Criteria: The tender shall be evaluated on a Two Stage Evaluation System, Stage One Functionality and Stage Two 80/20 Preference Point System. Adjudication criteria will be as per the tender document, the allocation of points will be in line with specific goals as prescribed in terms of the Preferential Procurement Regulations, 2022 pertaining

to the Preferential Procurement Policy Framework Act, Act No. 5 of 2000, including Chapter 4 of the Public Procurement Act No. 28 of 2024.

The Functionality for Stage One shall be evaluated on the following criteria:

Description	Maximum Points Awarded
Experience of Bidder in Water Pipeline and Structural Steel Projects	20
Experience in Water pipeline and Structural Steel Projects	15
Technical Qualifications i.e. Professional Registration with ECSA or SACPCMP	20
Construction Manager: Experience in Water Construction Projects	15
Total	70 Points
Minimum Threshold to Qualify for Stage Two	50 points

The allocation of Preference Points shall be according to the following Specific Goals:

Specific Goals	Maximum Points Awarded
Black Owned Enterprise	
A "black-owned enterprise" with at least 51% South African black ownership and/or more than 51% management control by South African black people	10
Locality Of The Business	
This includes any structure or establishment used in conducting a business within the Msunduzi Municipality's Area of Jurisdiction	10
Within Umgungundlovu Area of Jurisdiction	5
Total Points Awarded	20

The Msunduzi Municipality does not bind itself to accept the lowest or any tender and reserves the right to accept the whole or any part of a tender. Each tenderer will be informed of the tender result.

The Msunduzi Municipality expects businesses within the Pietermaritzburg and Midlands Region to support its contract and BEE/SMME initiatives.

MRS. N M NGCOBO (ACTING CITY MANAGER)

THE MSUNDUZI MUNICIPALITY

CONTRACT No. SCM 29 OF 24/25

**APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF COPESVILLE
WATER SUPPLY SCHEME PHASE 3C – RUPAR CRESCENT BULK WATER PIPELINE
AND 750KL ELEVATED STEEL TANK PROJECT WITHIN WARD 30**

DATA SHEET 1: INVITATION TO BID DOCUMENT

PART A

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE MSUNDUZI MUNICIPALITY					
BID NUMBER:	SCM 29 OF 24/25	CLOSING DATE:	12 December 2024	CLOSING TIME:	12h00
DESCRIPTION	APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF COPESVILLE WATER SUPPLY SCHEME PHASE 3C – RUPAR CRESCENT PIPELINE PROJECT WITHIN WARD 30				

BID RESPONSE DOCUMENTS MUST BE DEPOSITED IN THE BID BOX AT:

Tender Box located at the Central Stores				
2 Abattoir Road, (Off Kershaw Road)				
Co-ordinates: -29.6126297,30.3610014				
PIETERMARITZBURG				
3201				
SUPPLIER INFORMATION				
NAME OF TENDERER				
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:		OR	CSD No:

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES, ANSWER PART B:3]
TOTAL NUMBER OF ITEMS OFFERED		TOTAL BID PRICE	R
SIGNATURE OF TENDERER	.....	DATE	
CAPACITY UNDER WHICH THIS BID IS SIGNED			
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:		TECHNICAL INFORMATION MAY BE DIRECTED TO:	
DEPARTMENT	SCM UNIT	CONTACT PERSON	Fathima Mota
CONTACT PERSON	Vinesh Govender	TELEPHONE NUMBER	081 450 2060
TELEPHONE NUMBER	033 392 2027	CELLULAR NUMBER	081 450 2060
FACSIMILE NUMBER	-	E-MAIL ADDRESS	SEE BELOW
E-MAIL ADDRESS	Vinesh.govender@msunduzi.gov.za	Fathima.Mota@msunduzi.gov.za	

PART B

1. BID SUBMISSION:

- 1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
- 1.2. **ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED– (NOT TO BE RE-TYPED) OR ONLINE**
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

2. TAX COMPLIANCE REQUIREMENTS

- 2.1 TENDERERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
- 2.2 TENDERERS 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 TENDERERS 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 TENDERER 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)? ☐ YES ☐ NO
- 3.2. DOES THE ENTITY HAVE A BRANCH IN THE RSA? ☐ YES ☐ NO
- 3.3. DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA? ☐ YES ☐ NO
- 3.4. DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA? ☐ YES ☐ NO
- 3.5. IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION? ☐ YES ☐ 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 TENDERER:

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

T 1.2 TENDER DATA

SUB CLAUSE	DATA
	The conditions of tender are The Standard Conditions of Tender as contained in annex F of SANS 294-2004. The standard conditions of tender for procurements make several references to the tender data. The tender data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the sub clause in the standard conditions of tender to which it mainly applies.
F.1.1	The employer is: MSUNDUZI MUNICIPALITY
F.1.2	The tender documents issued by the employer comprise: <u>TENDER</u> T1.2 Tender data T2.1 List of returnable documents T2.2 Returnable schedules <u>CONTRACT</u> Part 1: Agreements and contract data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Form of Guarantee C1.4 Adjudicator's Agreement C1.5 Agreement in Terms of OHSA No 85 of 1993 Part 2: Pricing data C2.1 Pricing instructions C2.2 Bill of Quantities Part 3: Scope of work A: The Works B: Variation & Addition to Standard Specifications C: Particular Specifications D: Rules for the Contractor on Site E: Environmental Management Plan F: Environmental Management Check List G: List of Drawings. Part 4: Annexures C4.1 Annexures

	Tender documents may be collected from the Msunduzi Municipality SCM Unit, 5 th Floor, A S Chetty Centre, 333 Church Street, Pietermaritzburg, during working hours as from 12h00 on Wednesday, 30 October 2024.
F.1.4	The Employer's agent is: Name: JTN Consulting (Pty) Ltd Address: 56 Ridge Road, Scottsville, Pietermaritzburg, 3201 Tel: 033 342 3278 Fax: 086 554 5999 E-mail: admin@jtnconsulting.co.za The contact person is Mr. R. Rajkumar
F.2.1	Only those bidders who are registered with the CIDB in a contractor grading designation equal to or higher than 6CE or higher; and have adequate experience in the construction of water pipeline and structural projects are eligible to tender. A Tenderer will not be eligible to submit a tender if: the Tenderer cannot demonstrate that he will have in his employ during the contract period the necessary personnel satisfying the requirements of the Scope of Work for labour-intensive competencies for management and supervisory personnel.
F2.4	Add the following clause: All work produced, including records, drawings, documents and photography pertaining to this tender shall remain the property of Msunduzi Municipality and no part thereof may be copied, reproduced in any manner without the written consent of Msunduzi Municipality.
F.2.7	The arrangements for the site inspection meeting are: Location: Auditorium No.1, 1st Floor, Bessie Head Library, 260 Church Street, Pietermaritzburg, 3201 Thereafter, all parties will travel in convoy to site for a Site Inspection. Date: 14 November 2024 Starting time: 10h00 Tenderers must sign the attendance list in the name of the tendering entity. Addenda will be issued to, and tenders will be received only from, those tendering entities appearing on the attendance list.
F.2.12	If the tenderer wishes to submit an alternative offer, the only criteria permitted for such alternative tender offer is that it should demonstrably satisfy the Employer's standards and requirements, the details of which may be obtained from the Employer or Employer's Representative. Calculations, drawings and all other pertinent technical information and characteristics as well as modified or proposed Pricing Data must be submitted with the alternative tender offer to enable the Employer to evaluate the efficacy of the alternative and its principal elements, to take a view on the degree to which the alternative complies with the Employer's standards and requirements and to evaluate the acceptability of the pricing proposals. Calculations must be set out in a clear and logical sequence and must clearly reflect all design assumptions in the development of the pricing proposal. Acceptance of an alternative tender offer will mean acceptance in principle of the offer. It will be an obligation of the tenderer, in the event that the alternative is accepted, to accept

	the full responsibility and liability that the alternative offer complies in all respects with the Employer's standards and requirements The modified Pricing Data must include an amount equal to 5% of the amount tendered for the alternative offer to cover the Employer's costs of confirming the acceptability of the detailed design before it is constructed.
F.2.13.5	The employers address for delivery of tender offers and identification details to be shown on each tender offer package are: Location of Tender Box: Tender Box located at the Central Stores Physical address: , 2 Abattoir Road, (Off Kershaw Road), Pietermaritzburg, 3201, (Co-ordinates: -29.6126297,30.3610014) Identification details: Sealed tenders endorsed: "Contract No. SCM 29 OF 24/25"
F2.13.6	A two-envelope procedure will NOT be followed.
F.2.15	The closing time for submission of tenders is 12h00, on Thursday, 12 December 2024 Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted. Tender documents are not to be handed to staff of Msunduzi Municipality or Engineers. The Tenderer is to personally deposit the Tender in the Tender Box. Electronic copies of the Bill of Quantities are not acceptable and only Tender documents that have been completed by hand in black non-erasable ink will be accepted.
F.2.16	The tender offer validity period is 120 days.
F2.16.1	Add the following to the clause: If the tender validity expires on a weekend or public holiday, the tender validity period shall remain open until the close of business on the next working day.
F.2.18	The tenderer must submit to the Employer the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirement.
F.3.4	The time and location for opening tenders are: Time: 12h00 Location: Central Stores, 2 Abattoir Road, (Off Kershaw Road), Pietermaritzburg, 3201, (Co-ordinates: -29.6126297,30.3610014)
F.3.7	Add the following to the clause: Accept that failure to submit certificates stated in the Tender Data and failure to complete in full the tender document shall result in tender being regarded as non-responsive.
F.3.8	Test for responsiveness F.3.8.1 Determine, after opening and before detailed evaluation, whether each tender offer properly received: (a) complies with the requirements of these Conditions of Tender, (b) has been properly and fully completed and signed, and (c) is responsive to the other requirements of the tender documents. F.3.8.2 A responsive tender is one that conforms to all the terms, conditions, and specifications of the tender documents without material deviation or qualification. A material deviation or qualification is one which, in the Employer's opinion, would:

	(d) a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work, (e) b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or (f) c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified. Reject a non-responsive tender offer, and not allow it to be subsequently made responsive by correction or withdrawal of the non-conforming deviation or reservation.								
F.3.9	The procedure for evaluation of responsive submissions is; All respondents who submit responsive submissions and: a) submit an valid Tax Clearance Certificate or a PIN for Tax Status Compliance Verification issued by the South African Revenue Services or have made arrangements to meet outstanding tax obligations; b) are registered with the Construction Industry Development Board in an appropriate contractor grading designation; c) have completed the Compulsory Enterprise Questionnaire and who are considered by the Employer not to have any conflicts of interest which may impact on their ability to perform the proposed contract in the best interests of the Employer or potentially compromise the tender process and are free of persons in the state who are not permitted to submit tenders or to participate in the contract; and d) Are registered with Central Supplier Database e) Mandatory Requirements <table><tr><th>Description of Mandatory Requirement</th><th>Bidder Capacity Trait to be tested by the Mandatory Requirement</th><th>Custodian/Principal of Mandatory Requirement</th><th>Documentary proof: NB: Commissioner of Oaths required by law or Other verification method possible</th></tr><tr><td>LIC Certification</td><td>LIC training certification with a minimum of NQF L4 (Construction Manager) for CIDB Grade 6CE or higher</td><td>Bidder</td><td>Copy of LIC certificate (certified by a commissioner of Oaths)</td></tr></table> Failure to submit the above will lead to disqualification of the tender.	Description of Mandatory Requirement	Bidder Capacity Trait to be tested by the Mandatory Requirement	Custodian/Principal of Mandatory Requirement	Documentary proof: NB: Commissioner of Oaths required by law or Other verification method possible	LIC Certification	LIC training certification with a minimum of NQF L4 (Construction Manager) for CIDB Grade 6CE or higher	Bidder	Copy of LIC certificate (certified by a commissioner of Oaths)
Description of Mandatory Requirement	Bidder Capacity Trait to be tested by the Mandatory Requirement	Custodian/Principal of Mandatory Requirement	Documentary proof: NB: Commissioner of Oaths required by law or Other verification method possible						
LIC Certification	LIC training certification with a minimum of NQF L4 (Construction Manager) for CIDB Grade 6CE or higher	Bidder	Copy of LIC certificate (certified by a commissioner of Oaths)						
F.3.11	Tender offers will be evaluated on F.3.11.2 Method 2: Financial offer and preference, using Formula 2, option 1a (Table F.1). 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								
F.3.13	1) The tenderer has completed and submitted a signed Form of Offer, 2) The tenderer has completed and submitted the Bill of Quantities, indicating his rate and line total. 3) The tenderer has submitted a Certificate of Attendance for the Compulsory Tender Clarification Meeting- N/A 4) The tenderer has completed and returned all addenda issued against the tender 5) Workmen's compensation 6) The tenderer is registered with Central Supplier Database and has in his or her possession a PIN for Tax Status Compliance Verification issued by the South African Revenue Services or has made arrangements to meet outstanding tax obligations – Ref. MBD2								

	7) The tenderer has completed and signed the Contractor's Health and Safety Declaration 8) The tenderer has completed the Compulsory Enterprise Questionnaires and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interest of the employer or potentially compromise the tender process – Ref. MDB4. 9) The tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector – Ref. MBD8; 10) The tenderer is not in arrears for more than 3 months with the municipal rates and taxes and municipal services charges. 11) Complies with the mandatory and functionality requirements.
F.3.18	The number of paper copies of the signed contract to be provided by the employer is 1 (ONE)
	The additional conditions of tender are: All returnable schedules are to be completed and all relevant certificates attached where indicated

THE MSUNDUZI MUNICIPALITY

SPECIAL CONDITIONS OF CONTRACT

1. DOCUMENTS

This document comprises of the Standard Conditions of Contracts (GCC 2010), Special Conditions of Contract, Specifications, Pricing Schedule (if applicable), Tender Form, Drawings (if any), Data Sheets and Annexures thereto.

2. COMPULSORY SITE INSPECTION/TENDER BRIEFING MEETING

NB: This clause does not apply to this tender, as the Tender Briefing is non- compulsory

Where in the tender document reference is made to a compulsory Site Inspection/Tender Briefing Meeting, the Service Provider shall be required to attend the meeting prompt on the date and time mentioned in the tender document. Service Providers arriving at the meeting after the stipulated time will be disqualified and the Council shall not be held liable for any loss or damage due to the above. Service Providers are to ensure that they sign the Attendance Register circulated at the meeting and to also ensure that the Site Inspection/Tender Briefing Certificate attached hereto is duly signed by the authorised official.

An official will Chair the meeting and answer queries raised by prospective Service Providers. Any amendment to the tender documentation arising from such answers will be circulated in terms of the meeting's attendance register.

Tenders will not be considered from Service Providers who do not attend the meeting and whose Site Inspection/Tender Briefing Certificate has not been commissioned by the authorised official.

Service Providers arriving at the Site Inspection/Tender Briefing Meeting after the stipulated starting time will be disqualified. Further, all Service Providers will be required to present their tender document at the Site Inspection/Tender Briefing Meeting for endorsement and failure to comply with this will result in disqualification.

3. SUBMISSION OF TENDERS

Tenders must be made out on the Tender Form annexed hereto. Tenderers are advised that this document must be completed in ink and submitted in its entirety. Failure to comply with this condition shall result in the tender being disqualified.

Only original hand written priced tender documents will be considered. Tenders submitted by electronic mail, telex or facsimile shall not be considered. ***The use of correction fluid is strictly prohibited***. All corrections are to be countersigned.

Tenderers using Courier Companies or any other mode of transport to deliver their tender documents must ensure that the tender documents are delivered to the City Hall, 169 Chief Albert Luthuli Street (Commercial Road), Pietermaritzburg, 3201, and placed in the Tender Box situated in the Foyer, Ground Floor by the close of tenders. The Council shall not be held liable for any tender document which is not timeously delivered, mislaid or incorrectly delivered due to the negligence of the Courier Company or any other party involved in the delivery of the tender documents, including any employee of the Council.

Sealed tenders endorsed with the appropriate contract number, must reach the City Hall, Pietermaritzburg not later than the closing date and time stated in the public advertisement inviting tenders, when they will be opened in public. Under no circumstances will any extension of time be allowed for the submission of tenders. Tenders shall remain valid for 120 days from the date of opening, except for the initial five (5) working days grace period after the close of tenders within which period a tenderer may be permitted to withdraw its tender subject to an application with good and sufficient reasons being submitted in writing to obtain approval of such withdrawal, at the sole discretion of the Head: Supply Chain Management.

All literature submitted must be securely attached to the tender. The Council shall not be held liable for any loss or damages sustained due to the Tenderer's failure to comply with this condition.

In the case of a Tenderer withdrawing its tender after the expiry of the grace period, the Council may refuse to receive or consider, for such period as it may think fit, any further tenders from that Tenderer.

4. COMMUNICATION WITH MEMBERS OF THE COUNCIL OR COUNCIL EMPLOYEES

Without detracting from any prevailing law, no Tenderer shall offer, promise or give any person or persons connected with the adjudication, or awarding of the tender, any gratuity, bonus, discount or consideration of any kind in connection with the obtaining of a contract. Nor shall any Tenderer communicate with any member of the Council or a Council employee on a question affecting the awarding of a contract which is the subject of a tender, during the period between the closing date of tenders and the date of notification of the successful Tenderer; provided always that the Head: Supply Chain Management may, in exceptional circumstances, obtain additional information from a Tenderer to enable her to formulate her recommendation to Council.

Any attempt to contravene this condition which is brought to the notice of the Head: Supply Chain Management shall result in the disqualification of the Tenderer.

Prospective Tenderers are further advised that s118 of the Municipal Finance Management Act prohibits the interference, by any person, with the supply chain management system of the Municipality and the amendment of or tampering with any tender, quotation, contract or bid after its submission.

5. IMPORT PERMITS

The Council will not undertake to secure any import permits or currency for the import of any goods or materials required for the execution of this contract. The Tenderer must apply directly for any import permits or currency needed. However, the Council will furnish the successful Tenderer with a supporting statement, if required.

6. REGISTRATION WITH THE CENTRAL SUPPLIER DATABASE (CSD)

The National Treasury's Central Supplier Database (CSD) has been open for registration from 01 September 2015. The CSD serves as one single source of supplier information to all spheres of government.

Within this system, suppliers are required to register once when they do business with the state. This will significantly reduce the administrative burden for businesses, especially small and medium sized enterprises. The database interfaces with the South African Revenue Service (SARS), the Companies and Intellectual Property Commission (CIPC) and the payroll system. It will electronically verify a supplier's tax and enable public sector officials doing business with the state to be identified. CSD does not automatically verify B-BBEE information. Tenderers are required to submit this information for allocation of B-BBEE points.

All prospective suppliers can register any time on the CSD website www.csd.gov.za

Prospective suppliers may also visit the Provincial Treasury Database office situated at Treasury House, Ground Floor, 145 Chief Albert Luthuli Road, Pietermaritzburg from 08h00 to 15h00, Mondays to Fridays, for any assistance with on-line registration on CSD.

For further information or enquiries, please contact 033 – 897 4516 / 033 – 897 4212 / 033 – 897 4624 / 033 – 897 4535 / 033 – 897 4676 / 033 – 897 4509 or Toll-Free at 0800 201 049 during office hours or via e-mail at database@kzntreasury.gov.za.

With effect from 01 July 2016, the Msunduzi Municipality will not award any tender to a supplier not registered as a prospective supplier on the CSD. Negotiations for the tender award will only be concluded with the qualify tenderer(s) who is/are registered on the CSD on or after 01 April 2016.

In order for Council to verify your Company's registration with CSD, please provide the following information for verification purposes:-

CSD Supplier Number	
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Failure to provide the above information shall render the tender to be disqualified.

7. TAX CLEARANCE CERTIFICATE REQUIREMENTS

It is a condition of tender that the taxes of the successful tenderer must be in order, or that satisfactory arrangements have been made with the South African Revenue Service (SARS) to meet the tenderer's tax obligations.

Tenderers shall be required to submit, together with the tender document, a **valid** Tax Clearance Certificate or a Tax Compliance Status Verification Pin issued by SARS. Failure to submit a valid Tax Clearance Certificate or a Tax Compliance Status Verification Pin will result in the invalidation and disqualification of the tender.

Further to the above, Tenderers are to note that the Tax Clearance Certificate must be valid for the full duration of the tender validity period i.e. 120 days commencing from the closing date of the tender.

Should the validity of the Tax Clearance Certificate expire prior to the final award of the contract being made, the Council reserves the right to request the Tenderer to submit a further valid Tax Clearance Certificate. In this instance, the Tenderer shall be given seven (7) working days written notice in which to comply. Should the Tenderer fail to comply with this request, the Council further reserves the right to make no award to the Tenderer and the Council shall not be held liable for any loss or damages sustained by the Tenderer.

8. RATES

The prices, rates or percentages quoted in the proposal shall be deemed to include all costs, including but not limited to materials, plant, labour, patent rights and royalties, freight, insurance, customs, railage, delivery, etc., unless the Service Provider states otherwise in the proposal.

9. INCOMPLETE TENDERING

Tenders may be rejected if they show any additional, conditional or incomplete offers or irregularities of any kind in either the Tender Form or the Pricing Schedule, or if the prices tendered in the Schedule are not market related i.e. the tendered rates does not conform to current day prices.

Partial awards **may** be made where this is perceived by the Head: Supply Chain Management or the Employer's Agent to be in the best interests of the Council. Council reserves the right to take into account the principle of the distribution of works in order to empower SMME's and BEE's.

Should there be any difference or discrepancy between the prices and particulars contained in the Tender Form and those contained in any covering letter submitted by the Tenderer, the prices and particulars contained in the Tender Form shall prevail.

10. ACCEPTANCE OF ANY TENDER

The Council does not bind itself to accept the lowest or any tender and reserves the right to accept the whole or any part of a tender. Council reserve the right to appoint more than one tenderer.

The Council reserves the right to purchase such items on the open market notwithstanding the acceptance of an offer.

11. DOMICILIUM CITANDI ET EXECUTANDI

For the purpose of the service of all documents and the giving of notice as may be required in terms of this contract, or as a result of any action arising in conjunction with it, the Council chooses City Hall, 169 Chief Albert Luthuli Street (Commercial Road), Pietermaritzburg as its *domicilium citandi et executandi*.

The Tenderer's *domicilium citandi et executandi* shall be whatever street address is given in the Tender Form attached hereto.

Either party may, at any time, give one (1) month notice, in writing, of a change of its *domicilium citandi et executandi* provided that such address shall be within the Republic of South Africa.

12. DATA SHEETS

Tenderers shall be required to complete all Data Sheets and the Tender Form attached hereto in their entirety for adjudication purposes. Where Data Sheets and/or any other documentation as contained herein are required to be commissioned, such Data Sheets and/or documentation must be stamped and signed by a Commissioner of Oaths. ***Failure to comply with these provisions will render the offer unresponsive (invalid).***

13. PROHIBITION ON AWARDS TO PERSONS IN THE SERVICE OF THE STATE

The Supply Chain Management Regulations states that the Council may not make any award to a person:-

- (a) who is in the service of the state ;
- (b) if that person is not a natural person, of which and director, manager, principal shareholder or stakeholder is a person in the service of the state; or
- (c) who is an advisor or consultant contracted with the municipality or municipal entity.

14. MUNICIPAL FEES

All Tenderers are to sign the Declaration herein declaring that their Municipal Fees are in order, or that proper arrangements have been made with the Council. Tenderers must include the relevant account numbers in the declaration.

15. APPEALS AND/OR OBJECTIONS

Any Tenderer aggrieved by decisions or actions taken by the Municipality may lodge within fourteen (14) calendar days of the date of the decision or action, a written objection or complaint to the Municipal Manager / Head: Supply Chain Management. In the event that an appeal and/or objection is lodged, the following procedure shall apply:-

The Tenderer shall be required to pay an appeal/objection fee in the amount of **zero point five percent (0.5%) of the total contract sum, including VAT or R2 000.00, whichever is the greater to a maximum value of R20 000.00.**

The fee is to be paid in cash or by bank guarantee cheque on or before the expiration of the above period and proof of such payment is to be submitted together with the letter of appeal/objection to the Municipal Manager/ Head: Supply Chain Management. No appeal/objection will be entertained should the afore-mentioned condition not be adhered to and the Municipality shall not be held liable for any loss or damage sustained by the Tenderer due to the Tenderer's failure to adhere to the above condition.

16. PREFERENCE POINTS CLAIMED IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

Tenderers claiming preference points shall be required complete Annexure "C" hereto in its entirety and to fully comply with the General Conditions, Definitions and Directives stated therein.

In line with PPPFA 2022 Regulations:

16.1. An organ of state must, in the tender documents, stipulate—

- (a) the applicable preference point system as envisaged in regulations 4, 5, 6 or 7;
- (b) The specific goal in the invitation to submit the tender for which a point may be awarded, and the number of points that will be awarded to each goal, and proof of the claim for such goal.

16.2. If it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

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

16.3. Evaluation

- The tender will be evaluated based on the 80/20 in terms of PPPFA 2022
- The evaluation of tender offers is Method 1: Price and Preference, using the 80/20 preference point system.

Specific Goals	Description	Maximum Points
Race	At least 51% South African Black ownership and/or more than 51% management controlled by South African black people (Black Owned Enterprise (BOE)) The tenderer is required to submit a copy of the Service Providers FULL CSD report to claim points above.	10
Locality	Within Msunduzi Jurisdiction	10
	Within Umgungundlovu Jurisdiction	5
	Bidders to submit a lease agreement or Municipal Account in the name of the company to claim points above.	
	Total Preference Points (Specific Goals)	20

The tenderer is required to submit a copy of the Service Providers CIPC certificate, a **FULL CSD** report as well as **original certified copies** of all Members/ Directors/ Owners Identity Documents to be eligible to claim the above-prescribed Specific Goals Preference Points.

Failure to submit the above will result in zero (0) points being awarded per goal.

Contract No.	
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17. JOINT VENTURE AGREEMENTS AND CONSORTIUMS

Tenderers intending to tender in the form of Joint Ventures / Consortiums **must submit** the following documentation together with the tender:-

- 1) Original valid Tax Clearance Certificates or a Tax Compliance Status Verification Pins issued by SARS of all parties of the Joint Venture/Consortium;
- 2) All parties of the Joint Venture/Consortium must submit signed copies of:-
 - a) The Declaration of Interest Form;
 - b) The Declaration of Bidder's Past Supply Chain Management Practices Form, and,
 - c) The Certificate of Independent Bid Determination Form.
- 3) An undertaking duly signed by all parties of the Joint Venture/Consortium indicating their intention to enter into an agreement for the purposes of this contract, and,

Further to the above, the name of the Joint Venture/Consortium must appear on the relevant pages of the document. Failure to comply with these requirements shall lead to disqualification.

18. ADJUDICATION CRITERIA

The tender shall be evaluated on the 80/20 or 90/10 Preference Point System in accordance with the Preferential Procurement Regulations, 2022, issued in terms of section 5 of the Preferential Procurement Policy Framework Act, Act No. 5 of 2000.

19. COMBATIVE TENDERING

The Supply Chain Management Regulations states that Combative tendering practices are unethical and illegal. These include but are not limited to:-

- (i) Suggestions to fictitious lower quotations;
- (ii) Reference to non-existent competition;
- (iii) Exploiting errors in bids;
- (iv) Soliciting bids from Tenderers whose names appear on the list of restricted bidders/suppliers/persons, and,
- (v) Submission of two bids by a Tenderer.

Any **attempt** by a Tenderer to contravene this condition which is brought to the notice of the Municipal Manager or the Head: Supply Chain Management shall result in the disqualification of the tender. The Council further reserves the right to take any other action as it may deem necessary.

20. COUNCIL'S LIABILITY AND INDEMNITY

- 20.1 The Service Provider hereby indemnifies the Council and its employees and agents against all losses and claims for injuries or damages to any person or property whatsoever which may arise out of the execution of this contract.
- 20.2 The Council shall not be held liable to the Service Provider for any direct or indirect damages or losses and the Council shall be indemnified and held free against claims arising out of:-
 - 20.2.1 any negligent or innocent misrepresentations made by the Council, its employees or agents in respect of any data, information and statistics supplied to the Service Provider prior to or during the contract; provided that this condition shall not deprive the Contractor of any payments lawfully due to the Service Provider in terms of the contract, and

20.2.2 a change in a legislative provision applicable to the contract

21. ASSIGNMENT AND SUBLETTING

Neither the Service Provider nor the Council shall assign or cede the contract or any part thereof or any benefit or interest therein or thereunder without the written consent of the other. The Service Provider shall not sub-let the whole or any part of this contract without the written consent of the Employer's Agent and such consent, if given, shall not relieve the Service Provider from any liability or obligation under the contract.

22. SEQUESTRATION OR SURRENDER OF SERVICE PROVIDER'S ESTATE

In the event of an order being made for sequestration of the Service Provider's estate, whether provisional or final, or in the event of an application being made for such order, or in the event of the Service Provider making application for the surrender of the Service Provider's estate, or if the Service Provider shall enter into, make or execute any deed of assignment or other composition or arrangement with, or assignment for the benefit of the Service Provider's creditors, or purport to do so, or if the Service Provider, being a company, shall pass a resolution, or if the Court shall make an order for the liquidation of such company, the Council shall have the right, summarily and without recourse to law, to terminate the contract without payment of any compensation to the Service Provider, and without prejudice to the right of the Council to sue the Service Provider for any damages sustained by it in consequence of one or the other of the afore-mentioned events.

23. SECRECY OF INFORMATION

Subject to the provisions of the Promotion of Access to Information Act, the information revealed in this tender document is to be classified as confidential. Accordingly, the Employer's Agent reserves the right to request references and generally examine bona fides and available facilities of any Company of Firm wanting to participate in this contract.

24. LAW TO APPLY

The contract shall in all respects be construed in accordance with the law of the Republic of South Africa, and any difference that may arise between the Council and the Service Provider in regard to the contract shall be settled in the Republic of South Africa.

25. PATENT RIGHTS

The Service Provider shall pay all royalties and expenses and be liable for all claims in respect of the use of patent rights, trademarks or other protected rights, and shall hold the Council indemnified and harmless against any claims for loss or damage to (including legal expenses) arising therefrom.

26. CONTRACT TO BE IN CONFORMITY WITH BY-LAWS AND ANY OTHER APPLICABLE LAWS

The contract shall be carried out subject to and in conformity with any law, regulation or By-law which is of application thereto and shall be conditional upon any necessary consent required by law being obtained.

27. OCCUPATIONAL HEALTH AND SAFETY ACT

The attached Annexure "B" hereto must be completed thereby indemnifying the Msunduzi Municipality of any claims which may arise in terms of the Occupational Health and Safety Act (Act 85 of 1993), as amended.

28. MANDATORY REQUIREMENTS

Description of Mandatory Requirement	Bidder Capacity Trait to be tested by the Mandatory Requirement	Custodian/Principal of Mandatory Requirement	Documentary proof: NB: Commissioner of Oaths required by law or Other verification method possible
LIC Certification	LIC training certification with a minimum of NQF L4 (Construction Manager) for CIDB Grade 6CE or higher	Bidder	Copy of LIC certificate (certified by a commissioner of Oaths)

Failure to submit the above will lead to disqualification of the tender

29. AWARDING OF MORE THAN ONE TENDER

Service Providers shall not be awarded more than one contract. Should the Service Provider obtain the highest score in more than one contract, the Service Provider will be required to choose ONE only.

30. VERIFICATION OF INFORMATION

Msunduzi Municipality reserve the right to verify supporting documents submitted by the bidder.

STANDARD CONDITIONS OF TENDER

General Condition of the contract 2015 shall apply unless stated otherwise

(As published in Annex F of the CIDB Standard for Uniformity in Construction Procurement in Board Notice 86 of 2010 in Government Gazette No 33239 of 26 May 2010)

F.1 General

F.1.1 Actions

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

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

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

F.1.2 Tender Documents

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

F.1.3 Interpretation

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

F.1.3.2 These conditions of tender, the tender data and tender schedules which are only required for tender evaluation purposes, shall not form part of any contract arising from the invitation to tender.

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

- a) **Conflict of interest** means any situation in which:
 - i) Someone in a position of trust has competing professional or personal interests which make it difficult to fulfill his or her duties impartially;
 - ii) An individual or organization is in a position to exploit a professional or official capacity in some way for their personal or corporate benefit; or
 - iii) Incompatibility or contradictory interests exist between an employee and the organization which employs that employee.
- b) **Comparative offer** means the tenderer's financial offer after the factors of non-firm prices, all unconditional discounts and any other tendered parameters that will affect the value of the financial offer have been taken into consideration
- c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and
- d) **Fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels

- e) **Organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body
- f) **Quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and employer's agent

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

F.1.5 The employer's right to accept or reject any tender offer

F.1.5.1 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 cancellation and rejection, but will give written reasons for such action upon written request to do so.

F.1.5.2 The employer may not subsequent to the cancellation or abandonment of a tender process or the rejection of all responsive tender offers re-issue a tender covering substantially the same scope of work within a period of six months unless only one tender was received and such tender was returned unopened to the tenderer.

F.1.6 Procurement procedures

F.1.6.1 General

Unless otherwise stated in the tender data, 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.

F.1.6.2 Competitive negotiation procedure

F.1.6.2.1 Where the tender data require that the competitive negotiation procedure is to be followed, tenderers shall submit tender offers in response to the proposed contract in the first round of submissions. Notwithstanding the requirements of F.3.4, the employer shall announce only the names of the tenderers who make a submission. The requirements of F.3.8 relating to the material deviations or qualifications which affect the competitive position of tenderers shall not apply.

F.1.6.2.2 All responsive tenderers, or not less than three responsive tenderers that are highest ranked in terms of the evaluation method and evaluation criteria stated in the tender data, shall be invited in each round to enter into competitive negotiations, based on the principle of equal treatment and keeping confidential the proposed solutions and associated information. Notwithstanding the provisions of F.2.17, the employer may request that tenders be clarified, specified and fine-tuned in order to improve a tenderer's competitive position provided that such clarification, specification, fine-tuning or additional information does not alter any fundamental aspects of the offers or impose substantial new requirements which restrict or distort competition or have a discriminatory effect.

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

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

F.1.6.3 Proposal procedure using the two stage-system

F.1.6.3.1 Option 1

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

F.1.6.3.2 Option 2

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

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

F.2 Tenderer's obligations

F.2.1 Eligibility

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

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

F.2.2 Cost of tendering

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

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 of documents

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

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.

F.2.6 Acknowledge addenda

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

F.2.7 Clarification meeting

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

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.

F.2.9 Insurance

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

F.2.10 Pricing the tender offer

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 Rand unless instructed otherwise in the tender data. The conditions of contract identified in the contract data may provide for part payment in other currencies.

F.2.11 Alterations to documents

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

F.2.12 Alternative tender offers

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

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

F.2.13 Submitting a tender offer

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

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

F.2.13.3 Submit the parts of the tender offer communicated on paper as an original plus the number

of copies stated in the tender data, with an English translation of any documentation in a language other than English, and the parts communicated electronically in the same format as they were issued by the employer.

F.2.13.4 Sign the original and all copies of the tender offer where required in terms of the tender data. The employer will hold all authorized signatories liable on behalf of the tenderer. Signatories for tenderers proposing to contract as joint ventures shall state which of the signatories is the lead partner whom the employer shall hold liable for the purpose of the tender offer.

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

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

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

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

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

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

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

F.2.15 Closing time

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

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

F.2.16 Tender offer validity

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

F.2.16.2 If requested by the employer, consider extending the validity period stated in the tender data for an agreed additional period.

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

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

F.2.17 Clarification of tender offer after submission

Provide clarification of a tender offer in response to a request to do so from the employer during the evaluation of tender offers. This may include providing a breakdown of rates or

prices and correction of arithmetical errors by the adjustment of certain rates or item prices (or both). No change in the competitive position of tenderers or substance of the tender offer is sought, offered, or permitted.

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

F.2.18 Provide other material

F.2.18.1 Provide, on request by the employer, any other material that has a bearing on the tender offer, the tenderer's commercial position (including notarized joint venture agreements), preferencing arrangements, or samples of materials, considered necessary by the employer for the purpose of a full and fair risk assessment. Should the tenderer not provide the material, or a satisfactory reason as to why it cannot be provided, by the time for submission stated in the employer's request, the employer may regard the tender offer as non-responsive.

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

F.2.19 Inspections, tests and analysis

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

F.2.20 Submit securities, bonds, policies, etc.

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

F.2.21 Check final draft

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

F.2.22 Return of other tender documents

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

F.2.23 Certificates

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

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

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

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

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.3.3 Return late tender offers

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

F.3.4 Opening of tender submissions

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

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

F.3.5 Two-envelope system

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

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

F.3.6 Non-disclosure

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

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.

F.3.8 Test for responsiveness

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

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

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

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

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

F.3.9 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.

F.3.11 Evaluation of tender offers

F.3.11.1 General

Appoint an evaluation panel of not less than three persons. Reduce each responsive tender offer to a comparative offer and evaluate them using the tender evaluation methods and associated evaluation criteria and weightings that are specified in the tender data.

F.3.11.2 Method 1: Financial offer

In the case of a financial offer:

- a) Rank tender offers from the most favourable to the least favourable comparative offer.
- b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- c) Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this sub-clause is repeated.

F.3.11.3 Method 2: Financial offer and preference

In the case of a financial offer and preferences:

- a) Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of F.3.11.7 and F.3.11.8.
- b) Calculate the total number of tender evaluation points (**TEV**) in accordance with the following formula:

$$\text{TEV} = \text{NFO} + \text{NP}$$

Where: **NFO** is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;

NP is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub-clause is repeated

F.3.11.4 Method 3: Financial offer and quality

In the case of a financial offer and quality:

- a) Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F.3.11.7 and F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (**TEV**) in accordance with the following formula:

$$\text{TEV} = \text{NFO} + \text{NQ}$$

Where: **NFO** is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;

NQ is the number of tender evaluation points awarded for quality

offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest.
- d) Recommend tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub-clause is repeated.

F.3.11.5 Method 4: Financial offer, quality and preferences

In the case of a financial offer, quality and preferences:

- a) Score each tender in respect of the financial offer made, preference claimed, if any, and the quality offered in accordance with the provisions of F.3.11.7 to F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.
- b) Calculate the total number of tender evaluation points (**TEV**) in accordance with the following formula:

$$TEV = NFO + NP + NQ$$

Where: **NFO** is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;
NP is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.
NQ is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

- c) Rank tender offers from the highest number of tender evaluation points to the lowest. d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
- e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this sub-clause is repeated.

F.3.11.6 Decimal places

Score financial offers, preferences and quality, as relevant, to two decimal places.

F.3.11.7 Scoring Financial Offers

Score the financial offers of remaining responsive tender offers using the following formula:

$$NFO = W1 \times A$$

Where: **NFO** is the number of tender evaluation points awarded for the financial offer.

W1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data

A is a number calculated using the formula and option described in Table F.1 as stated in the Tender Data.

Table F.1: Formula for calculating the value of A

Formula	Comparison aimed at achieving	Option 1 ^a	Option 2 ^a
1	Highest price or discount	$A = (1 + \frac{P - P_m}{P_m})$	$A = P / P_m$
2	Lowest price or percentage commission / fee	$A = (1 - \frac{P - P_m}{P_m})$	$A = P_m / P$

^a P_m is the comparative offer of the most favourable comparative offer.
 P is the comparative offer of the tender offer under consideration.

F.3.11.8 Scoring preferences

Confirm that tenderers are eligible for the preferences claimed in accordance with the provisions of the tender data and reject all claims for preferences where tenderers are not eligible for such preferences. Calculate the total number of tender evaluation points for preferences claimed in accordance with the provisions of the tender data.

F.3.11.9 Scoring quality

Score each of the criteria and sub criteria for quality in accordance with the provisions of the Tender Data. Calculate the total number of tender evaluation points for quality using the following formula:

$$NQ = W2 \times SO / MS$$

Where: **SO** is the score for quality allocated to the submission under consideration;

MS is the maximum possible score for quality in respect of a submission, and

W2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

F.3.12 Preferential Procurement

1. An organ of state must, in the tender documents, stipulate-
 - (a) the applicable preference point system as envisaged in regulations 4, 5, 6 or 7;
 - (b) the specific goal in the invitation to submit the tender for which a point may be awarded, and the number of points that will be awarded to each goal, and proof of the claim for such goal.
2. If it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
 - a. an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - b. any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system

F.3.12.2. CALCULATION OF THE PREFERENT POINTS SYSTEM

Preference point system

- (a) The 80/20 preference point system is applicable to bids with a rand value equal to, or above R30 000 and up to a rand value of R50 million (all applicable taxes included).
- (b) The 90/10 preference point system is applicable to bids with a Rand value above R50 million (all applicable taxes included)

80/20 preference point system for acquisition of goods or services with Rand equal to R30,000 up to R50 million

1. The following formula must be used to calculate the points out of 80 for price in respect of an invitation for a tender with a Rand value equal to R30,000 up to R50 million, inclusive of all applicable taxes:

The PPPFA prescribes that the lowest acceptable bid will score 80 or 90 points for price. Bidders that quoted higher prices will score lower points for price on a pro-rata basis.

The formulae to be utilized in calculating points scored for price are as follows: 80/20 Preference point system (for acquisition of services, works or goods up to a Rand value of R50 million) (all applicable taxes included)

$$Ps = 80[1 - ((Pt - Pmin)/Pmin)]$$

Where

Ps = Points scored for comparative price of bid or offer under consideration

Pt = Comparative price of bid or offer under consideration

Pmin = Comparative price of lowest acceptable bid or offer.

Preference point system (for acquisition of services, works or goods with a Rand value above R50 million) (all applicable taxes included)

$$Ps = 90[1 - ((Pt - Pmin)/Pmin)]$$

Where

Ps = Points scored for comparative price of bid or offer under consideration

Pt = Comparative price of bid or offer under consideration

Pmin = Comparative price of lowest acceptable bid or offer.

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

80/20 preference points system for tenders for income-generating contracts with Rand value equal to R30,000 up to R50 million

1. The following formula must be used to calculate the points for price in respect of an invitation for tender for income-generating contracts, with a Rand value equal to R30,000 up to R50 million, inclusive of all applicable taxes:

The PPPFA prescribes that the lowest acceptable bid will score 80 or 90 points for price. Bidders that quoted higher prices will score lower points for price on a pro-rata basis.

The formulae to be utilized in calculating points scored for price are as follows: 80/20 Preference point system (for acquisition of services, works or goods up to a Rand value of R50 million) (all applicable taxes included)

$$Ps = 80[1 + ((Pt-Pmax)/Pmax)]$$

Where

Ps = Points scored for comparative price of bid or offer under consideration

Pt = Comparative price of bid or offer under consideration

Pmin = Comparative price of lowest acceptable bid or offer.

Preference point system (for acquisition of services, works or goods with a Rand value above R50million) (all applicable taxes included)

$$Ps = 90[1 + ((Pt-Pmax)/Pmax)]$$

Where

Ps = Points scored for comparative price of bid or offer under consideration

Pt = Comparative price of bid or offer under consideration

Pmin = Comparative price of lowest acceptable bid or offer.

2. A maximum of 20 points for 80/20 preference system or 10 Points for 90/10 preference points system may be awarded to a tenderer for the specific goal specified for the tender.
3. The points scored for the specific goal must be added to the points scored for price and the total must be rounded off to the nearest two decimal places.
4. Subject to section 2(1)(f) of the Act, the contract must be awarded to the tenderer scoring the highest points.

Points scored must be rounded off to the nearest 2 decimal places.

80/20 preference points system for tenders for income-generating contracts with Rand value equal to R30,000 up to R50 million

1. The following formula must be used to calculate the points for price in respect of an invitation for tender for income-generating contracts, with a Rand value equal to R30,000 up to R50 million, inclusive of all applicable taxes:

The PPPFA prescribes that the lowest acceptable bid will score 80 or 90 points for price. Bidders that quoted higher prices will score lower points for price on a pro-rata basis.

The formulae to be utilized in calculating points scored for price are as follows: 80/20 Preference point system (for acquisition of services, works or goods up to a Rand value of R50 million) (all applicable taxes included)

$$Ps = 80[1 + ((Pt-Pmax)/Pmax)]$$

Where

Ps = Points scored for comparative price of bid or offer under consideration

Pt = Comparative price of bid or offer under consideration

Pmin = Comparative price of lowest acceptable bid or offer.

Preference point system (for acquisition of services, works or goods with a Rand value above R50million) (all applicable taxes included)

$$Ps = 90[1 + ((Pt-Pmax)/Pmax)]$$

Where

Ps = Points scored for comparative price of bid or offer under consideration

Pt = Comparative price of bid or offer under consideration

Pmin = Comparative price of lowest acceptable bid or offer.

2. A maximum of 20 points for 80/20 preference system or 10 Points for 90/10 preference points system may be awarded to a tenderer for the specific goal specified for the tender.

3. The points scored for the specific goal must be added to the points scored for price and the total must be rounded off to the nearest two decimal places.

4. Subject to section 2(1)(f) of the Act, the contract must be awarded to the tenderer scoring the highest points.

Points scored must be rounded off to the nearest 2 decimal places.

F.3.12.3. BASKET OF SPECIFIC GOALS AND OR TARGETED PROCUREMENT OBJECTIVES

The municipality shall set appropriate specific goals and or Targeted Procurement objectives which must form part of the invitation to tender, set as performance criteria within contracts. The basket of preference goals as contained in the relevant legislation are listed hereunder and the Municipality is at liberty to apply specific goals in any combination format depending on their preference targets. Municipality may include in their policy specific goals as part of their tendering conditions.

1. Preference Goal 1

Ownership as specific goal

(1) A maximum of 20 points (80/20 preference points system) or 10 (90/10 preference points system), may be allocated. Bidder may score preference points based on company ownership.

(2) If the Municipality applies ownership as specific goal, the Municipality must advertise the tender with a specific tendering preferential procurement requirement that in order for a tenderer to claim 10 / 20 points for specific goals, a tendering company must have the following ownership:

- race, (Historically Disadvantaged Persons) or
- gender (Historically Disadvantaged Persons) or;
- disability (Historically Disadvantaged Persons).

(3) Ownership verification may be conducted through the Companies and Intellectual Property Commission (CIPC).

2. Preference Goal 2

RDP Goals

2.1. Over and above the awarding of preference points in favor of HDIs, the following activities may be regarded as a contribution towards achieving the goals of the RDP (published in Government Gazette No. 16085 dated 23 November 1994):

- a. The promotion of South African owned enterprises;
- b. The promotion of export orientated production to create jobs;
- c. The promotion of SMMEs;
- d. The creation of new jobs or the intensification of labor absorption;
- e. The promotion of enterprises located in a specific province for work to be done or services to

- be rendered in that province;
- f. The promotion of enterprises located in a specific region for work to be done or services to be rendered in that region;
- g. The promotion of enterprises located in a specific municipal area for work to be done or services to be rendered;
- h. The promotion of enterprises located in rural areas;
- i. The empowerment of the work force by standardising the level of skill and knowledge of workers;
- j. The development of human resources, including by assisting in tertiary and other advanced training programmes, in line with key indicators such as percentage of wage bill spent on education and training and improvement of management skills; and
- k. The upliftment of communities through, but not limited to, housing, transport, schools, infrastructure donations, and charity organizations

3. Preference Goal 3

Combinations of any other Goals

3.1. The Municipality may also combine any specific goals above in a manner that will help them evaluate and apply preference points to tenders.

3.2. The municipality shall set appropriate Local Economic Development Targets in the form of Contract Participation Goals and or Targeted Procurement objectives which must form part of the invitation to tender, set as performance criteria within contracts, where appropriate, for the following target groups:

- 3.2.1. Priority population groups
- 3.2.2. Women
- 3.2.3. Youth
- 3.2.4. Disabled
- 3.2.5. Co-operatives
- 3.2.6. Military Veterans
- 3.2.7. Location of a Business Enterprise

3.3. Targeted Procurement Criteria will be applied, where feasible, on a tender-by-tender basis.

3.4. Address declared by the prospective bidder in the National Treasury Central Supplier Database (CSD) or in Msunduzi Municipality vendor database shall be used to determine the location of a business enterprise.

3.5. The preference points system is still to be used on the sale or letting of assets and in accordance with the disposals management section of this policy.

F.3.13 Insurance provided by the employer

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

F.3.14 Acceptance of tender offer

F.3.14.1 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.

F.3.15 Prepare contract documents

F.3.15.1 If necessary, revise documents that shall form part of the contract and that were issued by the employer as part of the tender documents to take account of:

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

F.3.15.2 Complete the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.16 Complete adjudicator's contract

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

F.3.17 Notice to unsuccessful tenderers

F.3.17.1 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.

F.3.17.2 After the successful tenderer has been notified of the employer's acceptance of the tender, notify other tenderers that their tender offers have not been accepted.

F.3.18 Provide copies of the contracts

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

F.3.19 Provide written reasons for actions taken

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

MSUNDUZI MUNICIPALITY
COPESVILLE WATER SUPPLY SCHEME PHASE 3C -
RUPAR CRESCENT BULK WATER PIPELINE AND 750KI ELEVATED STEEL TANK PROJECT WITHIN
WARD 30

CONTRACT NO: SCM 29 OF 24/25

SPECIFICATION

1.0 INVITATION TO BID ON AN OPEN TENDER PROCESS

The Msunduzi Municipality hereby invites tenders from suitably qualified and experienced service providers with CIDB Contractor Grading designation of 6CE or higher on an open tender process as publically advertised by the Municipality, for the Rupar Crescent Bulk Water Pipeline and 750kl elevated steel tank project within Ward 30, Pietermaritzburg.

2.0 PROJECT CHAMPION

Fathima Mota
Cell: 081 450 2060
Fathima.Mota@msunduzi.gov.za

3.0 SCOPE OF WORKS

The Works to be carried out under this contract entails the following:

- The replacement of the existing 450kl elevated tank with a 750kl elevated tank
- Installation of approximately 250mm diameter Class 16 uPVC pipeline
- Earthworks for pipeline and steel tank structure
- Associated chambers
- Steel frame structure for elevated tank
- Fittings, valves and associated fixtures

4.0 CONTRACT PERIOD

The contract period shall be 6 months from the date of site handover.

5.0 RETENTION AND SURETIES

- 10% shall be withheld from each interim payment certificate, as retention money, and shall be paid in accordance with clause 6.10.3 of the GCC 2015, 3rd Edition.
- The Contractor is required to provide a security for the due performance of the Contract in the form of a Performance Guarantee, equal to the value of 10% of the Contract value, issued by a registered financial services provider or by cash payment made out to the account of the Msunduzi Municipality.

6.0 PENALTIES

The Penalties for failing to complete the Works within contract duration shall be, 0.1% of the Construction Value per day.

7.0 COMPLIANCE WITH ANY LEGISLATION, BYLAWS, ETC.

- Contractors will be deemed by submitting a tender to have undertaken to comply fully for all purposes under this Contract with all current legislation and related regulations.
- The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2014 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993).

- The Contractor shall comply with the Environmental Specification prepared by the Employer; and is deemed to have made himself conversant with all legislation pertaining to the environment, including provincial and local government ordinances, which may be applicable to the contract.
- The Contractor shall comply with the guidelines specified in GCC 2015- 3rd Edition.

8.0 GUARANTEE/WARRANTY/DEFECTS LIABILITY PERIOD

12 months from date of completion.

9.0 DRAWINGS

A set of Tender Drawings will be provided for the purposes of estimating and pricing of the Works. The Contract shall be executed in accordance with the Construction Drawings issued by the Engineer.

10.0 INSPECTION OF CONTRACTOR'S PREMESIS

An inspection of the Contractor's Site Camp will be done by the Engineer upon award of a Service Provider, to ensure compliance to the specifications in this regard.

11.0 ESCALATION

N/A

12.0 DEFECTS LIABILITY PERIOD

The Defects Liability Period in twelve (12) calendar months and may be extended in terms of Clauses 5.14.3 or 7.8.1 of GCC 2015

13.0 MATERIALS

All materials and equipment used in the execution of the Contract must comply with the SANS

14.0 MANDATORY REQUIREMENTS

Description of Mandatory Requirement	Bidder Capacity Trait to be tested by the Mandatory Requirement	Custodian/Principal of Mandatory Requirement	Documentary proof: NB: Commissioner of Oaths required by law or Other verification method possible
LIC Certification	LIC training certification with a minimum of NQF L4 (Construction Manager) for CIDB Grade 6CE	Bidder	Copy of LIC certificate (certified by a commissioner of Oaths)

Failure to submit the above will lead to disqualification of the tender.

15.0 EVALUATION CRITERIA

- The tender will be evaluated through two (2) stages:
 - Stage 1- Functionality
 - Stage 2- Price and Preference (80/20 in terms of PPPFA 2022)

15.1 Stage 1 - Functionality Test

- Bidders **MUST** also submit proof or supporting documents in order to claim points, failure to do so will result in no points being awarded, e.g. qualification certificates for project engineer and CV's clearly indicating the no. of years in water and sanitation projects
- Certified copies of required certificates **MUST** be submitted, not copies of the certified copy. Failure to do so will also result in no points being allocated.

The table below lists the returnable schedules that set out the scoring criteria and sub-criteria, and the percentage weighting for the score achieved against the relevant schedule to be used for functionality.

STAGE 1: FUNCTIONALITY				Reference page
1	No number of similar projects completed		Points Earned = 20	
	Experience of Bidder in Water Pipeline and Structural Steel Projects - Submit a list of all water pipeline and structural steel projects completed with contact details and completion certificates - Award letter and completion certificate must be in the name of the bidder - A certified copy of the Completion Certificate per project to be attached in order to claim points during the evaluation process. - Certification of requested documents must be by a Commissioner of Oaths Failure to submit the above will result in zero (0) points being allocated.	More than 5 projects 2-5 projects 1-2 projects 0 projects	20 points 10 points 5 points 0 points	
2	Contracts Manager		Points Earned = 35 (a+b)	
	Experience in Water pipeline and Structural Steel Projects - Submit list of all water pipeline and structural steel projects completed, clearly indicating project durations (years & months) and dates together with contact details Failure to submit the above will result in zero (0) points being allocated.	> 5 years ≥ 3 but ≤ 5 years ≥ 1 but < 3 years Less than 1	15 points 10 points 5 points 0 points	
	Technical Qualifications - CV and certified copies of qualifications and ID to be submitted - Anything below National Diploma: Civil Engineering/ Construction Management or not Civil Engineering related will be allocated 0 points	Professional Registration with ECSA or SACPCMP (relevant qualification must be attached along with professional registration certificate) BSc or B-Tech	20 points 10 points 5 points	

	<i>Certification of requested documents must be by a Commissioner of Oaths</i> <i>Failure to submit the above will result in zero (0) points being allocated.</i>	Diploma		
3	Construction Manager		Points Earned = 15	
	(a) Experience in Water Construction Projects <i>Submit list of all water and structural steel projects completed, clearly indicating project durations (years & months) and dates together with contact details</i> <i>Failure to submit the above will result in zero (0) points being allocated.</i>	>10 years >5 years but ≤ 10 years ≥2 years but ≤ 5 years Less than 2 years	15 points 10 points 5 points 2 points	
4	TOTAL POINTS		70 points	

Tenderers to meet a minimum threshold of 50 points in order to move onto the next stage.

NB: Experience in water pipeline AND structural steel projects will only be considered.

29.2 Specific Goals- 80/20 in line with PPPFA 2022

Specific Goals	Description	Maximum Points
Race	At least 51% South African Black ownership and/or more than 51% management controlled by South African black people (Black Owned Enterprise (BOE)) The tenderer is required to submit a copy of the Service Providers FULL CSD report to claim points above.	10
Locality	Within Msunduzi Jurisdiction	10
	Within Umgungundlovu Jurisdiction	5
	Bidders to submit a lease agreement or Municipal Account in the name of the company to claim points above.	
	Total Preference Points (Specific Goals)	20

Failure to submit the above will result in zero (0) points being awarded per goal.

It is proposed that the tender evaluation be done as follows:

15.2. Tender Eligibility (F.2.1.1)

Only the Tenderers who comply with the following will have their tender evaluated:

- (a) Registered in the Central Supplier Database in terms of Circular 81 of the Municipal Finance Management Act (MFMA)
- (b) Minimum CIDB contractor grading designation 6CE or higher
- (c) Tenderers shall provide details of the Contracts Manager, Construction Manager, Construction Supervisor and Construction Health and Safety Officer's experience in work of a similar nature to that for which their tender is submitted.
- (d) Attach a detailed CV and Proof of Qualification and Proof of Professional Registration

T 2.1 RETURNABLE DOCUMENTS

1. Authority for signatory
2. Declaration of municipal fees
3. Declaration of interest
4. Declaration of bidder's past supply chain management practices
5. Certificate of independent bid determination
6. Declaration for procurement above R10 million (all applicable taxes included)
7. OHS act declaration and submission
8. Workmen's compensation registration certificate
9. UIF registration certificate
10. Compulsory enterprise questionnaire
11. Tax clearance requirements
12. Preference points claim form in terms of the preferential procurement regulations 2022
13. Registration with CIDB
14. Compulsory site inspection
15. Record of addenda to tender documents
16. Competency of key personnel
17. Schedule of proposed sub-contractors
18. Alterations by tenderer
19. Alternative tenders
20. Tender programme
21. Form of offer

T2.2 RETURNABLE SCHEDULES

FORM	CONTENTS	PAGE No.	RETURN ED Y/N
A	AUTHORITY FOR SIGNATORY	T2.2/3	
B	DECLARATION OF MUNICIPAL FEES	T2.2/4	
C	DECLARATION OF INTEREST	T2.2/5	
D	DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES	T2.2/7	
E	CERTIFICATE OF INDEPENDENT BID DETERMINATION	T2.2/9	
F	DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (ALL APPLICABLE TAXES INCLUDED)	T2.2/11	
G	OHS ACT DECLARATION AND SUBMISSION	T2.2/13	
H	WORKMEN'S COMPENSATION REGISTRATION CERTIFICATE	T2.2/15	
I	UIF REGISTRATION CERTIFICATE	T2.2/16	
J	COMPULSORY ENTERPRISE QUESTIONNAIRE	T2.2/17	
K	TAX CLEARANCE REQUIREMENTS	T2.2/20	
L	PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022	T2.2/21	
M	REGISTRATION WITH CIDB	T2.2/26	
N	TENDER BRIEFING MEETING CERTIFICATE	T2.2/27	
O	RECORD OF ADDENDA TO TENDER DOCUMENTS	T2.2/28	
P	COMPETENCY OF KEY PERSONNEL	T2.2/29	
Q	SCHEDULE OF PROPOSED SUB-CONTRACTORS	T2.2/34	
R	ALTERATIONS BY TENDERER	T2.2/35	
S	ALTERNATIVE TENDERS	T2.2/36	
T	TENDER PROGRAMME	T2.2/37	
U	TENDERER'S PARTICIPATION IN JOB CREATION USING LOCAL LABOUR & SKILLS TRAINING	T2.2/38	

A. AUTHORITY FOR SIGNATORY

I/We*, the undersigned, am/are* duly authorised to sign the tender document on behalf of

.....

by virtue of the Articles of Association/Resolution of the Board of Directors*, of which a certified
copy is attached, or

Full Name of Signatory:

Capacity of Signatory:

Signature:

Date:

Witnesses:-

(1) Full Name:

Signature:Date.....

(2) Full Name:

Signature:Date.....

* ***Delete whichever is inapplicable or complete as indicated if none are applicable.***

* **Signatories for companies must establish their authority by enclosing herewith a copy of the relevant resolution of the Board of Directors duly signed and dated**

B. DECLARATION OF MUNICIPAL FEES

I/We do hereby declare that the Municipal Fees of _____

Is/are, as at the date of the tender closing, fully paid up, or arrangements have been concluded with the Municipality to pay the said Fees:-

<u>Description</u>	<u>Account No.</u>
Electricity	_____
Water	_____
Rates	_____

I/We acknowledge that should it be found that the Municipal Fees are not up to date, the Council may take such remedial action as it required, including termination of contract, and any income due to the Contractor shall be utilised to offset any monies due to the Council.

Full Name of Signatory.....

Capacity of Signatory.....

I.D. Number.....

Duly Authorised to sign on behalf of.....

Physical Address.....

.....

.....

Signature Date

C. 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.
.....

¹MSCM 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.

"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

 Name of Signatory

 Signature

 Designation of the Deponent

 Name of Bidder

D. 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	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). 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.	Yes ☐	No ☐
4.1.1	If so, furnish particulars:		
4.2	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.	Yes ☐	No ☐
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 ☐	No ☐
4.3.1	If so, furnish particulars:		

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 ☐	No ☐
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 ☐	No ☐
4.7.1	If so, furnish particulars:		

CERTIFICATION

I, the undersigned (name)

.....

certify that the information furnished on this Declaration Form is correct.

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

Signature Date

E. 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 *per se* prohibited 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:

(Bid Number and Description)

in response to the invitation for the bid made by:

(Name of Municipality / Municipal Entity)

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
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

F. 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:

* Delete if not applicable

1. Are you by law required to prepare annual financial statements for auditing?

***YES / NO**

1.1 If yes, submit audited annual financial statements for the past three years or since the date of establishment if established during the past three years.

.....

.....

2. Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days?

***YES / NO**

2.1 If no, this serves to certify that the bidder has no undisputed commitments for municipal services towards any municipality for more than three months or other service provider in respect of which payment is overdue for more than 30 days.

2.2 If yes, provide particulars.

.....

.....

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?

***YES / NO**

3.1 If yes, furnish particulars

.....

.....

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is

expected to be transferred out of the Republic?

***YES / NO**

4.1 If yes, furnish particulars

.....
.....

CERTIFICATION

I, THE UNDERSIGNED, (NAME)

**CERTIFY THAT THE INFORMATION FURNISHED ON THIS DECLARATION FORM IS
CORRECT.**

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

G. OHS ACT DECLARATION AND SUBMISSION

The Tenderer declares himself to be conversant with the following:

1. All the requirements, regulations and standards of the Occupational Health and Safety Act No. 85 of 1993, hereinafter referred to as the Act, together with its amendments and with special reference to the following Sections of the Act:
 - i) SECTION 8: General duties of employers to their employees
 - ii) SECTION 9: General duties of employers and self-employed persons to persons other than employees.
 - iii) SECTION 13: Duty to inform
 - iv) SECTION 37: Acts or omissions by employees or mandatories
 - v) SUB-SECTION 37(2) relating to the purpose and meaning of this Agreement
2. Construction Regulations, 2014 (Government Notice 37305. 7 February 2014) pertaining to the Contractor and to all his sub-contractors, or any amendments thereto.
3. Tender document Part 5: Specification for Occupational Health and Safety, including all the Annexures.

The Tenderer declares that he has or will obtain the necessary knowledge, competence and resources to comply fully with all OHS Act requirements should he be awarded the contract.

SECTION 37(1)

Whenever an employee does or omits to do any act which would be an offence in terms of this Act for the employer of such employee or a user to do or omit to do, then, it is proved that –

- (a) *in doing or omitting to do the act the employee was acting without connivance or permission of the employer or any such user;*
- (b) *it was not under any condition or in any circumstance within the scope of the authority of the employee to do or omit to do an act, whether lawful or unlawful, of the character of the act or omission charged; and*
- (c) *all reasonable steps were taken by the employer or any such user to prevent any act or omission of the kind in question,*

the employer or any such user himself shall be presumed to have done or omitted to do that act, and shall be liable to be convicted and sentenced in respect thereof; and the fact that he issued instructions forbidding any act or omission of the kind in question shall not, in itself, be accepted as sufficient proof that he took all reasonable steps to prevent the act or omission.

SECTION 37(2)

The provisions of subsection (1) shall “mutatis mutandi” apply in the case of a mandatory of any employer or user, except if the parties have agreed in writing to the arrangements and procedures between them to ensure compliance by the mandatory with the provisions of this Act.

ACCEPTANCE BY MANDATORY

In terms of the provisions of Section 37(2) of the Occupational Health and Safety Act 85 of 1993,

I, _____

(Name of PRINCIPAL CONTRACTOR / Representative) acting for and on behalf of

_____ (Name of

PRINCIPAL CONTRACTOR / Company) undertake to ensure that the requirements and provisions of the

Health and Safety Specifications issued by the client at the following site:

_____ (Name of

Site) are complied with in the following manner:

- To produce, review, monitor and enforce a Health and Safety Plan which has been approved by the Client, an Agent for the Client or a Principal Contractor;
- To include a risk assessment in the Health and Safety Plan which identifies all hazards pertaining to the project;
- To ensure that all relevant documentation required by the Occupational Health and Safety Act and Regulations, including the Construction Regulations, the Compensation for Occupational Injuries and Diseases Act as well as any other statutory laws as amended from time to time is available on site in the health and safety file;
- Enforce precautionary measures stipulated in the risk assessments.

The person signing this agreement confirms that he/she has the authority to so sign and to bind his/her employer, the said Contractor.

Signature: _____ Date: _____

(on behalf of PRINCIPAL CONTRACTOR)

Signature: _____ Date: _____

(CLIENT- Msunduzi Municipality)

Print Name: _____

(Name of CLIENT Representative)

H. WORKMEN'S COMPENSATION REGISTRATION CERTIFICATE

Attach original (or certified copy) of the Workmen's Compensation Letter of Good Standing to this page. When applicable the option to submit an original or certified copy of the letter from the Agent authorized by the Workmen's Compensation Commissioner will be accepted.

NOTE: Failure to do so will lead to your tender being disqualified.

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

I. UIF REGISTRATION CERTIFICATE

[The Tenderer's Unemployment Insurance Fund (UIF) Registration Certificate to be inserted here]

J. COMPULSORY ENTERPRISE QUESTIONNAIRE

The following particulars must be furnished. In the case of a joint venture, separate enterprise questionnaires in respect of each partner must be completed and submitted.

Section 1: Name of enterprise:

--

Section 2: VAT registration number, if any:

--

Section 3: CIDB registration number, if any:

--

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

* Complete only if sole proprietor or partnership and attach separate page if more than 6 partners

Section 5: Particulars of companies and close corporations

Company registration number	
Close corporation number	
Tax reference number	

Attach a certified copy of valid CIPRO Certificate to this page.

Section 6: Record of service of the state

Indicate by marking the relevant boxes with a cross, if any sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months in the service of any of the following:

☐ a member of any municipal council	☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
☐ a member of any provincial legislature	☐ a member of an accounting authority of any national or provincial public entity

☐ a member of the National Assembly or the National Council of Province	☐ an employee of Parliament or a provincial legislature
☐ a member of the board of directors of any municipal entity	
☐ an official of any municipality or municipal entity	

If any of the above boxes are marked, disclose the following:

Name of sole proprietor, partner, director, manager, principal shareholder or stakeholder	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

Section 7: Record of spouses, children and parents in the service of the state

Indicate by marking the relevant boxes with a cross, if any spouse, child or parent of a sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder in a company or close corporation is currently or has been within the last 12 months been in the service of any of the following:

☐ a member of any municipal council	☐ an employee of any provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
☐ a member of any provincial legislature	☐ a member of an accounting authority of any national or provincial public entity
☐ a member of the National Assembly or the National Council of Province	☐ an employee of Parliament or a provincial legislature
☐ a member of the board of directors of any municipal entity	
☐ an official of any municipality or municipal entity	

Name of spouse, child or parent	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)	
		Current	Within last 12 months

*insert separate page if necessary

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

- i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;
- ii) confirms that neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004;
- iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of fraud or corruption;
- iv) confirms that I / we are not associated, linked or involved with any other Tendering entities submitting Tender offers and have no other relationship with any of the Tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest;
- v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

K. TAX CLEARANCE REQUIREMENTS

It is a condition of bid that the taxes of the successful bidder must be in order, or that satisfactory arrangements have been made with South African Revenue Service (SARS) to meet the bidder's tax obligations.

1. In order to meet this requirement bidders are required to complete in full the attached Form TCC-001 "Application for a Tax Clearance Certificate" and submit it to any SARS branch office nationally. The Tax Clearance Certificate Requirements are also applicable to foreign bidders / individuals who wish to submit bids.
2. SARS will then furnish the bidder with a PIN for Tax Status Compliance Verification.
3. The PIN for Tax Status Compliance Verification must be submitted together with the bid. Failure to submit the PIN will result in the invalidation of the bid.
4. In bids where Consortia / Joint Ventures / Sub-contractors are involved; each party must submit a separate PIN.
5. Copies of the TCC-001 "Application for a Tax Clearance Certificate" form are available from any SARS branch office nationally or on the website www.sars.gov.za.
6. Applications for the Tax Clearance Certificates may also be made via eFiling. In order to use this provision, taxpayers will need to register with SARS as eFilers through the website www.sars.gov.za

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

L. PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2022

1. GENERAL CONDITIONS

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

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

1.2 The value of this bid is estimated to not exceed R50 000 000 (all applicable taxes included) and therefore the 80/20 Preference Point System shall be applicable.

1.3 Points for this bid shall be awarded for:

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

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

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and Specific Goals must not exceed	100

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

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

2. DEFINITIONS

- (a) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);
- (b) **“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;
- (c) **“Functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (d) **“highest acceptable tender”** means a tender that complies with all specifications and conditions of tender and that has the highest price compared to other tenders;
- (e) **“lowest acceptable tender”** means a tender that complies with all specifications and conditions of tender and that has lowest price compared to other tenders;
- (f) **“price”** means amount of money tendered for good or services, and includes all applicable taxes less all unconditional discounts;

- (g) **“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;
- (h) **“Rand Value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation;
- (i) **“specific goals”** means specific goals as contemplated in section 2(1)(d) of the Act which may include contracting with persons, or categories of persons, historically disadvantaged by unfair discrimination on the basis of race, gender and disability including the implementation of programmes of the Reconstruction and Development Programme as published in Government Gazette No. 16085 dated 23 November 1994;
- (j) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (k) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions;

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1 POINTS AWARDED FOR PRICE

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

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

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

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

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

3.2.1 POINTS AWARDED FOR PRICE

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

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \\ Ps = 80 \left(1 + \frac{Pt - P_{\max}}{P_{\max}} \right) & \text{or} & Ps = 90 \left(1 + \frac{Pt - P_{\max}}{P_{\max}} \right) \end{array}$$

Where: -

Ps = Points scored for price of bid under consideration
 Pt = Price of bid under consideration
 Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1 In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender.
- 4.2 For the purpose of this tender points will be allocated in accordance with the specific goals as outlined in the Tender Document specification and must be supported by proof / documentation stated therein.
- 4.3 In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
- (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable

5. SUB-CONTRACTING

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

(Tick applicable box)

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

- 5.1.1 If yes, indicate:

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

(Tick applicable box)

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

- iv) Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations, 2022:

Designated Group: An EME or QSE which is at least 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		
Co-operative owned by black people		
Black people who are military veterans		
OR		
Msunduzi EME		
Msunduzi Manufacturing Enterprise		
Location of a Business Enterprise		

6. **DECLARATION WITH REGARD TO COMPANY/FIRM**

6.1 Name of company/firm.....

6.2 VAT registration number.....

6.3 Company registration number.....

6.4 **TYPE OF COMPANY/ FIRM**

- ☐ Partnership/Joint Venture / Consortium
- ☐ One-person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited
- ☐ Non-Profit Company

[TICK APPLICABLE BOX]

6.5 **DESCRIBE PRINCIPAL BUSINESS ACTIVITIES**

.....

6.6 **COMPANY CLASSIFICATION**

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

6.7 MUNICIPAL INFORMATION

Municipality where business is situated.....

Registered Account Number:

Stand Number:

6.8 Total number of years the company/firm has been in business.....

6.9 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 specific goals as advised in the tender, 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 5.2, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
 - (a) disqualify the person from the bidding process;
 - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
 - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
 - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
 - (e) forward the matter for criminal prosecution.

WITNESSES:

1. 2.....

.....
SIGNATURE(S) OF BIDDER(S)

DATE:

ADDRESS:

.....

.....

M. REGISTRATION WITH CONSTRUCTION INDUSTRY DEVELOPMENT BOARD

The Tenderer shall attach to this page either:

- Written proof of the tenderers registration with CIDB as a category 6CE or Higher
- Written proof of the tenderers application to CIDB for registration as a contractor in the category listed above.

In the case of a joint venture, each tenderer making up the joint venture shall attach their CIDB or CIDB registration certificates here.

NOTE:

Failure to affix such documentation as prescribed to this page shall result in this tender not being further considered for the award of the contract.

Tenderers submitted written proof of application to CIDB will be considered provided their registration can be confirmed with CIDB on the day of evaluation. ***Failure will lead to your tender being disqualified.***

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

N. TENDER BREIFING MEETING

TENDER BRIEFING MEETING CERTIFICATE

As required in terms of this document. I/we attended the non-compulsory tender briefing meeting on the date specified in the document.

I/we carefully examined the contract document and have made myself/ourselves fully conversant with all the circumstances likely to influence this contract.

I/we further certify that I am/we are satisfied with the description of the Works and the explanation given or on behalf of the Engineer at the tender briefing meeting, and that I/we perfectly understand the work to be done, as specified and implied in the execution of the contract.

(Print clearly)

NAME OF REPRESENTATIVE :

ON BEHALF OF TENDERER :

ADDRESS :

.....

TELEPHONE NUMBER :

O. RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the employer or his Agent before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer.

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		
12.		

Attach additional pages if more space is required.

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

P. COMPETENCY OF KEY PERSONNEL

Contractors shall employ in labour-intensive works only those supervisory and management staff that have completed the required Skills Programme in terms of Appendix C of the "Guidelines for the implementation of labour-intensive infrastructure projects under the Expanded Public Works Programme (EPWP) Third Edition 2015":

- Construction Manager at NQF level 4

Tenderers' attention is drawn to the required minimum supervisor to worker ratio for this project stated in the Particular Specifications.

The Tenderer must insert in the spaces provided below the relevant details of the personnel to be employed in the construction of the Works possessing the required qualifications in the supervision or management of LIC projects. A copy of the relevant qualification certificate for each such person shall be attached to the next page.

As this is a mandatory requirement, failure to submit the above will lead to disqualification of the tender.

DESIGNATION	NAME	NAME OF TRAINING INSTITUTION	QUALIFICATION OBTAINED IN THE SUPERVISION OR MANAGEMENT OF LIC PROJECTS	YEAR QUALIFICATION OBTAINED

T2.2 / 30

(b) Construction Manager – To be appointed in line with 8 (1) of the Construction Regulations, 2014

CONSTRUCTION MANAGER (NQF LEVEL 4)		NAME:.....	
NB: • Minimum Qualification shall be National Diploma in Civil Engineering • Attach a detailed CV and Proof of Qualification • All supporting documentation to be certified by a Commissioner of Oaths as per the functionality requirements.			
CLIENT & NATURE OF WORK	POSITION HELD	VALUE OF WORK	PROJECT DURATION

(c) Construction Supervisor – To be appointed in line with 8 (7) of the Construction Regulations, 2014

CONSTRUCTION SUPERVISOR (Foreman) (NQF LEVEL 4)		NAME:..... ...	
NB: • Attach a detailed CV			
CLIENT & NATURE OF WORK	POSITION HELD	VALUE OF WORK	PROJECT DURATION

R. ALTERATIONS BY TENDERER

Should the Tenderer desire to make any departures from, or modifications to the General Conditions of Contract, Specifications, Bill of Quantities or Drawings, or to qualify his tender in any way; he shall set out his proposals clearly hereunder or alternatively state them in a covering letter attached to the tender, and referred to hereunder. Failing to comply with the aforesaid will deem the tender unqualified. If no departures or modifications are desired the Schedule hereunder is to be marked NIL and in any case signed by the Tenderer.

PAGE	CLAUSE OR ITEM	REMARKS

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

T. TENDER PROGRAMME

The Tenderer shall detail below or attach a preliminary programme reflecting the proposed sequence and tempo of execution of the various activities comprising the work for this Contract. The programme shall be in accordance with the information supplied in the Contract, requirements of the Project Specifications and with all other aspects of his Tender.

PROGRAMME														
ACTIVITY	WEEKS													

[Note: The programme must be based on the completion time as specified in the Contract Data. No other completion time that may be indicated on this programme will be regarded as an alternative offer, unless it is listed in Form C of Page T2.2/4 hereafter and supported by a detailed statement to that effect, all as specified in the Tender Data]

Signed _____ Date _____

Name _____ Position _____

Tenderer _____

U. TENDERER'S PARTICIPATION IN JOB CREATION USING LOCAL LABOUR

The Contractor shall be required to participate in job creation (employment of local labour) by executing various portions of the Works using local labour (unskilled or semi-skilled), recruited from the local community, who are South African Citizens or foreigners in possession of a work visa issued by the Department of Home Affairs (only one such foreigner may be employed on any project). Proof of citizenship or work visa may be audited during the contract period.

The creation of one job shall mean the temporary employment, for any period of time, of one such unskilled or semi-skilled labourer from the local community.

The Tenderer shall note the requirements for Job Creation Reporting for EPWP as set out in the Requirements of the Expanded Public Works Programme (EPWP) of the project specifications.

The number of jobs to be created using such local labour is inclusive of the local labour employed to execute various portions of the Works by both the main Contractor and any subcontractors, including the small development subcontractors.

The number of jobs to be created using such local labour shall include for a minimum percentage allocation to the following individual targeted groups:

- 55% Women;
- 55% Youth; and
- 2% Disabled.

The minimum required content of such local labour for this project shall be calculated as follows:

Minimum required content of such local labour (%)

$$= \frac{(100 \times \text{amount spent on wages for such local labour (excluding VAT)})}{(\text{total value of the project (excluding VAT)})}$$

The minimum required content of such local labour for this project shall be **5 %**.

(Compiler to insert the target minimum percentage based on detailed calculations of the local labour component anticipated for each scheduled pay item, including the pay items contributing to the provisional sum associated with the construction Works carried out by Targeted Enterprise subcontractors appointed).

For purposes of completing the table on the next page containing the Tenderer's declaration with respect to participation in job creation using local labour, the total value of the project shall be the amount of the Tender Offer.

TENDERER'S DECLARATION WITH RESPECT TO PARTICIPATION IN JOB CREATION USING LOCAL LABOUR:

The Tenderer shall complete the table below reflecting the anticipated local labour force to be employed on this contract, including such local labour employed by subcontractors.

I/We hereby tender to participate in job creation through the employment of local labour by creating the following number of jobs using unskilled or semi-skilled labourers, recruited from the local community, who are South African Citizens or foreigners in possession of a work visa issued by the Department of Home Affairs (only one such foreigner may be employed on any project), including for a minimum allocation of 55% Women, 55% Youth and 2% Disabled:

Local labour comprising unskilled or semi-skilled labourers recruited from the local community	Anticipated number of jobs to be created	Total number of person-days anticipated	Wage rate per person-day (excluding VAT) (Rand)	Total wage cost (excluding VAT) (Rand)
Contractor's local labour content				
Subcontractors' local labour content				
Total anticipated wage cost of local labour content (excluding VAT)				R
Tender Offer (excluding VAT)				R
Hence anticipated local labour content expressed as a percentage of the Tender Offer (excluding VAT)				%
Note: Should this percentage not equal or exceed the specified minimum percentage, the tender will be considered non-responsive in terms of subclause F.3.8 of the Conditions of Tender and such a tender shall be rejected.				
Specified minimum local labour content (Compiler to insert the specified minimum percentage)				5 %

A penalty shall be applied to any shortfall in the local labour content achieved, as set out in the Requirements of the Expanded Public Works Programme (EPWP) of the project specifications. The penalty shall not apply to shortfalls in the allocations to the individual target groups (i.e., Women/Youth/Disabled), only to shortfalls in the total local labour content achieved.

The undersigned, who warrants that he/she is duly authorized to do so on behalf of the Tenderer, confirms that he/she understands the conditions for such participation and confirms that the tender satisfies the conditions for participation in job creation through the employment of local labour.

Name:

Duly authorized to sign on behalf of:

SIGNATURE:

DATE:

(Of person authorised to sign on behalf of the Tenderer)

Failure to complete, sign and date this form shall result in the tender being considered non-responsive in terms of subclause F.3.8 of the Conditions of Tender and such a tender shall be rejected.

Structured training programmes

The Contractor, supported by the training provider, shall plan then implement structured training programmes for generic, entrepreneurial and construction skills training.

Training courses shall commence within four months of the Contractor taking possession of the Site, and shall be completed before the Due Completion Date. *(Compiler to note that training courses cannot commence until the Contractor has fully established his facilities on site, including the required training facilities, and until the labourers that will be the recipients of the intended training have been recruited. The recruitment of labour, in turn, will to a large extent commence only after the initial subcontractors have been procured. A reasonable amount of time must therefore be allowed before the training process can commence).*

All training shall take place within normal working hours, or as otherwise agreed with the learners.

The training provider shall design, compile and deliver the structured training programmes, based on the information obtained from the skills analysis.

The structured training programmes designed by the training provider for the generic skills training shall comprise relevant general courses such as basic hygiene and HIV/AIDS awareness, first aid, road safety, managing personal finance, and other courses that would be useful to workers in the road construction industry or as life skills generally.

The structured training programmes designed by the training provider for the entrepreneurial skills training shall comprise unit standards that contribute towards one or more of the following full learnership qualifications, as appropriate taking into consideration the skills analysis information for the selected candidates (details of the learnership qualifications and the applicable unit standards may be found on the website www.saqa.org.za):

ENTREPRENEURIAL SKILLS TRAINING				
Qualification title	SAQA qualification ID	NQF level	Minimum credits	Purpose of qualification
National Certificate: Supervision of Construction Processes	49053	Level 4	176	Learners found competent against this qualification will be able to execute the supervision of construction processes, with specialisation in a specific context

(Compiler to liaise with the project manager regarding any further possible entrepreneurial skills training qualifications required for the contract).

The structured training programmes designed by the training provider for the construction skills training shall comprise unit standards that contribute towards one or more of the following full learnership qualifications, as appropriate taking into consideration the skills analysis information for the selected candidates (details of the learnership qualifications and the applicable unit standards may be found on the website www.saqa.org.za):

CONSTRUCTION SKILLS TRAINING				
Qualification title	SAQA qualification ID	NQF level	Minimum credits	Purpose of qualification
National Certificate: Supervision of Construction Processes	49053	Level 4	176	Learners found competent against this qualification will be able to execute the supervision of construction processes, with specialisation in a specific context
National Certificate: Occupational Health, Safety and Environment	74269	Level 2	120	This qualification is to equip learners working in any type of workplace with a broad understanding and knowledge of Occupational Health, Safety and Environmental (HSE) concepts and practices with sufficient detail to enable them to function in a safe and healthy way and to deal with health and safety problems and issues.

The Contractor's proposed training programmes shall be subject to the approval of the Employer's Agent, and the Contractor shall, if so instructed by the Employer's Agent, alter or amend the programmes and the course content to meet any additional needs identified.

The Contractor shall be responsible for everything necessary for the delivery of the training programmes, including:

- (a) the provision of the trainers;
- (b) the provision of a suitable secure venue complete with adequate furniture, lighting, air conditioning, power and ablution facilities;
- (c) the provision of all necessary stationery, consumables and study materials;
- (d) the transportation of the learners to and from the training facility;
- (e) the payment of wages to all learners during the classroom training at a rate equal to the minimum wage rate as set on an annual basis in the Ministerial Determination for the Expanded Public Works Programme;
- (f) the provision of any relevant Personal Protective Equipment (PPE) required for the training; and
- (g) additional supervision of the learners during the practical learning stage of the training carried out by constructing relevant elements of the Works (wages for the learners during this stage of the training will be paid through the rates tendered for the relevant scheduled work items for those elements).

At the successful completion of each course, the Contractor's training provider shall, as proof of attendance and completion, issue each learner with a certificate indicating the course content.

The training provider shall also ensure that each unit standard contributing towards a full learnership qualification and successfully completed by the learner is entered onto the national database.

The Contractor shall keep comprehensive records of the training given to each learner and the certificates issued, and shall provide copies of such records to the Employer's Agent when required.

The Contractor shall also complete and submit to the Employer's Agent each month, in a format acceptable to the Employer (using the EPWP Data Collection Tool template), a return detailing the training provided, both for the month and cumulatively for the contract.

PART 1

AGREEMENTS AND CONTRACT DATA

C1.1 FORM OF OFFER AND ACCEPTANCE

A. OFFER

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

APPOINTMENT OF A CONTRACTOR FOR THE CONSTRUCTION OF COPESVILLE WATER SUPPLY SCHEME PHASE 3C – RUPAR CRESCENT PIPELINE PROJECT WITHIN WARD 30

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

By the representative of the Tenderer, deemed to be duly authorized, 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:

Print clearly 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

Organization Name

Address.....

.....

Witness Signature **Date**

B. 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	Annexures

Drawings and documents, or parts thereof, may be incorporated by reference into Parts 1 – 4 above.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any changes to the terms of the Offer agreed by the Tenderer and the Employer during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Agreement. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be duly signed by the authorized 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 fulfill 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 the 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

Organization Name

Address.....

.....

Witness Signature **Date**

C. 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 further matter in such letter, which constitutes a deviation as aforesaid become the subject to agreements reached during the process of the 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 and 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 authorized 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

Print clearly

Signature(s)

Name(s)

Capacity

Organisation Name

Address.....

.....

Witness Signature **Date**

FOR THE EMPLOYER

Print clearly

Signature(s)

Name(s)

Capacity

Organisation Name

Address.....

.....

Witness Signature **Date**

C1.2 CONTRACT DATA

A. CONDITIONS OF CONTRACT

The conditions of contract applicable to this project shall be the General Conditions of Contract for Construction Works, 3rd Edition 2015, published by the South African Institution of Civil Engineering.

B. CONTRACT SPECIFIC DATA

(Clause numbers refer to Clauses in the General Conditions of Contract for Construction Works (3rd Edition 2015))

*** To be completed by Tenderer**

DESCRIPTION	CLAUSE	DETAILS
Defects Liability Period	1.1.1.13	12 calendar months from the date of issue of the Certificate of Completion
Time for achieving Practical Completion (including non-working and special non-working days)	1.1.1.14	Employers Time for Completion is 6 months from date of site handover.
Name of Employer	1.1.1.15	Msunduzi Municipality
Employers Agent	1.1.1.16	JTN Consulting (Pty) Ltd
Contract Pricing Strategy	1.1.1.26	Re-measurable Contract
Address of Employer	1.2.1.2	AS Chetty Building, 333 Church Street, Pietermaritzburg, 3201
Address of Employers Agent	1.2.1.2	56 Ridge Road, Scottsville, Pietermaritzburg, 3201
Specific approval of the Employer Required	3.2.3	The Employer's Agent shall obtain the specific approval of the Employer before executing any of his functions or duties according to the following clauses of the GCC: Clause 6.3: Variation Clause 5.12: Extension of Time for Practical Completion
Contractor's General Obligations	4.1.1 and SCC 4.1.1:	The penalty for failing to achieve the monetary value of the target set by the Employer for local labour content in terms of Part F: Requirements of the Expanded Public Works Programme (EPWP) of section C3.3 Particular Specifications in Part C3: Scope of Works, is 5% of the monetary value by which the achieved monetary value falls short of the target monetary value.
Documentation Required Before Commencement with Works Execution	5.3.1	- Health and Safety File, approved by the Safety Agent (Refer to Clause 4.3) - Initial Programme (Refer to Clause 5.6) - Performance Guarantee (Refer to Clause 6.2) - Insurances (Refer to Clause 8.6)

		- Letter of Good Standing with Compensation Commissioner. - Construction Notice with the Department of Labour
Time to Submit Documentation Required Before Commencement with Works Execution	5.3.2	Within 14 days after the Commencement Date.
Non-working and special non-working days	1.1.1.12 & 5.8.1	Non-working days are Sundays. Special non-working days are the year-end break and statutory public holidays.
Year-end break	5.8.1	18/12/2024 to 05/01/2025 (both days included)
Amount of Penalty	5.13.1	The penalty for failing to meet the requirements of clause 5.5 shall be the value of 0.1% of the Contract Value per day.
Latent Defect Period	5.16.3	10 years.
Performance Guarantee	6.2.1	10% of the Accepted Offer
Duration of Guarantee	6.2.3	Until the date of issue of Certificate of Completion
Contract Price Adjustment	6.8.2	CPA is not applicable for the first 12 months of the contract. The base month for the escalation calculation shall be month 12 and escalation will only be applicable from the 13 th month of the contract.
Percentage advance on material not yet built into the Permanent Works	6.10.1.5	80 percent
Percentage Retention	6.10.3	10 percent
Limit of Retention Money	6.10.3	5 percent of the total Contract Price
Delivery of Contractor's Completion Statement	6.10.8	14 days after the date of issue of the Certificate of Completion
Delivery of Contractor's final statement	6.10.9	14 days after the date of issue of the Certificate of Final Approval
Insurance of the Works	8.6.1	Required
Special Risks Insurance	8.6.1.2	SASRIA all risk is required
Minimum Amount of Liability Insurance	8.6.1.3	R5 000 000.00 for each and every claim, the number of claims being unlimited.
Settlement of disputes to be by	10.5.2 & 10.7.1	Ad-hoc adjudication followed by Arbitration (following the Rules for Conduct of Arbitrations published by the Association of Arbitrators)

Penalties	F1.11	Penalty applicable to any shortfall in the local labour content achieved
		The specified minimum percentage of local labour content is 5%
		<u>Note to compiler:</u> <i>The compiler is to insert the target percentage based on detailed calculations of the <u>local labour</u> component anticipated for each scheduled pay item, including the pay items contributing to the provisional sum associated with the construction Works carried out by Targeted Enterprise subcontractors.</i> <i>The compiler is to discuss and confirm the proposed minimum percentage of local labour content with the Department's Project Manager.</i>

C. SPECIAL CONDITIONS OF CONTRACT

CLAUSE 4.1

EXTENT OF CONTRACTOR'S OBLIGATIONS

SCC 4.1.1 Extent of Contractor's obligations

Add the following new paragraphs to the end of Clause 4.1.1:

"If the Contractor fails to achieve the monetary value of the target set by the Employer for local labour content in terms of the Requirements of the Expanded Public Works Programme (EPWP) in the Particular Specifications, the Contractor shall be liable to the Employer for a sum calculated in accordance with the Contract Data and the aforementioned Scope of Works as a penalty for such underachievement.

Clause 4.1.3 – Add the following sub-clause:

"Where the Contractor elects to offer a design or of affecting the permanent works, the design shall be subject to the written approval of the Employer's Agent. The Contractor shall make any changes required by the Employer's Agent at no extra cost to the Employer."

CLAUSE 4.3

LEGAL PROVISIONS

Clause 4.3.1 – Add the following sub-clause:

4.3.1.1 The Occupational Health and Safety Act (1993) (OHS Act) as amended shall apply. The Employers Agent Representative shall be co-opted as a member of the Contractor's Safety Committee for the Works in accordance with Section 19 of the OHS Act. The Explosives Regulations Act 26 of 1956 and as amended shall apply.

Clause 4.3.2 – Delete the words "If required"

CLAUSE 4.4

SUBCONTRACTING

Msunduzi SCM Policy 2022/2023

52.3 Subcontracting as condition of tender

(1) If feasible to subcontract for a contract above R5 million, Msunduzi Municipality will apply subcontracting to advance designated groups.

(2) If the Msunduzi Municipality applies subcontracting as contemplated in sub regulation (1), the Municipality must advertise the tender with a specific tendering condition that the successful tenderer must subcontract a minimum of 30% of the value of the contract to-

- (a) Msunduzi EME;
- (b) an EME or QSE which is at least 51% owned by black people;
- (c) an EME or QSE which is at least 51% owned by black people who are youth;
- (d) an EME or QSE which is at least 51% owned by black people who are women;
- (e) an EME or QSE which is at least 51% owned by black people with disabilities;
- (f) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;
- (g) a cooperative which is at least 51% owned by black people;
- (h) an EME or QSE which is at least 51% owned by black people who are military veterans;

- (i) Msunduzi Manufacturing Enterprise
- (j) Location of a Business Enterprise or
- (i) more than one of the categories referred to in paragraphs (a) to (j).
- (3) The Msunduzi Municipality will make available the list of all suppliers registered on database approved by the National Treasury to provide the required goods or services in respect of the applicable designated groups mentioned in subregulation (2) from which the tenderer must select a supplier.
- (4) A person awarded a contract may only enter into a subcontracting arrangement with the approval of the Municipality.

52.4 Subcontracting after award of tender

- (1) A person awarded a contract may only enter into a subcontracting arrangement with the approval of the Municipality.

52.5 80/20 preference point

- (1) A tenderer must submit proof to claim points for specific goals.
- (2) A tenderer failing to submit proof for specific goals may not be disqualified, but-
- (a) may only score points out of 80 for price; and
- (b) scores 0 points out of 20 for specific goals.
- (3) The points scored by a tenderer for specific goals in terms of sub regulation (2) must be added to the points scored for price under sub regulation (1).
- (4) The points scored for the price must be added to the points scored for the specific goal to obtain the bidder's total points scored out of 100.
- (5) The points scored must be rounded off to the nearest two decimal places.
- (6) the contract must be awarded to the tenderer scoring the highest points.
- (7)(a) If the price offered by a tenderer scoring the highest points is not market related, the organ of state may not award the contract to that tenderer.
- (b) The Msunduzi Municipality may-
 - (i) negotiate a market-related price with the tenderer scoring the highest points or cancel the tender;
 - (ii) if the tenderer does not agree to a market-related price, negotiate a market-related price with the tenderer scoring the second highest points or cancel the tender;
 - (iii) if the tenderer scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the tenderer scoring the third highest points or cancel the tender.
- (c) If a market-related price is not agreed as envisaged in paragraph (b)(iii), the organ of state must cancel the tender.

52.6 90/10 preference point system for acquisition of goods or services with Rand value above R50 million

- (1) A tenderer must submit proof to claim points for specific goals.
- (2) A tenderer failing to submit proof for specific goals may not be disqualified, but-
- (a) may only score points out of 90 for price; and
- (b) scores 0 points out of 10 for B-BBEE.
- (3) The points scored by a tenderer for specific goals in terms of sub regulation (2) must be added to the points scored for price under sub regulation (1).

- (4) The points scored for the price must be added to the points scored for the specific goal to obtain the bidder's total points scored out of 100.
- (5) The points scored must be rounded off to the nearest two decimal places.
- (6) the contract must be awarded to the tenderer scoring the highest points.
- (7)(a) If the price offered by a tenderer scoring the highest points is not market related, the organ of state may not award the contract to that tenderer.
- (b) The Municipality may-
 - (i) negotiate a market-related price with the tenderer scoring the highest points or cancel the tender;
 - (ii) if the tenderer does not agree to a market-related price, negotiate a market-related price with the tenderer scoring the second highest points or cancel the tender;
 - (iii) if the tenderer scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the tenderer scoring the third highest points or cancel the tender.
- (c) If a market-related price is not agreed as envisaged in paragraph (b)(iii), the Msunduzi Municipality must cancel the tender.

CLAUSE 5.8 NON-WORKING HOURS AND SPECIAL NON-WORKING DAYS

The first paragraph is to be amended to read:

"None of the Works shall be executed except between 07:00 and 17:00 on Monday to Friday inclusive and 13:00 on Saturday of any week or on any non-working and special non-working days stated in the Contract Data unless"

Delete sub-clauses 5.8.1.2 and 5.8.1.3.

CLAUSE 5.12 EXTENSION OF TIME FOR PRACTICAL COMPLETION

Add to sub-clause 5.12

"Extensions of time for practical completion due to abnormal climatic conditions shall be determined in accordance with Clause PS 4.3.6 "Critical Path" method.

CLAUSE 6.6 PROVISIONAL SUMS

Sub-Clause 6.6.1.2.2 - Delete the entire sub-clause.

CLAUSE 6.10.1 MONTHLY PAYMENTS

Add sub-clause 6.10.1.9:

"In order to meet payment submission deadlines stipulated by the Client, the Contractor must do **measurement** for inclusion into monthly valuations from the **26th day of the preceding month** to the **25th day of the current month**."

Add sub-clause 6.10.1.10:

"In order to facilitate payment, the Contractor must ensure that all valuations and payment certificates, including labour returns, are submitted to the Employers Agent by the **27th day** of the current month." Should the 27th fall on a non-working day or special non-working day, the certificate is to be submitted on or before the previous working day.

CLAUSE 6.10.4
DELIVERY, DISSATISFACTION WITH A PAYMENT OF PAYMENT CERTIFICATE

Replace

"28 Days in the seventh line with 35 days."

CLAUSE 6.11
VARIATIONS EXCEEDING 15 PERCENT

Delete the entire clause.

CLAUSE 8.5
REPORTING ACCIDENTS

Clause 8.5.1 – Delete, in the second paragraph, "If required by Employers Agent"

TESTING AND COMMISSIONING

Testing and commissioning of the works described in this contract shall be witnessed by the Employers Agent in the presence of a representative of the Employer.

**GUIDELINES FOR THE IMPLEMENTATION OF L.I.C. INFRASTRUCTURE PROJECTS UNDER THE
EXPANDED PUBLIC WORKS PROGRAMME.**

In terms of Government Gazette Notice No. 23045 dated 25 January 2002 of the Basic Conditions of Employment Act of 1997, this project is classified as a Special Public Works Programme (SPWP).

The tenderers should take note of the relevant requirements in the Guidelines to the following:

1. Basic conditions of employment.
2. Sourcing of labour in accordance with SANS 1914-5

CIVIL ENGINEERING INDUSTRY MINIMUM WAGE RATE OF R25/ HOUR (8 Hour Day)

Locally employed persons shall be remunerated at the Task Grade 1 Wage Rate per hour, whichever is the greater, which comes into effect during the currency of the Contract as reflected in:

1. the latest Sectorial Determination for the Civil Engineering Sector (Government Gazette No. 37749); or
2. a Civil Engineering Industry Wage & Task Grade COLLECTIVE AGREEMENT facilitated by the Bargaining Council for the Civil Engineering Industry (BCCEI); or as adopted following
3. a signed agreement between the South African Federation of Civil Engineering Contractors (SAFCEC) and labour unions.

All other terms of employment shall be structured in accordance with the 'Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)- Second Edition July 2005- Pages 7-12'. Refer Part 5- Annexures- Item 1.7.

D. DATA PROVIDED BY CONTRACTOR

Clause	Data
1.1.1.9	The Contractor is
1.2.1.2	The Contractor's address for receipt of communications is: Physical address: Postal address: Telephone: Fax: E-mail:

PART 2

PRICING DATA

C2.1 PRICING INSTRUCTIONS

1. The Tenderer is advised to check the number of pages and, should any be found to be missing or in duplicate or the figures or writing indistinct or the Bill of Quantities containing any obvious errors, the Tenderer must inform the Engineer at once and have it rectified. No liability whatsoever will be admitted in respect of errors due to the foregoing.

Should there be any doubt or obscurity as to the meaning of any particular item, the Tenderer must obtain an explanation of it, in writing, from the Engineer. No claims for extras arising from any such doubt or obscurity will be admitted after delivery of the tender.

2. The work is to be in accordance with the drawings, specifications and instructions and under the supervision and to the entire satisfaction of the Engineer.
3. The Bills of Quantities should be read in conjunction with the Conditions of Contract, the Specifications and Drawings for the full intent and meaning of each clause or item. The quantities are measured generally in accordance with SANS 1200.
4. The sum and unit prices to be inserted in the Bill of Quantities are to be the fully inclusive value of the work described under the several items, including all costs and expenses which may be required in and for the construction of the work described, together with all general risks, liabilities and obligations set forth or implied in the documents on which the tender is based.
5. A sum or unit price is to be entered against each item in the Bill of Quantities, whether quantities are stated or not. Items against which no price is entered will be considered as covered by other prices or rates in the Bills.
6. All unit prices, extensions and totals must be filled in, in **BLACK INK**.
7. No claim whatsoever will be allowed in respect of errors in pricing due to brevity of description of items which are fully described when read in conjunction with the relevant instruction.
8. The Tenderer is advised that, where trade or patent names are used in description of items in the Bill of Quantities, except in the case of nominated suppliers or sub-Contractors, it does not necessarily follow that these specific materials will be used.

The trade or patent names are inserted in the description only as a guide to the Tenderer and to make clear the type of material required. All or any of these items may be replaced at the Engineer's discretion by other similar and approved materials without affecting the Billed Unit Prices.

Where such a change involves a difference in the basic price of the item, the Contractor will be requested to submit a revised unit price before the order is placed and this will be subject to the approval and acceptance of the Engineer.

Where, however, a trade or patent name is used in the description of an item and the Tenderer offers an alternative material, the onus will be on the Tenderer to produce proof that his material offered is equal in all respects to the material used in the description.

9. The Tenderer is hereby advised that, while every endeavor has been made to ensure the correctness of the quantities and descriptions of all labour and materials in the Bill of Quantities, any errors (whether in excess or short of the actual quantity, or insufficiently or incorrectly described) will be adjusted on completion of the Contract by the Engineer. For this purpose, the entire contents of the Bill of Quantities are to be considered as provisional and therefore subject to re-measurement and adjustment in part or as a whole. All such adjustment will be based on, or pro rata to, the Schedule unit prices submitted by the Contractor. The Bill of Quantities is not necessarily correct for ordering purposes.
10. It is deemed that provision for head office overheads, consumables, stores, profit, etc, as well as all labour, material and plant costs, is made in the priced items of the measured Bill following the Preliminary and General Bill and that any increases and decreases in the measured quantities will correspondingly adjust for these charges.
11. The column headed 'CLAUSE' in the Bill of Quantities, where used, indicates specifications and/or clauses in which further information in respect of billed items can be obtained. This is meant as an

aid to Tenderers but does not imply that the specifications or clauses referred to are the only sources of information in respect of these items and further information and explanations may be found elsewhere in the Contract Documents and on the Drawings.

12. It is deemed that all costs incurred by the Contractor to ensure conformity with the Environmental Management Specifications, is made in the priced items of the measured Bill following the Preliminary and General Bill and that any increases and decreases in the measured quantities will correspondingly adjust for these charges.
13. Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorized use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

ITEMS SCHEDULED FOR CONSTRUCTION USING LABOUR-INTENSIVE METHODS

Those parts of the Works to be constructed using labour-intensive methods are marked in the Schedule of Quantities with the letters LI, either in a separate column or as a prefix or suffix against every item so designated. The Works or parts of the Works so designated are to be constructed using labour-intensive methods only, unless otherwise specified in the Scope of Work.

The items marked with the letters LI include:

- (a) Items in the SANS/ SABS Standard Specifications that would normally be carried out using labour-intensive construction methods.
- (b) Items in the SANS Standard Specifications that would normally be carried out using plant but which have been modified specifically so as to require the use of labour-intensive construction methods instead of plant for some or all of the work components of the item.
- (c) New items that have been written for this contract specifically requiring the use of labour-intensive construction methods rather than plant for some or all of the work components of the item.

The items marked with the letters LI are not necessarily an exhaustive list of all the activities which could be carried out using labour-intensive methods. Where a minimum percentage for local labour content is specified, additional activities may need to be identified to be carried out using labour-intensive methods rather than plant in order to meet such target.

14. The Contractor will be required to prepare and submit monthly returns. (Refer Annexure 1.5)

C2.2 BILL OF QUANTITIES

CONTRACT NO. SCM 29 OF 24/25
 COPESVILLE WATER SCHEME PHASE 3C- RUPAR CRESCENT BULK WATER PIPELINE AND 750 KL ELEVATED
 STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
1	SANS 1200 A		GENERAL				
1.1	8.3		FIXED-CHARGE AND VALUE RELATED ITEMS				
1.1.1	8.3.1		Contractual Requirements	Sum	1		
	8.3.2		Establishment of Facilities on the Site				
	8.3.2.1		Facilities for Engineer				
1.1.2			a) Furnished offices (1No.)	Sum	1		
1.1.3			b) Telephone	Sum	1		
1.1.4			c) Nameboards (2 No.)	Sum	1		
	8.3.2.2		Facilities for Contractor				
1.1.5			a) Offices and storage sheds	Sum	1		
1.1.6			b) Workshops	Sum	1		
1.1.7			c) Laboratories	Sum	1		
1.1.8			d) Living accommodation	Sum	1		
1.1.9			e) Ablution and latrine facilities	Sum	1		
1.1.10			f) Tools and equipment	Sum	1		
1.1.11			g) Water supplies, electric power and communications	Sum	1		
1.1.12			h) Dealing with water (see 5.5)	Sum	1		
1.1.13			i) Access (see 5.8)	Sum	1		
1.1.14			j) Plant	Sum	1		
1.1.15	8.3.3		Other Fixed-charge Obligations	Sum	1		
1.1.16	8.3.4		Removal of Site Establishment	Sum	1		
Total Carried Forward							

CONTRACT NO. SCM 29 OF 24/25
 COPESVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 kL ELEVATED
 STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.1.17			Compliance with the Site Specific Health and Safety Specification and with Occupational Health and Safety Regulations	Sum	1		
1.1.18			Compliance with EMP and EMPr the requirements (EMPr attached on CD)	Sum	1		
1.2	8.4		TIME-RELATED ITEMS				
1.2.1	8.4.1		Contractual Requirements	Sum	1		
	8.4.2		Operation and Maintenance of Facilities on Site, for Duration of Construction, except where otherwise stated				
	8.4.2.1		Facilities for Engineer				
1.2.2			a) Furnished offices (1No.)	Sum	1		
1.2.3			b) Telephone	Sum	1		
1.2.4			c) Nameboards (2 No.)	Sum	1		
1.2.5			d) Survey assistants and materials	Sum	1		
	8.4.2.2		Facilities for Contractor				
1.2.6			a) Offices and storage sheds	Sum	1		
1.2.7			b) Workshops	Sum	1		
1.2.8			c) Laboratories	Sum	1		
1.2.9			d) Living accommodation	Sum	1		
1.2.10			e) Ablution and latrine facilities	Sum	1		
1.2.11			f) Tools and equipment	Sum	1		
Total Carried Forward							

CONTRACT NO. SCM 29 OF 24/25
 COPENHAGEN WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 kL ELEVATED
 STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.2.12			g) Water supplies, electric power and communications	Sum	1		
1.2.13			h) Dealing with water (see 5.5)	Sum	1		
1.2.14			i) Access (see 5.8)	Sum	1		
1.2.15			j) Plant	Sum	1		
1.2.16	8.4.3		Supervision for Duration of Construction	Sum	1		
1.2.17	8.4.4		Company and Head Office Overhead Costs for the Duration of the Contract	Sum	1		
1.2.18	8.4.5		Other Time-related Obligations	Sum	1		
1.2.19			Compliance with the Site Specific Health and Safety Specification and the Occupational Health and Regulations	Sum	1		
1.2.20			Compliance with EMP and EMPr the requirements (EMPr attached on CD)	Sum	1		
1.3	8.5		SUMS STATED PROVISIONALLY BY ENGINEER (Subclause 8.1.2.1 (d))				
1.3.1			Community Liason Officer	Prov. Sum	1	50000.00	50 000.00
1.3.2			Overheads, charges and profit on 1.3.1 above	%	50000		
1.3.3			Additional Tests required by Engineer	Prov. Sum	1	25000.00	25 000.00
1.3.4			Overheads, charges and profit on 1.3.3 above	%	25000		
1.3.5			Allowance for additional survey	Prov. Sum	1	25000.00	25 000.00
1.3.6			Overheads, charges and profit on 1.3.5 above	%	25000		
1.3.7			Allowance for relocation of existing services	Prov. Sum	1	100000.00	100 000.00
Total Carried Forward							

CONTRACT NO. SCM 29 OF 24/25
 COPENHAGEN WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 kL ELEVATED
 STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.3.7			Overheads, charges and profit on 1.3.7 above	%	100000		
1.3.9			Allowance for Nominated Health and Safety Officer	Prov. Sum	1	160000.00	160 000.00
1.3.10			Overheads, charges and profit on 1.3.9 above	%	160000		
1.3.11			Allowance for Nominated Environmental Control Officer	Prov. Sum	1	160000.00	160 000.00
1.3.12			Overheads, charges and profit on 1.3.11 above	%	160000		
1.3.13			Allowance for HIV awareness and training	Prov. Sum	1	10000.00	10 000.00
1.3.14			Overheads, charges and profit on 1.3.13 above	%	10000		
1.3.16			Expanded Public Works Programme (EPWP) Allowance for training on targeted labour	Prov. Sum	1	10000.00	10 000.00
1.3.17			Overheads, charges and profit on 1.3.16 above	%	10000		
1.3.18			Transportation and accommodation of workers for training where it is not possible to undertake in close proximity	Prov. Sum	1	10000.00	10 000.00
1.3.19			Overheads, charges and profit on 1.3.18 above	%	10000		
1.3.20			Allowance for the supply of safety apparel (safety boots, reflectors, vests, orange overalls bearing the EPWP logo and large EPWP logo on the back and safety gloves for all targeted labour)	Prov. Sum	1	10000.00	10 000.00
1.3.21			Overheads, charges and profit on 1.3.20 above	%	10000		
Total Carried Forward							

CONTRACT NO. SCM 29 OF 24/25
 COPESVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 kL ELEVATED
 STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
1.4			DAYWORK (See 8.1.2.1 (d))				
1.4.1			a) Labour	Prov. Sum	1	10000.00	10 000.00
1.4.2			Overheads, charges and profit on item (a) above	%	10000		
1.4.3			b) Materials	Prov. Sum	1	10000.00	10 000.00
1.4.4			Overheads, charges and profit on item (a) above	%	10000		
1.4.6			c) Plant	Prov. Sum	1	10000.00	10 000.00
1.4.7			Overheads, charges and profit on item (a) above	%	10000		
1.5	8.8		TEMPORARY WORKS (See 8.1.2.1 (d))				
1.5.1	8.8.1		Main Access Road to Works (construct and maintain)	Sum	1		
1.5.2			Dealing with traffic	Sum	1		
1.5.3			Contractor to provide "Construction Record" Information	Sum	1		
Total Carried Forward To Summary							

CONTRACT NO. SCM 29 OF 24/25

COPESVILE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 KL ELEVATED
STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
2	SANS 1200 C		SITE CLEARANCE				
			CLEAR SITE				
2.1	8.2.1	LI	Clear and grub Site				
2.1.1			(i) Pipeline route (5 m wide strip)	m	800		
2.1.2			(ii) New elevated tank site	ha	0.3		
2.2	8.2.2		Remove and grub large trees and tree stumps of girth				
2.2.1			a) over 1m and up to 2m	No.	5		
2.2.2			b) over 2 m and up to 3 m	No.	5		
2.3	8.2.4	LI	Reclear surfaces (provisional) (where ordered by Engineer)	m	100		
2.4		LI	Take down existing fences	km	0.3		
2.5	8.2.6		Clear hedge or fence or both where not scheduled separately				
2.5.1		LI	Hedges up to 2m high	m	100		
2.5.2		LI	(ii) Reinststate Hedge	m	100		
2.6	8.2.9		Transport materials and debris to unspecified sites and dump (Provisional)	m ³ .km	1500		
2.8	8.2.8		Demolish and remove structures/buildings and dismantle steelwork, etc and transport to Murray road reservoir site, 15km away.				
2.8.1			(i) Existing elevated tank structure including 15m high tank stand support and associated pipework and valves etc.	Sum	1		
2.8.2			(i) Existing welded mesh fencing up to 1,8m high	m	220		
Total Carried Forward To Summary							

CONTRACT NO. SCM 29 OF 24/25

COPESVILE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 KL ELEVATED
STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
3	SANS 1200 D		EARTHWORKS				
3.1	8.3.1.2		Remove topsoil to nominal depth 150mm stockpile and maintain				
3.1.1			(i) Pipeline route (5m wide strip)	m ²	4000		
3.1.2			(ii) New elevated tank site	m ²	1500		
3.2	8.3.2		Bulk Excavation				
			a) Excavate all materials and use for embankment or backfill or dispose as ordered				
3.2.1			(i) Inlet Chamber	m ³	85		
3.2.2			(ii) Outlet Chamber	m ³	85		
			b) Extra-over for:				
3.2.3			1) Intermediate excavation	m ³	5		
3.2.4			2) Hard rock excavation	m ³	5		
3.2.5			3) Boulder excavation, Class A	m ³	5		
3.2.6			4) Boulder Excavation, Class B	m ³	5		
3.3	8.3.3		Restricted Excavation				
3.3.1			a) Excavate for restricted foundations, footings and pipe trenches in all materials and use for backfill or embankment or dispose	m ³	15		
			b) Extra-over for:				
3.3.2			1) Intermediate excavation	m ³	5		
3.3.3			2) Hard rock excavation	m ³	5		
3.3.4			3) Boulder excavation, Class A	m ³	5		
3.3.5			4) Boulder Excavation, Class B	m ³	5		
3.4	8.3.6		Overhaul (see 5.2.5.2)				
3.4.1			a) Limited overhaul (provisional)	m ³	10		
3.4.2			b) Long overhaul (provisional)	m ³ .km	1000		
Total Carried Forward							

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COPESVILE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 KL ELEVATED
STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
3.5	8.3.8		Existing Services				
3.5.1			b) The use or hire of specialist equipment for detection	Hour	40		
3.5.2			c) Excavate by hand in soft material to expose existing services	m ³	300		
3.6	8.3.10		Topsoiling				
3.6.1			(i) Along pipeline routes	m ²	4000		
3.6.2			(ii) New elevated tank site	m ²	1000		
3.7	8.3.11		Grassing				
3.7.1			(i) Along pipeline routes	m ²	4000		
3.7.2			(ii) New elevated tank site	m ²	1000		
3.8	PSD 8.3.13		Erosion control berms	m ³	80		
3.9	PSD 8.3.14		Sandbag protection to pipe trench	No.	15		
3.10	PSD 8.3.15		Extra-over Sandbag protection for stabilisation	No.	15		
Total Carried Forward To Summary							

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COPEVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 kL ELEVATED

STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
4	SABS 1200 DB		EARTHWORKS: PIPE TRENCHES				
	8.3.2		Excavation				
4.1			a) Excavate in all materials for trenches, backfill, compact, and dispose of surplus material				
			For pipes:				
		LI	Over 125 mm and up to and including 700 mm diam. for total trench depth:				
4.1.1			Up to 1m	m	5		
4.1.2			Over 1m and up to 2m	m	615		
4.1.3			Over 2m and up to 3m	m	175		
4.1.4			Over 3m and up to 4m	m	5		
			b) Extra-over item (a) above for:				
4.1.5			1) Intermediate excavation	m ³	250		
4.1.6			2) Hard rock excavation	m ³	125		
4.1.7			c) Excavate and dispose of unsuitable material from trench bottom (provisional)	m ³	375		
4.2	8.3.3		Excavation Ancillaries				
	8.3.3.1		Make up deficiency in backfill material (provisional)				
4.2.1			a) from other necessary excavations on site	m ³	200		
4.2.2			c) by importation from commercial or off site sources selected by the Contractor	m ³	175		
4.2.3	PSDB 8.3.3.1		d) Stabilised backfill (4% cement)	m ³	10		
4.3	8.3.3.3		Compaction in road reserves	m ³	400		
Total Carried Forward							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
4.4	8.3.3.4		Overhaul				
4.4.1			a) Limited Overhaul (provisional)	m ³	50		
4.4.2			b) Long Overhaul (provisional)	m ³ .km	600		
4.5	8.3.4		Particular Items				
			a) Shore trench opposite structure or service				
4.5.1		LI	(i) Existing Houses	m	400		
4.6	8.3.5		Existing Services that Intersect or Adjoin a Pipe Trench				
			a) Services that intersect a trench				
4.6.1			(i) Concrete pipes up to 1000 mm dia.	No.	10		
4.6.2			(ii) Water pipes up to 400 mm dia.	No.	20		
4.6.3			(iii) Telkom cables	No.	20		
4.6.4			(iv) Electricity cables	No.	20		
			b) Services that adjoin a trench				
4.6.5			(i) Concrete pipes up to 1000 mm dia.	m	400		
4.6.6			(ii) Water pipes up to 400 mm dia.	m	400		
4.6.7			(iii) Telkom cables	m	400		
4.6.8			(iv) Electricity cables	m	400		
Total Carried Forward							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
4.7	8.3.6		Finishing Reinstate road surfaces complete with all courses				
4.7.1			a) Gravel on shoulders	m ²	20		
4.7.2			c) Asphalt of thickness 40 mm in roadway	m ²	20		
4.7.3			e) Asphalt of thickness 25 mm in driveways	m ²	55		
4.7.4			f) Concrete 25 Mpa /19 mm of thickness 150 mm in driveways	m ²	10		
4.7.5			g) Paving blocks 80 mm thick in driveways	m ²	10		
Total Carried Forward To Summary							

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COPESVILE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 kL ELEVATED

STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
5	SABS 1200 DK		GABIONS AND PITCHING				
	8.2.1		Surface preparation for bedding of gabions				
5.1		LI	a) Cavities filled with approved excavated material or rock	m ²	15		
5.2		LI	b) Cavities filled with grade 15 concrete (provisional)	m ²	15		
5.3	8.2.2		Gabions				
			Gabions (PVC Coated)				
5.3.1		LI	1.0 m x 1.0 m x 1.0 m	m ³	10		
5.3.2		LI	1.0 m x 1.0 m x 3.0 m	m ³	30		
			Foundation Mattresses (PVC Coated)				
5.3.3			0.23 m x 2.0 m x 6.0 m	m ³	30		
5.4	8.2.3	LI	Extra-over item 8.2.2 for packing selected stone for exposed face	m ²	5		
5.5	8.2.4		Geotextile (or geomembrane)				
5.5.1			(i) Type A4 - for gabions / foundation mattresses	m ²	300		
5.5.2			(ii) Type A2 - for crushed stone bedding and sub-soil drains	m ²	100		
5.6	8.2.5		Pitching				
5.6.1		LI	(i) Plain pitching (see 5.3.2)	m ²	5		
5.6.2			(ii) Grouted pitching (see 5.3.3)	m ²	5		
5.6.3			(iii) Wired pitching (see 5.3.4)	m ²	5		
5.7	8.2.6		Backing for pitching (see 5.3.1) (provisional)	m ²	5		
Total Carried Forward To Summary							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
6	SABS 1200 G		CONCRETE (STRUCTURAL)				
	8.2		SCHEDULED FORMWORK ITEMS				
6.1	8.2.1		Rough				
6.1.1			(i) Vertical to Inlet Chambers floor slab	m ²	18		
6.1.2			(ii) Vertical to Outlet Chambers floor slab	m ²	18		
6.1.3			(iii) Elevated tank footings	m ²	16		
6.2	8.2.2		Smooth				
6.2.1			(i) Inlet Chamber walls	m ²	75		
6.2.2			(ii) Outlet Chamber walls	m ²	75		
6.3	8.2.5		Narrow widths (up to 300 mm wide)				
6.3.1			(i) Inlet Chamber roof slab	m	25		
6.3.2			(ii) Inlet Chamber roof slab	m	25		
6.4	8.2.6		Box out Holes / Form Voids				
			a) Small, circular, of diameter up to and including 0.375m				
			4) over 3,0 m and up to and including 3,5 m deep				
6.4.1			(i) 150 mm dia. Inlet / outlet chamber pipework cast into wall	No.	8		
6.5	8.3		SCHEDULED REINFORCEMENT ITEMS				
	8.3.1		Steel bars				
6.5.1			Mild Steel	t	0.3		
6.5.2			High-tensile	t	11.0		
6.6	8.3.2		High-Tensile Welded Mesh				
6.6.1			(i) Ref 193	m ²	10		
Total Carried Forward							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
	8.4		SCHEDULED CONCRETE ITEMS				
6.7	8.4.1		Prescribed Mix Concrete				
			Grade 25 Mpa/19 mm				
6.7.1			(i) Inlet chamber	m ³	25		
6.7.2			(ii) Outlet chamber	m ³	25		
6.7.3			(iii) Elevated tank footings	m ³	15		
6.8	8.4.2		Blinding Layer in Grade 15 Mpa/19 mm Concrete				
6.8.1			(i) 50 mm thick	m ²	40		
6.9			Sundry Items				
6.9.1			Supply and install polymer manhole cover and frame - Type 9B "Maverick" or similar approved including locking mechanism	No.	2		
6.9.2			Supply and install G.M.S. handrails to chambers complete as per drawings	No.	2		
6.9.3			Supply and install G.M.S. access ladders to chambers complete as per drawings	No.	2		
6.9.4			Supply and install air bricks with mesh to chambers complete as per drawings for 220 mm x 160 mm x 50 mm size	No.	20		
Total Carried Forward To Summary							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
7	SABS 1200 L		MEDIUM PRESSURE PIPELINES				
7.1	8.2.1		Supply, Lay and Bed Pipes Complete with Couplings uPVC to SABS 966 : Part 1, PN 16				
7.1.1			250 mm Ø OD	m	800		
7.2	8.2.2		Extra-over 8.2.1 for the Supplying, Laying and Bedding of Specials Complete with Couplings uPVC Double Socketed Bends PN 16				
7.2.1			250 mm Ø x 11¼ ° bend	No.	8		
7.2.2			250 mm Ø x 22½ ° bend	No.	10		
7.2.3			250 mm Ø x 45° bend	No.	4		
7.2.4			250 mm Ø x 90° bend	No.	3		
			uPVC Double Socketed Tee piece PN 16				
7.2.5			250 mm Ø x 250 mm Ø	No.	1		
			Cast Iron Flanged Reducer PN 16				
7.2.6			300 mm Ø x 250 mm Ø	No.	1		
			Cast Iron End Cap PN 16				
7.2.7			250 mm Ø	No.	2		
			Cast Iron Flange Adaptor PN 16				
7.2.8			250 mm Ø	No.	2		
Total Carried Forward							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
7.3	8.2.3		Extra-over 8.2.1 for the Supplying, Fixing, and Bedding of Valves				
			Isolating valve assemblies complete as per detail, drawing no. PRJ 130A-DW303 Rev C.				
7.3.1			DN 250, PN 16 Flange Adaptor, VJ or similar approved. (Item no. 1)	No.	4		
7.3.2			DN 250, PN 16 GMS pipe F.B.E., 1025 mm long with puddle flange 425 mm from one end. Length T.B.C. on site. (Item no. 2)	No.	4		
7.3.3			DN 250, PN 16 Flanged Amri Butterfly valve (Item no. 3)	No.	2		
7.3.4			DN 250, PN 16 GMS pipe F.O.E., 300 mm long. Length T.B.C. on site. (Item no. 4)	No.	2		
Total Carried Forward							

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COPEVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 KL ELEVATED

STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
7.3.5			Air valve assemblies complete as per detail, drawing no. PRJ 130A-DW301 Rev C. DN 50, PN 16, Double acting Air Valve with threaded fitting, (Vent-O-Mat or similar approved) (Item no. 1)	No.	3		
7.3.6			DN 50, PN 16 GMS pipe, one male and one female end both threaded, 150 mm long. Length T.B.C. on site. (Item no. 2)	No.	3		
7.3.7			DN 50, PN 16, CI Ball valve, female threaded both ends (Item no. 3)	No.	3		
7.3.8			DN 50, PN 16 GMS pipe with welded flange for DN 250 pipe on one end and male threaded on the other end, 450 mm long. Length T.B.C. on site. (Item no. 4)	No.	3		
7.3.9			DN 250 x DN 250, PN 16, GMS Equal Tee, F.A.E. (Item no. 5)	No.	3		
7.3.10			DN 250, PN 16, Flange Adaptor, VJ or similar approved. (Item no. 6)	No.	6		
Total Carried Forward							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
7.3.11			Scour valve assemblies complete as per detail, drawing no. PRJ 130A-DW302 Rev C. DN 250 x DN 150, PN 16, GMS Reducing Tee, F.A.E. (Item no. 1)	No.	2		
7.3.12			DN 150, PN 16 GMS pipe F.B.E., 840 mm long with puddle flange 420 mm from one end. Length T.B.C. on site. (Item no. 2)	No.	4		
7.3.13			DN 150, PN 16, Wedge Gate Valve to SABS 664 (Item no. 3)	No.	2		
7.3.14			DN 150, PN 16, Flange Adaptor, VJ or similar approved. (Item no. 4)	No.	2		
7.3.15			DN 150, PN 16 GMS pipe F.O.E., 450 mm long. Length T.B.C. on site. (Item no. 5)	No.	2		
7.3.16			DN 150, PN 16 GMS pipe F.O.E., 250 mm long. Length T.B.C. on site. (Item no. 6)	No.	2		
7.3.17			DN 150, PN 16 GMS 45° bend (Item no. 7)	No.	2		
7.3.18			DN 150, PN 16 GMS pipe, F.O.E., welded onto 45° bend, 2000 mm long. Length T.B.C. on site. (Item no. 8)	No.	2		
7.3.19			DN 150, PN 16 GMS flanged jet dipenser. (Item no. 9)	No.	2		
7.3.56			DN 250, PN 16, Flange Adaptor, VJ or similar approved. (Item no. 10)	No.	4		
Total Carried Forward							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
7.4	8.2.5		Supply and Place Pipes, Valves and Specials (Short pipe runs) Inlet Chamber assemblies complete as per detail, drawing no. PRJ 130A-DW304 Rev C & PRJ 130A-DW304a Rev C.				
7.4.1			DN 250, PN 16, Flange Adaptor, VJ or similar approved. (Item no. 1)	No.	1		
7.4.2			DN 250 x DN 200, PN 16, GMS flanged reducer (Item no. 2)	No.	2		
7.4.3			DN 200, PN 16 GMS pipe F.B.E., 700 mm long with puddle flange 350 mm from one end. Length T.B.C. on site. (Item no. 3)	No.	4		
7.4.4			DN 200, PN 16 Flanged Amri Butterfly valve (Item no. 4)	No.	4		
7.4.5			DN 200, PN 16 GMS pipe F.B.E., 342 mm long. Length T.B.C. on site. (Item no. 5)	No.	1		
7.4.5			DN 200, PN 16 GMS pipe F.O.E., 342 mm long. Length T.B.C. on site. (Item no. 5a)	No.	1		
7.4.6			DN 200, PN 16 Equal Tee with extended length F.B.E. (Item no. 6)	No.	2		
7.4.7			DN 200, PN 16, Flange Adaptor, VJ or similar approved. (Item no. 7)	No.	1		
7.4.8			DN 200, PN 16 Flanged Strainer, Bermad or similar approved. (Item no. 8)	No.	1		
7.4.9			DN 200, PN 16 Flanged Flow Control Valve, Bermad or similar approved. (Item no. 9)	No.	1		
7.4.10			DN 200, PN 16 GMS pipe F.B.E., 328 mm long, welded on item 6. Length T.B.C. on site. (Item no. 10)	No.	2		
7.4.11			DN 200, PN 16 Flanged Pressure Release Valve, Bermad or similar approved. (Item no. 11)	No.	1		
7.4.12			DN 200, PN 16, Flange Adaptor, VJ or similar approved. (Item no. 12)	No.	1		
7.4.13			DN 200, PN 16 Flanged Water Meter, Sensus or similar approved. (Item no. 13)	No.	1		
Total Carried Forward							

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ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
7.4.14			DN 150, PN 16, Flange Adaptor, VJ or similar approved. (Item no. 14)	No.	1		
7.4.15			DN 150 x DN 100, PN 16, GMS flanged reducer (Item no. 15)	No.	2		
7.4.16			DN 100, PN 16 GMS pipe F.B.E., 924 mm long with puddle flange. Length T.B.C. on site. (Item no. 16)	No.	2		
7.4.17			DN 100, PN 16 Flanged RSV Gate Valve to SABS 664 (Item no. 17)	No.	3		
7.4.18			DN 100, PN 16 GMS pipe F.B.E., 805 mm long. Length T.B.C. on site. (Item no. 18)	No.	2		
7.4.19			DN 100, PN 16 Flanged Water Meter, Sensus or similar approved. (Item no. 19)	No.	1		
7.4.20			DN 100, PN 16, Flange Adaptor, VJ or similar approved. (Item no. 20)	No.	1		
7.4.21			DN 100, PN 16 GMS pipe F.O.E., 300 mm long. Length T.B.C. on site. (Item no. 21)	No.	1		
7.4.22			DN 100, PN 16 Flanged Strainer, Bermad or similar approved. (Item no. 22)	No.	1		
7.4.23			DN 100, PN 16 Equal Tee with extended length F.B.E. (Item no. 23)	No.	1		
7.4.25			DN 200 x DN 100, PN 16, GMS flanged reducer (Item no. 25)	No.	1		
7.4.26			DN 200, PN 16 GMS pipe F.B.E., 900 mm long. Length T.B.C. on site. (Item no. 26)	No.	1		
7.4.27			DN 100, PN 16 GMS pipe F.B.E., 820 mm long with puddle flange. Length T.B.C. on site. (Item no. 27)	No.	1		
			Elevated Tank assemblies complete as per detail, drawing no. PRJ 130A-DW309 Rev C & PRJ 130A-DW310 Rev C.				
7.4.28			DN 250 EQUILIBRIUM FLOAT VALVE, F.O.E. (Item no. 1)	No	1		
7.4.29			DN 250 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE. (Item no. 2)	No	1		
7.4.30			DN 250 GMS 90° BEND, F.B.E . (Item no. 3)	No	3		
Total Carried Forward							

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STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R		
Brought Forward									
7.4.31	8.2.7		DN 250 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 4)	No	4				
7.4.32			DN 250 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 5)	No	1				
7.4.33			DN 250 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 6)	No	1				
7.4.34			DN 250 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 7)	No	1				
7.4.35			DN 150 VORTEX INHIBITOR, F.O.E. (Item no. 8)	No	1				
7.4.36			DN 150 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE(Item no. 9)	No	2				
7.4.37			DN 150 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE(Item no. 10)	No	1				
7.4.38			DN 150 GMS 90° BEND, F.B.E (Item no. 11)	No	1				
7.4.39			DN 150 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 12)	No	1				
7.4.40			DN 300 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 13)	No	1				
7.4.41			DN 300 GMS 90° BEND, F.B.E (Item no. 14)	No	1				
7.4.42			DN 300 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 15)	No	1				
7.4.43			DN 300 GMS PIPE, F.O.E , LENGTH T.B.C. ON SITE (Item no. 16)	No	1				
7.4.44			DN 300 x DN 250 GMS BELLMOUTH, F.A.E. (Item no. 17)	No	1				
7.4.45			DN 250 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 18)	No	2				
7.4.46			DN 250 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 19)	No	1				
7.4.47			DN 250 FLANGED BALL VALVE (Item no. 20)	No	1				
7.4.48			DN 250 GMS PIPE, F.B.E , LENGTH T.B.C. ON SITE (Item no. 21)	No	1				
7.4.49			DN 250 GMS 90° BEND, F.B.E (Item no. 22)	No	1				
7.4.50			DN 250 GMS PIPE, F.O.E , LENGTH T.B.C. ON SITE (Item no. 23)	No	1				
7.5					Extra-over 8.2.1 for Encasing Joints				
Total Carried Forward									

CONTRACT NO. 29 OF 24/25

COPEVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 KL ELEVATED

STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
7.5.1			Denso mastic plastic blanket or similar approved for buried pipes and flanges etc as indicated on drawings, for : Wrapping for jointing and pipework at Isolating valve chambers	No.	8		
7.5.2			Wrapping for jointing and pipework at Air valve chambers	No.	16		
7.5.3			Wrapping for jointing and pipework	No.	8		
7.5.4			Wrapping for jointing and pipework at Inlet / Outlet chamber	No.	4		
7.6	8.2.11		Anchor / Thrust Blocks and Pedestals as per drawing no. PRJ 130A-DW307 Rev C.				
7.6.1			b) Concrete Grade 25MPa / 19mm	m ³	20		
7.6.2			b) Formwork	m ²	30		
7.7	8.2.12		Concrete Casing (Grade 20 MPa / 19mm)	m ³	5		
7.8	8.2.13		Valves and Hydrant Chambers etc				
7.8.1			Isolation Valve Chambers complete as per drawing no. PRJ 130A-DW303 Rev C.	No.	2		
7.7.2			Air Valve Chambers complete as per drawing no. PRJ 130A-DW301 Rev C.	No.	3		
7.7.3			Scour Valve Chambers complete as per drawing no. PRJ 130A-DW302 Rev C.	No.	2		
7.8			Supply and install pipeline markers complete as drawing no. PRJ 130-DW308 Rev A.	No.	10		
7.9			Supply and install valve markers per complete as drawing no. PRJ 130-DW308 Rev A.	No.	8		
7.10			Supply and Install 750KL Pressed Steel Elevated water tank, with pipework, valves and fittings with 10 m high stand. Rate to include for design, inspection, and sign off by Designer for footings and stand.	Sum	1		
Total Carried Forward							

CONTRACT NO. 29 OF 24/25

COPEVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 KL ELEVATED

STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
Brought Forward							
7.11			Clearvu invisible security fence comprising of steel mesh panels size 3305 x 1800mm high formed of 3mm diameter horizontal wires and 4mm diameter vertical wires hot dipped powder coated wire with aperture size (centres) 76.2mm x 12.7mm to include 100mm high toughened shark tooth spikes bolted to fencing panel with anti-vandal bolts. Fence and posts to be installed according to manufacturer's instructions and specifications.	m	220		
7.12			6000 x 1800mm high Clear VU or equal and approved single swing dipped galvanised steel high security gates with deadlock and catch plate finished with patent marine fusion bond coating of approved colour to include 100mm high toughened shark tooth spikes bolted to fencing panel with anti-vandal bolts.	No.	2		
7.13			DN 100 GMS F.B.E between inlet and outlet chamber, 3000mm long, length to confirmed on site.	No.	1		
Total Carried Forward To Summary							

CONTRACT NO. 29 OF 24/25

COPESVILE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 KL ELEVATED
STEEL TANK PROJECT WITHIN WARD 30

ITEM No.	PAYMENT REF	LIC	DESCRIPTION	UNIT	QTY	RATE	AMOUNT R
8	SABS 1200 LB		BEDDING (PIPES)				
8.1	8.2.1		Provision of Bedding from Trench Excavation				
8.1.1			a) Selected granular material	m ³	10		
8.1.2			b) Selected fill material	m ³	10		
8.2	8.2.2.3		From commercial sources (Provisional)				
8.2.1			a) Selected granular material	m ³	300		
8.2.2			b) Selected fill material	m ³	200		
8.3			19mm Crushed Stone Bedding	m ³	20		
	8.2.3		Concrete Bedding Cradle	m ³	5		
8.4	8.2.4		Encasing of Pipes in Concrete				
8.5			(i) Grade 25 MPa / 19 mm concrete	m ³	5		
8.6	8.2.5		Overhaul of Material for Bedding Cradle and Selected Fill Blanket	m ³ .km	600		
Total Carried Forward To Summary							

CONTRACT NO. 29 OF 24/25

COPESVILE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750 kL ELEVATED
STEEL TANK PROJECT WITHIN WARD 30

SUMMARY OF SECTIONS		
SECTION	DESCRIPTION	AMOUNT (R)
1	SANS 1200 A - GENERAL	
2	SANS 1200 C - SITE CLEARANCE	
3	SANS 1200 D - EARTHWORKS	
4	SANS 1200 DB - EARTHWORKS : PIPE TRENCHES	
5	SANS 1200 DK - GABIONS & PITCHING	
7	SANS 1200 G - CONCRETE (STRUCTURAL)	
8	SANS 1200 L - MEDIUM PRESSURE PIPELINES	
9	SANS 1200 LB - BEDDING	
TOTAL OF SECTIONS		
ALLOWANCE FOR CONTINGENCIES (10%)		
TOTAL INCLUDING CONTINGENCIES		
ADD VAT (15%)		
GROSS TOTAL CARRIED TO FORM OF OFFER & ACCEPTANCE		

PART 3

SCOPE OF WORKS

CONTENTS

PARAGRAPH	PARAGRAPH TITLE	PAGE No.
A	THE WORKS	C3.1/3 – C3.1/58
B	OHS SPECIFICATION	C3.1/59- C3.1/67
C	ENVIRONMENTAL MANAGEMENT PLAN	C3.1/68 – C3.1/76

A. THE WORKS

This section gives a general description of the project, the facilities available and the requirements to be met, together with a list of the relevant Standardised and Particular Specifications.

CLAUSE	CONTENTS	PAGE No.
PS 1	DESCRIPTION OF THE WORKS	C3.1/4
PS 2	ENGINEERING	C3.1/7
PS 3	CONTRACT PARTICIPATION	C3.1/8
PS 4	CONSTRUCTION & MANAGEMENT	C3.1/13
PS 5	OCCUPATIONAL HEALTH AND SAFETY	C3.1/57
PS 6	USE OF PROPRIETARY NAMES	C3.1/58

STATUS

In the event of any discrepancy between the Scope of Works and a part or parts of the SABS 1200 Standardized Specifications, the Bill of Quantities or the Drawings, the Project Specifications shall take precedence and prevail in the Contract.

PS 1 DESCRIPTION OF THE WORKS

PS 1.1 Employer's Objectives

The Employer's objectives are to deliver public infrastructure using labour-optimised methods where possible. The intention is to undertake a detailed design of a bulk pipeline system extending to the future Copesville & Panorama Gardens developments.

PS 1.2 Scope of Works

The Works to be carried out under this contract entails the following:

- The replacement of the existing 450kl elevated tank with a 750kl elevated tank
- Installation of approximately 250mm diameter Class 16 uPVC pipeline
- Earthworks for pipeline and steel tank structure
- Associated chambers
- Steel frame structure for elevated tank
- Fittings, valves and associated fixtures

The main activities forming the scope of works include:

- Establishment on site
- Trench excavations
- Replacement of Elevated Tank
- Pipe laying.
- Construction of isolation valve chambers
- Construction of Inlet and Outlet chambers
- All associated fittings and specials required for connecting the new pipeline

PS 1.3 Location of the Works

The project areas are located in the area of Copesville, north-east of Pietermaritzburg in the province of KwaZulu-Natal. The project areas encompass urban and peri-urban areas and is situated in the Msunduzi Municipality within the jurisdiction of Umgungundlovu District Municipality.

Access to the community of Copesville is via Chief Mhlabunzima Road. Access to Rupar Crescent is via Bhambatha Road.

PS 1.4 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.

PS 1.5 Available facilities

The Contractor shall make his own arrangements with the necessary authorities for the supply of electricity, telephones, potable water suitable for drinking and sanitation services.

PS 1.6 Construction Record Information

The Contractor shall provide the Employer's Agent with –

- a) A list of surveyed coordinates of services constructed or modified during the course of the contract.
- b) A list of surveyed inverts and cover levels and co-ordinates of all manholes constructed or modified during the course of the contract.
- c) As built records of all materials testing results.

All as-built information must be submitted to the Employer's Agent on a Compact Disc (containing the raw survey data in .tot, .dwg, .cdm and .pdf file types)

The Contractor shall ensure that accurate as-built records are kept of all infrastructure located, exposed, installed, removed or relocated during the Contract.

All information in the possession of the Contractor, required by the Employer's Agent and/or the Employer's Agent's Representative to complete the as-built/record drawings, must be submitted to the Employer's Agent's Representative before a Certificate of Completion will be issued.

PS 1.7 Geotechnical Information

A geotechnical report for the project is available.

PS 1.8 Construction Programme

The Contractor's attention is drawn to Section C1.2 – Contract Data (Conditions of Contract), Clause 1.1.1.14.

The Contractor shall submit a detailed, comprehensive and realistic programme for executing the Works within 14 days after the commencement of the contract, showing the order of construction and method by which he proposes to carry out the Works. The format of the programme shall be to the Employer's Agent's approval but shall be in the form of a bar chart and network diagram showing the critical path. In addition, the Contractor shall provide a schedule of the forecast value of completed work, month by month.

The successful Tenderer shall complete the Works within the stipulated times to avoid the imposition of penalties as provided for in the General Conditions of Contract.

The Contractor shall not depart from the order in which the various items of work have been agreed without the prior written consent of the Employer's Agent. If the programme is to be adjusted by reason of the Contractor falling behind he shall produce an adjusted version showing the modifications to the original programme necessary to ensure completion of the Works or any part thereof within the time for completion as defined, or any extended time granted, as well as a revised schedule of the forecast value of completed work, month by month.

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

The approval by the Employer's Agent of any programme shall have no Contractual significance other than that the Employer's Agent would be satisfied if the Work is carried out according to such programme and that the Contractor undertakes to carry out the Work in accordance with the programme. It shall not limit the right of the Employer's Agent to instruct the Contractor to vary the programme should circumstances make this necessary.

Cognisance shall be taken of the frequency of rain days, inclement weather and material delivery delays when formulating a programme of works.

PS 2 ENGINEERING

PS 2.1 Design

- (a) The Employer 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 Employer's Agent in the compilation of the as-built drawings, in accordance with PS 1.6.

PS 2.2 Drawings

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

The Drawings prepared by the Employer for the permanent Works are listed and bound at the end of this section. All drawings are issued for tender purposes only and the Employer reserves the right to issue amended and/or additional drawings during the Contract.

PS 3 Contract Participation

A Contract Participation Goal (CPG) must be achieved in respect of targeted enterprises in the performance of the contract. The Contractor is obliged to meet the specified CPG targets and shall be penalized in failing to do so.

PS 3.1 Scope

This section covers construction aspects relating to the processes by which the construction industry develops emerging and established small contractors, preferably from the Target Area. It also deals with labour enhanced construction by encouraging the engagement and training of labour recruited from local communities.

PS 3.2 Definitions and Applicable Legislation

(a) Definitions

Unless inconsistent with the context, in these specifications, the following terms, words or expressions shall have the meanings hereby assigned to them:

(i) Contract Participation

Contract Participation is a process by which the Employer Implements Government's objectives by setting targets relating to small contractor development and labour enhancement which the Contractor shall achieve as a minimum.

(ii) Contract Participation Goal (CPG)

Contract Participation Goal is the monetary value of the targets set by the Employer in the Contract Participation process.

(iii) Contract Participation Performance (CPP)

Contract Participation Performance is the measure of the Contractor's progress in achieving the CPG.

(iv) Labour

Labour is the Contractor's and Subcontractor's personnel whose monthly earnings are derived from hours worked for a fixed hourly rate which is adjusted from time to time by legislation (as a statutory minimum) and the Contractor's and Subcontractor's employment policies.

(v) Targeted Enterprise

An enterprise which:

- a) is a contractor registered with the Construction Industry Development Board in a contractor grading designation from 1 to 6 and status as potentially emerging; and
- b) the Contractor has no equity holding in; and
- c) is a sub-contractor who undertakes work within its registered CIDB category; and
- d) is registered in terms of the Company's Act, 2008 (Act No. 71 of 2008) or Close Corporation Act, 1984 (Act No. 69 of 1984); and
- e) is registered with the South African Revenue Service.

- f) is either from within the Panel of Contractors for Construction of Water and Sanitation Infrastructure Projects or registered and trading in the jurisdiction of the Msunduzi Municipality.

(vi) Targeted Labour

Targeted Labour is Labour recruited from the jurisdiction of the Msunduzi Municipality, who permanently reside in the area or who are recognized as being residents of the area on the basis of identification and association with and recognition by the residents of the area.

(b) Applicable Legislation

The following Acts, as amended from time to time, are predominant amongst those which apply to the construction industry and are listed here for reference purposes only:

- (i) The Constitution of South Africa;
- (ii) Public Finance Management Act No. 1 of 1999;
- (iii) Preferential Procurement Policy Framework Act No. 5 of 2000;
- (iv) Construction Industry Development Board Act No. 38 of 2000;
- (v) Broad-Based Black Economic Empowerment Act No. 53 of 2003.

PS 3.3 Contract Participation

(a) Objective

A major objective of Government is to extend economic opportunities and entrepreneurial capacity to all localities by the optimum utilization of the resources existing in the vicinity of projects, the development of these resources in the execution of the project, and by maximising the amount of project funds retained within the project locality. To this end, the contractor shall preferably recruit Targeted Enterprises from the Target Area.

(b) Contract Participation Targets

Contract participation is the process by which the Employer implements Government's objectives. The Employer sets targets for construction by specified entities the rand value for which is based on the services and work undertaken by the specified entities and measured as a percentage of the Contractor's final certified value of work completed (excluding VAT) measured at the date of issue of the Taking-over Certificate. The Contractor is obliged to commit to or exceed the targets stated in the Appendix to Tender. As far as it is practical, the Contractor should consider utilising small contractor resources from communities immediately adjacent to the contract before considering from wider areas.

(c) Contract Participation Goal (CPG)

As per SCM Policy 2022/2023

1. Subcontracting as condition of tender

1.1. If feasible to subcontract for a **contract above R5 million**, Msunduzi Municipality will apply subcontracting to advance designated groups.

1.2. If the Msunduzi Municipality applies subcontracting as contemplated in sub regulation (1), the Municipality must advertise the tender with a specific tendering condition that the successful tenderer must subcontract a minimum of 30% of the value of the contract to-

- (a) Msunduzi EME;
- (b) an EME or QSE which is at least 51% owned by black people;
- (c) an EME or QSE which is at least 51% owned by black people who are youth;

- (d) an EME or QSE which is at least 51% owned by black people who are women;
- (e) an EME or QSE which is at least 51% owned by black people with disabilities;
- (f) an EME or QSE which is 51% owned by black people living in rural or underdeveloped areas or townships;
- (g) a cooperative which is at least 51% owned by black people;
- (h) an EME or QSE which is at least 51% owned by black people who are military veterans;
- (i) Msunduzi Manufacturing Enterprise
- (j) Location of a Business Enterprise or
- (i) more than one of the categories referred to in paragraphs (a) to (j).

1.3. The Msunduzi Municipality will make available the list of all suppliers registered on database approved by the National Treasury to provide the required goods or services in respect of the applicable designated groups mentioned in subregulation (2) from which the tenderer must select a supplier.

1.4. A person awarded a contract may only enter into a subcontracting arrangement with the approval of the Municipality

2. Subcontracting after award of tender

1. A person awarded a contract may only enter into a subcontracting arrangement with the approval of the Municipality.

80/20 preference point

- (1) A tenderer must submit proof to claim points for specific goals.
- (2) A tenderer failing to submit proof for specific goals may not be disqualified, but-
 - (a) may only score points out of 80 for price; and
 - (b) scores 0 points out of 20 for specific goals.
- (3) The points scored by a tenderer for specific goals in terms of sub regulation (2) must be added to the points scored for price under sub regulation (1).
- (4) The points scored for the price must be added to the points scored for the specific goal to obtain the bidder's total points scored out of 100.
- (5) The points scored must be rounded off to the nearest two decimal places.
- (6) the contract must be awarded to the tenderer scoring the highest points.
- (7)(a) If the price offered by a tenderer scoring the highest points is not market related, the organ of state may not award the contract to that tenderer.
 - (b) The Msunduzi Municipality may-
 - (i) negotiate a market-related price with the tenderer scoring the highest points or cancel the tender;
 - (ii) if the tenderer does not agree to a market-related price, negotiate a market-related price with the tenderer scoring the second highest points or cancel the tender;
 - (iii) if the tenderer scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the tenderer scoring the third highest points or cancel the tender.

- (c) If a market-related price is not agreed as envisaged in paragraph (b)(iii), the organ of state must cancel the tender.

90/10 preference point system for acquisition of goods or services with Rand value above R50 million

- (1) A tenderer must submit proof to claim points for specific goals.
- (2) A tenderer failing to submit proof for specific goals may not be disqualified, but-
 - (a) may only score points out of 90 for price; and
 - (b) scores 0 points out of 10 for B-BBEE.
- (3) The points scored by a tenderer for specific goals in terms of sub regulation (2) must be added to the points scored for price under sub regulation (1).
- (4) The points scored for the price must be added to the points scored for the specific goal to obtain the bidder's total points scored out of 100.
- (5) The points scored must be rounded off to the nearest two decimal places.
- (6) the contract must be awarded to the tenderer scoring the highest points.
- (7)(a) If the price offered by a tenderer scoring the highest points is not market related, the organ of state may not award the contract to that tenderer.
- (b) The Municipality may-
 - (i) negotiate a market-related price with the tenderer scoring the highest points or cancel the tender;
 - (ii) if the tenderer does not agree to a market-related price, negotiate a market-related price with the tenderer scoring the second highest points or cancel the tender;
 - (iii) if the tenderer scoring the second highest points does not agree to a market-related price, negotiate a market-related price with the tenderer scoring the third highest points or cancel the tender.
- (c) If a market-related price is not agreed as envisaged in paragraph (b)(iii), the Msunduzi Municipality must cancel the tender.

(d) Contract Participation Performance (CPP)

The CPP is the monetary value of the Contractor's actual progress towards achievement of the CPG calculated as follows:

CPP = total value (excluding VAT) of Targeted Labour contribution + Targeted Enterprise contribution

The Contractor's participation performance will be measured monthly in order to monitor the extent to which he is striving to reach the CPG. The basis of monitoring shall be the levels of the individual contributions for Targeted Labour, Targeted Enterprises and Target Groups. Monthly returns, in the format provided by the Employer, are required from the Contractor and shall be submitted with each interim payment certificate.

To assist in the measurement of CPP the Contractor shall include in his contract programme details of how he will achieve the CPG. The detail shall be provided not later than 1 (one) month after the engineer has accepted the original construction programme and updated with every subsequent revision.

Failure to reach the CPG shall render the Contractor liable for a penalty which shall be calculated as follows:

Penalty = 0.5 x (the value of the shortfall of Targeted Labour + the value of the shortfall of Targeted Enterprise). It shall be applied on a pro-rata basis according to a monthly evaluation of achievements against the programmed utilisation.

(e) Accredited Registration

CPP for Targeted Enterprises shall only be accepted if the respective Targeted Enterprises for which services or work is being claimed as having been performed, is registered with CIDB in one of the defined categories. In addition, documentary evidence that such Targeted Enterprises are registered with the South African Revenue Services (SARS) shall be lodged with the engineer before the work or service may be considered as having been performed by a Targeted Enterprise. The responsibility for producing evidence of the respective registration documentation shall rest with the Contractor.

The Contractor shall assume responsibility for the compilation and maintenance of comprehensive records detailing each Targeted Enterprise progress during construction, starting from the award of a subcontract to a Targeted Enterprise until the successful completion of the subcontract work or termination of the subcontract. The Contractor may engage a small contractor who is not yet registered as a Targeted Enterprise and it then becomes a responsibility of the Contractor to assist with the registration process. If not successfully registered within the contract period, work completed by that small contractor shall not count towards CPP.

PS 3.4 Procurement of Targeted Enterprises

Preferential procurement, in accordance with the Msunduzi Municipality's Supply Chain Management Policy, <http://www.msunduzi.gov.za/site/procurement> [Accessed 19 August 2017], shall be followed for the employment of services providers and subcontractors where applicable.

PS 4 CONSTRUCTION & MANAGEMENT

PS 4.1 Applicable Standards and Particular Specifications

For the purposes of this Contract, the following shall apply:

STANDARD SPECIFICATIONS (English Versions)

Bill of Quantities 1 (Pipework)

SANS 1200 A	:	General
SANS 1200 DB	:	Earthworks (Pipe Trenches)
SANS 1200 DK	:	Gabions and Pitching
SANS 1200 L	:	Medium Pressure Pipelines
SANS 1200 LB	:	Bedding (Pipes)

PS 4.2 Variations and Additions to Standard Specification

This section covers the variations and additions to the SANS 1200 Standard Specifications applicable to this Contract. Clause numbers refer to the same numbered Clauses given in the SANS Specifications.

PSA GENERAL (SABS 1200 A)

PSA 1 Scope

Replace the first paragraph of sub-clause 1.1 with the following:

“1.1 This specification covers requirements, principles and responsibilities of a general nature which are normally applicable to all civil engineering contracts as well as the requirements for the Contractor’s establishment on Site”.

PSA 2 Interpretations

PSA 2.3 Definitions

(a) General

Add the following definitions:

“General Conditions: The General Conditions of Contract specified for use with this Contract and the Special Conditions of Contract as applicable.

Specified: As specified in the Standardised Specifications, the Drawings or the Project Specifications.”.

(c) Measurement and Payment

Replace the definitions for fixed charge, time-related charge and value-related charge with the following:

“Fixed Charge: A charge that is not subject to adjustment on account of variation in the value of the Contract amount or the Contract Time for Completion.

Time-related Charge: A charge, the amount of which is varied in accordance with the Time for Completion of the work as adjusted in accordance with the provisions of the Contract.

Value-related Charge: A charge, the amount of which is varied pro-rata the final value of the measured work executed and valued in accordance with the provisions of the Contract.”

PSA 2.4 Abbreviations

a) Abbreviations relating to standard documents

Add the following abbreviations:

“CSK: SABS Coordinating Specification”

PSA 3 Materials

PSA 3.1 Quality

Add the following:

“All manufactured materials supplied shall be new materials unless the contrary is specified. All materials specified in accordance with SABS Specifications shall bear the SABS mark, whether so specified or not.

The Contractor shall arrange for all necessary process control tests for soil properties, density, etc, and concrete cube tests and is responsible for the cost of all testing to ascertain that the

materials do comply with the relevant minimum requirements and all such costs shall be deemed to be included in the tendered rates. The cost of acceptance control tests done by the Engineer, of which the results do not comply with the minimum requirements, shall be for the Contractor's account. The tests must be carried out by an independent laboratory approved by the Engineer.

The Contractor shall inform the Engineer of any process control testing to be done at least 48 hours before such test are required and must allow in his programme for the time necessary for the tests and the processing of the results thereof."

Add the following sub-clause:

"PSA 3.3: Ordering of Materials

The quantities set out in the Schedule of Quantities have been carefully determined from calculations based on data available at the time and should therefore be considered to be only approximate quantities. The liability shall rest entirely and solely with the Contractor to determine before ordering, the required types and quantities of the various materials required for completion of the Works in accordance with the Specifications and the Drawings issued to the Contractor for construction purposes.

Any reliance placed by the Contractor on the estimated quantities stated in the Schedule of Quantities issued for tendering purposes, or measurements made by the Contractor from the drawing issued for tendering purposes, shall be entirely at the Contractor's risk, and the Employer accepts no liability whatever in respect of materials ordered by the Contractor on the basis of Tender Documents."

PSA 4 Plant

PSA 4.2 Contractor's Office, Stores and Services

Add the following before the first paragraph:

"The Contractor's construction camp shall be fenced off and shall contain all offices, stores, workshops, toilet facilities, etc. The camp shall always be kept in a neat and tidy condition.

No personnel will be allowed to reside on the Site. The Contractor shall be responsible for the security of his construction camp and of the construction Site, at his own cost. Only night-watchmen may be on the Site after hours."

PSA 5 Construction

PSA 5.1 Survey

PSA 5.1.1 Setting out the Works

Add before the first sentence:

"The Contractor will be required to set out the various sections of the Works in the order that he proposes to undertake the work as per his programme, at least one week prior to commencing work on these sections, to enable the Engineer to check the design proposals in the field and thereafter to make any minor changes which he may deem necessary. Any additional survey work or setting out required as a result of these changes shall be undertaken on a daywork basis."

PSA 8 Measurement and Payment

PSA 8.1 *Measurement*

PSA 8.1.2 Preliminary and General Items or Section

PSA 8.1.2.2 Tendered Sums

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

“The Contractor’s tendered sums under items PSA 8.3 and PSA 8.4 shall collectively cover all charges for:

- Risks, costs and obligations in terms of the General Conditions of Contract and of this Standardised Specifications, except to the extent that provision is made in these Project Specifications to cover compensation for any of these items of work.
- Complying with the Occupational Health and Safety Act (Act No. 85 of 1993) and in particular with the latest Construction Regulations and Part 5 – Section C5.1: Health and Safety Specification, providing the required health and safety measures
- Head-office and site overheads and supervision.
- Profit and financing costs
- Expenses of a general nature not specifically related to any item or items of permanent or temporary work
- Providing facilities on Site for the Contractor’s personnel, including offices, storage facilities, workshops, ablutions, for providing services such as water, electricity, sewerage, sewerage and rubbish disposal, for access roads and all other facilities required, as well as for the maintenance and removal on completion of the Works of these facilities and the cleaning up of the camp site on completion of the Works.
- Dealing with water.
- Providing facilities for the Engineer and his staff as specified in SABS 1200 AB and in these Project Specifications.
- Two name boards as specified. These boards are to be erected in positions to be indicated by the Engineer.

PSA 8.2 *Payment*

PSA 8.2.1 Fixed-Charge and Value-Related Items

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

Payment for the sum tendered under item PSA 8.3.1 will be made in three separate instalments as follows:

- a. The first instalment which is 50% of the sum, will be paid when the Contractor has met all his obligations to date under this Specification, the General Conditions of Contract and the Special Conditions of Contract, and where the value of work certified for payment, excluding Materials on Site and any payments under preliminary and general items is equal to not less than 5% of the total value of the work listed in the Schedule of Quantities.

- b. The second instalment, which is 35% of the sum, will be made when the amount certified for payment, including retention monies but excluding the second instalment referred to herein, exceeds 50% of the tender sum.
- c. The final payment, which is 15% of the sum, will be made when the Works have been certified as completed and the Contractor has fulfilled all his obligations to date under this Specification, the General Conditions of Contract and the Special Conditions of Contract.

No adjustment will apply to item 8.3.1 in respect of variations in the value of work done or the time for completion finally authorised.

Payment for the sum tendered under PSA 8.3.2 will be made in monthly instalments in relation to the value of the work done (excluding the value of any price adjustments in terms of Clause 6.8 of the General Conditions of Contract).

Should the value of the measured work finally completed be more or less than the tender sum (excluding the value of any price adjustments in terms of Clause 6.8 of the General Conditions of Contract), then the sum tendered under Item PSA 8.3.2 will be adjusted pro-rata up or down and this adjustment shall be applied to the final instalment.

PSA 8.2.2 Time-Related Items

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

“Subject to the provisions of Item 8.2.3 and Item 8.2.4, payment under item PSA 8.4.1 (time-related item) will be made monthly, pro rata for parts of a month, from the Commencement Date, until the end of the period for completion of the works, plus any extension of time awarded. provided always that the total of the monthly amounts so paid for the item is not more than in proportion to the progress of the work as a whole.

Should the Engineer grant an extension of time for completion of the Works, the Contractor will be entitled to an increase in the sum tendered for the time-related item, which increase shall be in the same proportion to the original tendered sum as the extension of time is to the original time for completion of the Works.

Payment for such increased amounts will be taken to be in full compensation for all additional time-related preliminary and general costs that result from the circumstances pertaining to the extension of time granted.”

PSAB ENGINEER'S OFFICE (SABS 1200 AB)

PSAB 3 Materials

PSAB 3.2 Office Building

Add the following:

"The Contractor shall provide a single office of size at least 5m x 3m for the use of the Engineer that shall be situated within the security area enclosing the Contractor's camp.

The office shall be fitted with a suitable air conditioning unit for both heating and cooling.

In addition to the furnishings as set out in Clause 3.2, the following furnishings shall be required:

- 1 swivel chair
- 1 inclined plan table
- 1 drawing hanging stand
- 10 aluminium clamps to fit drawing hanging stand

The Engineer's office shall be cleaned on a daily basis.

In addition, the offices for the Engineer shall be supplied with approved burglar proofing, the cost of which shall be taken as included in the relevant tendered rates.

Furthermore, the Contractor shall supply a two shaded carports for the exclusive use of the Engineer. The carport shall be constructed with gum pole uprights with IBR or corrugated iron roofing with 80% shade cloth cladding to the sides. The surface bed of the carport shall be free draining and constructed with a 100 mm layer of 19 mm stone".

Add the following sub-clause:

"PSAB 3.3 Engineer's Survey Equipment

The Contractor shall provide on request from the Engineer or his Representative, survey equipment for temporary use such as an automatic level, tachometer, level staff, 100 m tape, ranging rods, pegs, etc and any other labour required for this purpose. Instruments provided shall be in good state of repair and accuracy.

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

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."

PSAB 5 Construction

PSAB 5.4 *Telephones*

Add the following:

"The Contractor shall provide, for the sole use of the Engineer, a cellular telephone complete with an approved airtime contract, sim card etc. The tendered fixed and time related Preliminary and General Charges in the Schedule of Quantities shall be deemed to include for all costs in this regard and shall include for an amount of R 1 000.00 per month to cover the cost of calls."

PSAB 5.5 *Survey Assistants*

The Contractor shall make available two suitably educated survey assistant for use on and about the site at all reasonable times.

PSAB 8 Measurement and Payment

All measurements and payment for Engineer's office to be effected under PSA 8.3 and PSA 8.4.

PSC SITE CLEARANCE (SABS 1200 C)

PSC 3 Materials

PSC 3.1 *Disposal of Material*

Replace the words from “Material obtained from clearing and grubbing...” to “... prior written approval for the Engineer” with the following:

“The Contractor shall make his own arrangements for the disposal of material obtained from clearing and grubbing and from the demolition of structures, which material shall be removed from the site.

The disposal site shall meet with the approval of the Local Authority within whose area it falls, and the spoiling shall comply with all the statutory and municipal regulations. No burning of material will be allowed on site.

No overhaul will be paid for any spoil materials and the Contractor shall allow for all haulage in his tendered rates. All costs relating to this activity shall be deemed to be included in the rates tendered for site clearance.”

PSC 5 Construction

PSC 5.2.3.2 Individual Trees

A penalty of R 2 000.00 per tree shall apply. Prior to removing any trees, the Contractor shall, together with the Engineer, mark the trees to be preserved.

PSC 5.3 *Clearing*

Add the following:

“Where any Portion of the Works traverses existing fences these shall be carefully uplifted, if required, and reinstated during the course of activities in that specific area. Where an uplifted fence interferes with the security of what it controls a temporary fence shall be installed and operated to the satisfaction of the Engineer or his Representative. Prior to removal or dismantling of any fence, the contractor will be required to photograph the fence for future reference.”

PSC 8 Measurement and Payment

PSC 8.1 *Basic Principles*

Add the following:

“No separate payment will be made for topsoil removal along pipeline routes. The Contractor is to excavate trenches in such a manner that the top 150 mm of material is kept separate from other excavated material, for replacement on completion of backfill operations. All costs related to excavating this vegetation and topsoil, and separate stockpiling shall be deemed to be included in rates tendered for trench excavation.”

PSC 8.2.5 Take down existing fences

“The tendered rate shall also include for the re-erection of the fence, photographing and temporary fencing where required all as specified.”

PSC 8.2.8 Demolish and remove structures/buildings and dismantle steelwork, etc and transport to Murray Road reservoir site, 15km away.

The tendered rate shall include for the safe dismantling of structures/building/steelwork and delivery to Murray Road Reservoir site, which is 15km away from the project area. “

PSD EARTHWORKS (SABS 1200 D)

PSD 2 Interpretations

PSD 2.3 Definitions

Replace the definition “Borrow” with the following:

“Borrow material: Material, other than materials obtained from excavations required for the Works, obtained from sources such as borrow pits or the authorised widening of excavations. ‘Borrow’ shall have a corresponding meaning.”

Replace the definition “Stockpile” with the following:

“Stockpile (Verb): The process of selecting and, as may be necessary, loading, transporting and off-loading material in a designated area for later use and a specific purpose.”

Add the following definitions:

“Fill: An embankment or terrace constructed from material obtained from excavations or borrow. In roads it includes the earthworks up to the underside of the selected sub-Grade level.

Fill (Material): Material used for the construction of an embankment or terrace.

Roadbed: The natural in-situ material on which the fill, or in the absence of fill, any pavement layers, are to be constructed.”

PSD 3 Materials

PSD 3.1.1 Method of Classifying

Add the following:

“Classification of material other than ‘soft excavation’ shall be agreed upon before excavation may commence.

The Contractor shall immediately inform the Engineer if and when the nature of the material being excavated has changed to such an extent that a new classification for further excavation is warranted. Failure on the part of the Contractor to advise the Engineer thereof in good time shall entitle the Engineer to classify, at his discretion, such excavation as may have been executed in material of a different nature.”

PSD 3.3 *Selection*

Add the following sub-clause:

“PSD 3.3.3: Selection in borrow pits and excavations

The approval of a borrow area for a certain purpose does not necessarily mean that all material within that area is suitable for the specified purpose. What it does mean, is that the borrow area contains some suitable material. The onus is on the Contractor to ensure that only material that is indeed suitable is removed and used for the specified purpose.

Where the Contractor is required to select material from excavations for a specific purpose, the above provisions relating to borrow areas shall apply *mutatis mutandis* to excavations.

The Contractor shall not waste or contaminate material that has been selected for a specific purpose”.

PSD 5 *Construction*

PSD 5.2 *Methods and Procedures*

PSD 5.2.2.2 Borrow Pits

Add the following:

“A commercial source shall, for the purposes of this Specification, mean a source of material provided by the Contractor, not the Employer.

Where it is specified that material shall be obtained from commercial sources, the Contractor shall be responsible and include in his price for fill from commercial sources, for finding a source of suitable material, for making all arrangements for procuring the material with the owner of the source, for the payment of any royalties, charges or damages and for transporting the material to the site regardless of the distance involved.

No payment will be made for the removal of overburden or stockpiling at the commercial source and no extra over payment for excavating in intermediate, hard or boulder material shall apply.”

PSD 5.2.2.3 Disposal

Add the following:

“The Contractor shall make his own arrangements for the disposal of excess or unsuitable materials. The disposal / spoil site shall meet with the approval of the Local Authority within whose area it falls, and the spoiling shall comply with the statutory and municipal regulations. The cost of all loading, hauling, dumping, spreading, compacting and any other costs or charges will be deemed to be included in the rates tendered for spoiling of material.”

PSD 5.2.4 Finishing

PSD 5.2.4.3 Grass or other Vegetation

Add the following to subclause (f) Grassing:

"The type of Grass to be used shall be Cynodon Dactylon, Cynodon Royal Blue or Pennisetum Clandestinum (Kikuyu) as agreed with the Engineer.

- a) General - Grassing shall be carried out at the earliest convenient stage of the construction and shall be arranged to suit the seasonal weather conditions. Fertiliser shall be supplied by the Contractor.
- b) Planting Grass cuttings - The areas to be Grassed by means of Grass cutting shall, unless already moist, be thoroughly watered before cuttings are planted to ensure that the soil will be uniformly moist to a depth of at least 150 mm when the planting is done. This method shall only be used on flat areas, such as sidewalks and platforms.

An approved variety of Grass cuttings shall be evenly planted by hand or mechanically at a rate of at least 600 kg of cuttings per hectare and shall be covered with 30 mm of approved soil. Fresh cuttings only shall be used but not any Grass cuttings that have been allowed to dry out. Immediately after having been planted, the Grass cuttings shall be given a copious watering, and, when sufficiently dry, shall be rolled with a light agricultural roller.

- c) Sodding - Areas to be Grassed by sodding shall be given a layer of topsoil of at least 50 mm in thickness unless, where suitable soil is present, the Engineer orders the topsoil to be omitted. The areas to be sodded shall be thoroughly watered beforehand so that it will be moist to a depth of at least 150 mm during sodding. The surface shall be roughened slightly to ensure a good penetration of roots into the soil. Sods shall be protected against drying out and kept moist from the time of harvesting until they are finally placed. The handling of the sods shall not result in the sods losing their prescribed soil thickness.

The first row of sods shall, where possible, be laid in a straight line, and if on a slope, laying the sods shall start at the bottom of the slope. The sods shall be butted tightly against each other, and care shall be taken not to stretch or overlap the sods. Where a good fit cannot be obtained, any intervening spaces shall be filled with topsoil. The next row shall be similarly placed tightly against the bottom row with staggered joints, and so on until the entire area has been covered with sods. Sods shall be laid in such a way that unnecessary trampling over areas previously laid is prevented. To this end, a diagonal method of laying sods is preferred, moving up the slope and behind previously laid sods. On steep slopes and batters the sods shall be held in position by a sufficient number of wooden stakes approximately 300 mm long by 20 mm in thickness and these stakes shall be knocked in to a depth of 100 mm into the subsoil.

Sods laid adjacent to concrete side drains and concrete kerbs shall be laid in such a manner that the sodding will be 20 mm higher than the concrete. When stripsodding is required, the sods shall be laid in such a manner that the sods are proud of the surrounding Ground level.

During stripsodding the areas in between shall be planted as specified in item B5.2.4.3(f)(b) above. Stripsodding shall at all times be staked as specified above.

As sodding is completed each section shall be lightly rolled or firmly pressed to ensure a proper bond with the underlying material, and thoroughly watered afterwards.

- d) Maintenance of Grassed areas - Maintenance shall include watering, weeding, mowing, refertilisation where necessary, regrassing of areas that, in the opinion of the Engineer, are unsatisfactory, and any other work that is necessary to achieve full, healthy and weed-free grass cover to banks and plateaux before the end of the defects liability period.

Mowing shall be undertaken with an approved power mower. All established grass cover shall be cut to a height of 25 mm above ground level. Mowing shall be undertaken initially with the mower set to cut 50 mm above ground level, the height of cut being reduced to 25 mm when adequate cover has been achieved."

PSD 5.2.5 Transport for Earthworks

PSD 5.2.5.1 Freehaul

Delete the contents of sub-clause 5.2.5.1(b) and replace with "All movement of materials from commercial sources, borrow pits selected by the contractor, cut, fill and spoil materials will be regarded as freehaul."

PSD 5.2.5.2 Overhaul

Delete the contents of sub-clause 5.2.5.2 and replace with "No overhaul shall apply."

PSDB EARTHWORKS (PIPE TRENCHES) (SABS 1200 DB)

PSDB 3.1 *Classes of Excavation*

Delete the contents of this clause and replace with the following:

“For this contract, the classes of excavation will be subdivided as follows:

(a) Labour Intensive Excavation

(i) Soft Excavation

Soft excavation shall be that excavation in material, which in the opinion of the Engineer, can be efficiently excavated and loaded by means of hand-held tools excluding pneumatic or hydraulic breaking tools. Soft excavation shall include all boulders with a volume of less than 0.125 m³ and a maximum dimension of 500 mm, which can still be removed by hand methods.

(ii) Hard Excavation/Hard Rock

Hard excavation shall be excavation in material, which in the opinion of the Engineer, can only be removed efficiently with mechanical equipment such as jackhammers, drilling and blasting etc. Hard excavation shall also include boulders with a volume exceeding 0.125 m³ and the maximum dimension exceeding 500 mm, which cannot be broken down and removed by hand methods.

(b) Machine Based Excavation

In cases where heavy excavation equipment is permitted, only two classes of excavation shall be applicable, i.e. hard rock excavation and soft excavation.

Hard rock excavation shall be as specified in Subclause 3.1.2 (c) of SABS 1200 D, while excavation in all other materials shall be classified as soft excavation.

Boulders which require individual drilling and blasting in order to be loaded by a front-end loader or back acting excavator, shall be classified as hard rock and will be measured individually as they are removed.”

PSDB 3.7 *Selection*

Replace the words “if he so wishes” in the first line of the second paragraph with the words “at his own cost”.

PSDB 5 *Construction*

PSDB 5.6 *Backfilling*

PSDB 5.6.1 General

Add the following:

“Notwithstanding the requirements of sub-clause 5.6.1 and 5.6.6, no pipe joint or pipe filling shall be covered by either the blanket fill or the main fill prior to the successful completion of the visual inspection, and the pressure testing of the relevant section of the pipeline.

PSDB 5.6.4 Disposal of Intermediate and Hard Rock Material

Add the Following:

"Intermediate and/or hard rock material shall be disposed of at sites approved by the Engineer".

PSDB 5.7 *Compaction*

PSDB 5.7.2 Areas subject to Traffic Loads

Add the following:

"All backfill to pipes under roads and in road reserves or future road reserves shall comply with the requirements of sub-clause 3.5(b) and shall be compacted in accordance with sub-clause 5.7.2."

PSDB 5.9 *Re-Instatement of Surfaces*

Add the following new clause:

"PSDB 5.9.7 Cross Drainage Berms

Cross drainage berms are required along all steeply inclined pipeline routes at intervals to be determined by the Engineer, to minimize possible flood damage."

PS DK GABIONS AND PITCHING

PSDK 3 MATERIALS

PSDK 3.1.2 Gabion cages:
Gabions shall be constructed of double twisted, hexagonal Construct gabions using galvanised wire mesh, and PVC coated wire mesh of nominal 80mm 'cross dimension b' , with 3.4mm diameter selvedge wire and 2.7mm diameter mesh wire in accordance with SANS 1580:2010.

PSDK 3.1.3 Geotextile:
In addition to the requirements of subclause 3.1.3 the geotextile shall be a non-woven continuous polyester filament needle punched type (A4) and shall have a mass of at least 210g/m² and a strength of at least 14.0kN/m in all directions.

PSL MEDIUM PRESSURE PIPELINES (SABS 1200 L)

PSL 1 Scope

This specification covers the supply and installation of pipelines, for rising mains, gravity mains, pipework for pumping installations and reservoirs as well as reticulation.

PSL 2 Interpretations

PSL 2.4 *Abbreviations*

Add the following:

HDPE High Density Polyethelene
mPVC Modified Polyvinyl Chloride

PSL 3 Materials

PSL 3.4 *Steel Pipes, Fittings and Specials*

PSL 3.4.1 General

Add to the sub clause:

"All steel pipes and fittings under this contract shall be to the dimensions and details shown on the drawings or schedule of quantities. All pipes, fittings and specials shall have their relevant item numbers painted onto the exterior surface prior to despatch from the factory."

PSL 3.4.2 Steel Pipes of NB up to 150mm

In the second and third lines delete 'medium class shall be screwed' and add 'heavy duty class.'

Add to the sub clause:

"Test certificates for the pipework are to be provided in terms of sub clause 3.7(a) and 3.7(b) where so called for by the Engineer."

PSL 3.4.3 Steel Pipes over 150mm NB

Delete the sub clause and substitute:

"PSL 3.4.3.1 Grade of Pipe

All pipes supplied shall comply with SABS 719/71, as amended by this project specification.

Grade B or 300W steel shall be used for pipes where called for on the drawings or in the schedule of quantities."

PSL 3.4.3.2 Welds

Pipes shall be manufactured from steel strips or plates continuously welded along the seams and the height of the inner weld reinforcement shall not exceed 1mm. In the case of pipes used with couplings, the external weld reinforcement shall be ground flush with the outer wall of the pipe over a suitable distance of the pipe. Pipes must have a continuous helical seam but for smaller than 300mm diameter, longitudinal and circumferential seams would be acceptable.

PSL 3.4.3.3 Hydraulic Testing at the Factory

Each pipe shall be hydraulically tested in accordance with SABS 719, clause 7.3 to 3500kPa."

PSL 3.4.4 Fittings and Specials

Add the following new sub-clauses:

"PSL 3.4.4.1 Stainless Steel Pipework

Pipework fittings and specials shall comply with the dimensional requirements specified for mild steel pipe work, fittings and specials. The wall thickness shall be not less than 4,0 mm for pipes of diameter up to 150 mm and not less and 5,0 mm for pipes exceeding 150 mm in diameter, or as called for on the pipe schedules.

Stainless Steel pipework, fittings and specials shall be Grade 304L and shall not be supplied coated.

Plain ends of pipes and fittings shall be covered and protected against damage whilst being transported and stored.

PSL 3.4.4.2 Steel Pipe Fittings

All steel pipe fittings, irrespective of their diameter, shall be fabricated from plain-ended pipes and shall be coupled by means of welded flanges as detailed. Screwed flanges and fittings shall not be permitted. The lengths of the pipes shall be as dimensioned on the drawings but shall be verified on site prior to galvanising. No cutting or welding of pipes shall be permitted on site.

PSL 3.4.4.3 Puddle collars

Puddle collars used as pipe anchorages shall be of the same dimensions as the corresponding flanges but undrilled."

PSL 3.7 ***Other Types of Pipes***

PSL 3.7.2 Polyethylene Pipes

HDPE Pipes shall be in accordance with SABS ISO 4427, PE 100.

Add the following sub-clauses:

"PSL 3.7.3 mPVC Pipes

mPVC shall not be permitted unless otherwise shown or agreed with the Engineer.

PSL 3.10 **Valves**

Change the heading of this clause to the following and add:

"PSL 3.10 Valves and Other Mechanical/Electronic Accessories

PSL 3.10.1 Isolation Valves (General)

Unless otherwise stated, all isolation and scour valves shall be of the Waterworks Pattern Sluice Valve type.

The following general requirements shall be met:

- a) The valve class shall be at least equal to that of the pipework in which is to be installed. All valves shall be rated for a working pressure of at least 1,6 MPa (Class 16).
- b) The valves shall be doubled flanged.
- c) The valves shall be supplied with non-rising type spindle. Spindles shall be threaded such that two turns of the hand wheel shall effect a movement of 25 mm on the valve gate. This allows for easy identification of the valve diameter.
- d) The valves shall be fitted with a cast iron cap attached to the spindle by means of a Stout brass screw with hexagonal head or with a handwheel as indicated on the drawings or specified in the Schedule of Quantities. The handwheel shall indicate the direction of closing.
- e) The valves shall be anti-clockwise closing with non-rising spindle.

- f) The design of the valve guides shall be such that all valves supplied can be mounted in any position.
- g) The stuffing box may either be of the conventional type with gland packing with a gland secured with 2 No. bolts and nuts. The nuts shall be of the Tee pattern and the gland stuffing box shall be capable of holding four rings of a standard size of gland packing. The gland stuffing box shall be capable of being repacked under working pressure, preferably with the gate in the open position. The gland shall fit neatly and snugly into the stuffing box. The base of the gland and the stuffing box shall be chamfered to force the packing against the spindle.

Alternatively the sealing of the spindle in the body may be by means of O-rings which are retained in position by means of machined Grooves in the valve body and which seal against the spindle. If this type of valve is offered, tenderers should indicate with their tender the cost of a service head for each size of valve offered. Such service head shall be supplied complete with seals, gate, spindle and cap.
- h) The valves shall be double flanged and drilled in accordance with SABS 1123/1977 appropriate to the Class of valve required/specified.
- i) Each valve shall be supplied with 2 No. full face rubber gaskets and the requisite number of bolts, nuts and washers to suit the valves. Sufficient bolts, nuts and washers shall be supplied for both faces of the valves. The cost of these items shall be included in rates tendered.
- j) The valves shall be drop tight at the specified working pressure applied to one side of the gate and the other side subject to open end conditions.

In addition to the above conditions:

- k) When called for in Schedule of Quantities, valves for installation on fire hydrants shall be drop tight when subjected to working pressures within in range 345 kPa to 1380 kPa under unbalanced open end conditions, and chattering of the gate in its guides during operation of the valves shall be reduced to a minimum to prevent damage to the valve seats.
- l) Every valve shall be internally and externally fusion bonded epoxy powder coated to 250 micron DFT, as standard.

PSL 3.10.1.1 Resilient Seal Valves

- a) General

Gate valves shall be double flanged and be resilient seated and unless otherwise specified, the valves shall be of the non-rising spindle type.

The valves shall be capable of withstanding the nominal pressure and specified test pressure and shall have the capability to seal drip tight bi-directionally. The valves shall generally be manufactured in accordance to SABS 664.

- b) Gate Design

The gate shall be fully rubber encapsulated inside and outside therefore to ensure drip tight sealing and avoid corrosion. The gate shall further have a drain hole, preventing stagnant water or impurities from collecting.

Rubber utilised in the coating of the wedge shall be inert and shall not impart odour, taste and colour and shall be suitable for drinking water applications. The gate nut shall not be fixed to the wedge, thereby reducing opening torques.

c) Gate and Body Design

The gate shall have optimally placed guides of wear resistant plastic so as to reduce the torques as well as reduce wear between the rubber and the coating on the body. The bore of the body shall be straight through design in order to allow cleaning with a badger.

d) Valve Bonnet

The valve shall utilise 3 independent bonnet seals which shall include a set of stem steels embedded in non-corrosive material, a back seal to prevent leakage when changing seals, and wiper ring to protect against debris entering the valve.

Two friction washes (sizes 50mm – 200mm) and thrust ball bearings (250mm – 600mm) shall be incorporated to ensure smooth spindle operation as well as to reduce opening and closing torques.

A full circle thrust collar shall be utilised to ensure low torque operation. O-ring stem seals shall be replaceable under pressure for sizes 50mm – 200mm.

e) Spindle

Spindles shall be made of stainless steel. The stem threads shall be rolled to maintain steel structure and increase strength and, to ensure smooth thread edges and consequently a low operating torque.

f) Body and Bonnet Assembly

The rubber bonnet gasket shall fit in a recess in the valve bonnet preventing blow out of the seal under surge conditions. The bonnet bolts shall pass through the gasket and sunk into the bonnet and sealed for corrosion protection.

An edge protecting ring shall permanently be fitted around the body and bonnet joint in order to protect the coating during transportation and installation.

PSL 3.10.1.2 Wedge Gate Valves

Wedge Gate Valves shall be of the Waterworks Pattern Sluice Valve type and be manufactured to a standard of not less than that specified in SABS 664.

The following special requirements shall be met:

- a) The lugs on the gate and the spindle are to conform to 3.2.3 of SABS 664 and are to be machined to a good fit and finish.
- b) Valve trim shall be either Type B (Gun metal trim) or Type C (Stainless Steel trim) as specified in SABS 664 Clause 3.5.5. Tenderers must indicate in their tender what type of trim is offered.
- c) Seat rings shall comply with Clause 3.5.6 of SABS 664 and shall be pinned into position.
- d) The stuffing box may either be of the conventional type with gland packing with a gland secured with 2 No. bolts and nuts. The nuts shall be of the Tee pattern and the gland stuffing box shall be capable of holding four rings of a standard size of gland packing. The gland stuffing box shall be capable of being repacked under

working pressure, preferably with the gate in the open position. The gland shall fit neatly and snugly into the stuffing box. The base of the gland and the stuffing box shall be chamfered to force the packing against the spindle.

- e) Valves which incorporate a thrust plate of the horseshoe type will NOT be considered.
- f) Every sluice valve shall be provided with substantial guides cast on each side of the gate, preferably extending to the top of the nut box and operating along corresponding guides cast in the sides of the valve body. (Brass trim only).
- g) When called for in the Schedule of Quantities, valves shall, in place of the guides described in (f) above, be fitted with machined bronze guide shoes on either side of the gate operating in accurately matching machined bronze guide channels fixed on the sides of the valve body. The bronze guides shall be of phosphor bronze to B.S. 1400 PB 2-0.
- h) The gate valves shall be supplied with the gland packing installed and shall be either "Maxmech Style M57, Chesterton 1724" or similar approved.

3.10.1 4 Butterfly Valves

The valves shall be manufactured in accordance with BS 5155 (cast iron and carbon steel butterfly valves for general purposes), as far as is applicable. Where conflict exists, the requirements in this specification shall take precedence.

The following criteria for construction shall be met:-

- a) Body

These shall be of the wafer-lug type, with drilled/tapped bolt holes, to allow the valve to be used at maximum working pressures of respectively 20 and 16 bars in terminal positions.

This is to allow downstream pipework to be disassembled with the upstream pipework under pressure.

Bodies shall be one piece casting Ductile Iron, UTS 400 MPa, YP 250 MPa, (elongational 12%) GGG 42 or equivalent for sizes up to 1500mm. Sizes above shall be of cast steel. Bodies shall never be in contact with the fluid conveyed and shall be fully protected internally by the resilient seat.

- b) Disc

Shall be cast or stamped, spherically machined and positively splined or keyed internally to the driving shaft. (Use of plinths or bolts is totally prohibited).

Selection of the disc material shall be made taking into account the aggressivity of the fluid. (Cupro-aluminium or stainless steel 316 or equivalent).

- c) Shaft

Butterfly valve technology shall be such that the shaft will never be wetted. (Dry shaft) Stainless Steel, AISI 420 of high mechanical characteristics shall be used.

It shall be positively splined or keyed to the disc. The upper and lower shaft and tie-bolt, when assembled to the disc, shall give in effect a one-piece shaft/disc assembly. At least three bearing assemblies, consisting of steel outer shell, with sintered bronze inner lining, coated with Teflon, facing shall be used.

The upper shaft shall be carried in two bearings, the lower in one.

d) Liner

The resilient, synthetic rubber seat shall be easily replaceable (bonded liners are prohibited) and shall entirely cover the inside of the body overlapping over the sides to form the seal between the body and matching pipework.

Where necessary, it shall be keyed to the body with annular grooves in the bore of the valve. The design shall be such as to allow the disc to seal drop-tight to the liner so that there is no ingress of fluid to the shaft area.

e) General

Valves with "O" Ring Shaft Backup Seals shall not be considered. The Manufacturer shall be able to offer alternative grades to cope with various fluids.

Quarter-turn handles shall be supplied for valves up to and including 150mm nominal diameter. The handle shall be lockable in all intermediate positions and be adaptable to the valves.

For valves larger than 150mm a gear shall be used. The gear operator shall be designed with a worm and nut system. The gear operator shall be irreversible in any position. The gear shall have a handwheel and an indicator protected by plexiglass, showing the position of the disc. If specified, limit switches shall be fitted, mounted in a waterproof and dustproof housing.

U-section wafer-type valves, as described in BS 5155, shall be acceptable, provided that:

- the valve is suitable for individual bolting of each flange
and
- the dimension between the inside faces of the flanges is not less than 3D, where D is the diameter of the flange bolts as specified in BS 4504: Part 1, or SABS 1123

The use of single flanged and flangeless valves shall be permitted only if provision is made for downstream pipework to be disassembled with upstream pipework under pressure.

The direction of opening of the butterfly blade shall be such that the bottom of the blade moves in a downstream direction.

All handwheels shall be fitted with a suitably sized shear-pin, that shall fail before damage can be done to the drive gearing of the valve.

PSL 3.10.2 Air release valves

a) Function

The required valves shall provide any of the functions, or combination of functions, described below as specified in the schedule of quantities:

- Pipeline filling
Uninterrupted high volume air discharge through the large orifice.
- Pipeline draining or Column Separation

Uninterrupted high volume air intake through the large orifice.

- Pipeline full and operating

Discharge of disentrained pressurized air through the small orifice.

- Rapid Filling / Column Separation

The valve must incorporate an integral surge alleviation mechanism which will automatically dampen surge pressures due to rapid air discharge or the subsequent rejoining of separated water columns.

b) Construction and design

The air release and vacuum break valve shall be of a compact single chamber design with solid cylindrical High Density Polyethylene control floats housed in a tubular stainless steel or corrosion protected body with epoxy powder coated cast iron, or stainless steel ends secured by means of stainless steel tie rods.

The valve shall have an integral surge alleviation mechanism which shall operate automatically to limit transient pressure rise or shock induced by closure due to high velocity air discharge or the subsequent rejoining of separated water columns. The limitation of pressure rise must be achieved by deceleration of approaching water prior to valve closure. Relief mechanisms that act subsequent to valve closure cannot react in the low millisecond time span required and are therefore unacceptable.

Large orifice sealing shall be effected by the flat face of the control float seating against a nitrile/EPDM rubber 'O' Ring housed in a dovetail Groove circumferentially surrounding the large orifice. Discharge of pressurized air shall be controlled by the seating and unseating of a small orifice on a nitrile/EPDM rubber seal affixed to the control float.

The intake/discharge orifice area shall be equal to the nominal size of the valve i.e. a 150mm (6") valve shall have a 150mm (6") intake/discharge orifice. The valve construction shall be proportioned with regard to material strength characteristics, so that the deformation, leaking or damage of any kind does not occur by submission to twice the designed working pressure.

The valve design shall incorporate an over pressure safety feature that will fail without an explosive effect, such as is normally the case when highly compressed air is released suddenly. This feature shall consist of easily replaceable components such as gaskets, seals or the like.

The air valve class shall be at least equal to that of the pipework in which is to be installed, with a minimum working pressure of at least 1,6 MPa (Class 16).

All air valves are to be double acting.

PSL 3.10.3 Float Valves

Float Valves shall be hydraulically controlled dual diaphragm end line type control valves with either a direct or remote pilot to facilitate automatic control of levels in tanks and reservoirs with an inherent slow closing characteristic to automatically reduce induced pressure when closing.

Float valves shall be dual diaphragm end of line type with concentric cast iron body and bonnet, which shall be coated and lined with fusion bonded epoxy powder coated to 250 microns.

The spacer piece and plug assembly shall be manufactured from solid HDPE and the diaphragms shall be manufactured from proprietary elastomer as specified by the manufacturer. The internal filter mechanism shall be manufactured from LG2 brass and 304 stainless steel. The control orifice, trim and fasteners shall all be manufactured from Grade 304 stainless steel.

Valve construction shall be such that deformation, leaking or damage of any kind does not occur when the valve is subjected to testing pressures of 1.5 x the designed working pressure.

The valve shall be supplied with a direct or remote (as specified), magnetic two level latch type pilot with a fixed deadband. The pilot shall be constructed of brass with stainless steel trim and shall be fitted with an "Eclipse shallow pot" type magnet. The pilot float arm shall be constructed from stainless steel and the ball from polypropylene.

The pilot shall be able to remain "closed" or "open" when the water surface is turbulent and shall only change state at either end of the deadband.

Where a filter is specified to prevent debris from entering the valve, it shall be a cone filter manufactured from powder coated mild steel.

Float valves shall be supplied with stud connections suitable for alignment to flanges conforming to PN16 ratings of BS 4504 standards.

Float valves shall be suitable for operating under a static pressure of 16 bar and shall be able to operate at a residual pressure of at least 0.1 bar.

PSL 3.10.4 Meters (*Woltmann Type*)

Water meters used in this application in nominal bore sizes from 40mm to 150mm must comply with the South African Bureau of Standards Specification No. 1529-1:1994 and Section 18 of the Trade Metrology Act No. 77 of 1973 and Regulation 80 of Part II of the Trade Metrology Regulations.

All Water Meters, sizes 40 mm to 100 mm, must be tested and sealed by an authorised officer in a SANAS (S.A.B.S. 0259) accredited laboratory, situated within the borders of the Republic of South Africa.

The Water Meter must be of the *Woltmann WP* helical vane inferential velocity type with the following capabilities:

METER SIZE (mm)	40	50	80	100	150	200	250	300
Max. Flowrate $q_s \pm 2\%$ (m ³ /h)	90	90	200	250	600	1000	1600	2000
Permanent Flowrate $q_p \pm 2\%$ (m ³ /h)	50	50	120	180	450	700	1000	1500
Transitional Flowrate $q_t \pm 2\%$ (m ³ /h)	1.0	10	2.0	2.0	4.0	6.0	11.0	15.0
Minimum Flowrate $q_{min} \pm 5\%$ (m ³ /h)	.35	0.35	0.5	0.6	2.0	4.0	6.0	12.0
Starting Flow (m ³ /h)	0.15	0.16	0.22	0.25	0.90	1.2	1.8	1.8
Maximum Working Pressure (Kpa)	1600	1600	1600	1600	1600	1600	1600	1600
Body Length (mm)	311	200	200	250	300	350	450	500

In addition, the meters offered must comply with the following:-

- Epoxy coated cast iron body.
- Counter to be encased in a Copper can with mineral glass lens sealed to IP 68 standards to prevent condensation from forming under the lens, thus providing clear reading in any environment.
- Scratch resistant mineral glass counter window able to withstand the impact of a 25mm steel ball dropped onto the centre from a height of one metre.
- Counter unit must be equipped to generate pulse outputs, as per the following:

<u>Meter sizes 40 mm to 100 mm</u>	One pulse per 10 litres One pulse per 1 000 litres
<u>Meter sizes 150 mm & 200 mm</u>	One pulse per 100 litres One pulse per 10 000 litres

- Meter must have the following features to facilitate convenience of on-site replacement:
 - (a) Fully shrouded, pre-calibrated replaceable mechanism.
 - (b) Helical vane fitted in a shrouded cartridge designed to direct the entire volume of water through the measuring element ensuring body impact is negligible on the accuracy.
- Must be suitable for Vertical, Horizontal or Inclined Installation.
- Meters must be capable of measuring reverse flows within the same Class B accuracy envelope as per the Specification (No. 1529-1, 1994) for forward flow, i.e. $\pm 5\%$ q_{min} & 2% q_p to q_s .
- Meter must be provided with a pressure tapping (1/4 BSP), into which a pressure gauge or pressure transducer can be fitted to measure the downstream pressure of the meter.
- Suitable for water temperatures up to 50°C and maximum working pressure of 1 600 kPa.
- All internal plastic components to be constructed of virgin materials.
- The meter must perform within the legal accuracy specification, with a length of pipe, the same diameter as the meter, three diameters long, free from fittings and valves, fitted at the inlet to the meter body and one diameter long fitted to the outlet of the meter body.
- Each Meter must be backed with a two-year warranty against faulty workmanship and/or materials.

Spare parts for all Water Meters offered must be available in South Africa and still be available for a period of ten years after the purchase of the water meter.

PSL 3.14 Strainers

All strainers shall be “Y” type configuration and shall conform to the following:

- Cast iron body and lid and shall be fusion bonded epoxy coated both inside and outside.
- Face to face dimension of all flanged strainers shall be according to EN 558-1 GR 1. Strainers shall be supplied with stud connections suitable for alignment to flanges conforming to PN16 ratings of BS 4504 standards.
- Strainers shall be suitable for operating under a static pressure of 16 bar.

- The screen shall be a fine-meshed double screen manufactured from stainless steel able to restrain parts bigger than 0.5mm for sizes DN 40mm – DN 150mm, and able to restrain parts bigger than 0.6mm for sizes DN 200mm – DN 300mm.
- All fastening bolts and nuts to be stainless steel.

PSL 3.15 Reflux Valves

Reflux valves shall be double-flanged, for horizontal and vertical mounting, of robust construction and suitable for the operating head and close drop tight, unless otherwise permitted in the Project Specification.

The body cover and door shall be of the close-grained cast iron and the door shall be fitted with a zinc-free phosphor-bronze face, closing on a corresponding bronze face, in the body.

The valves must be of the “non-slam” type, for horizontal or vertical installation. Unless otherwise specified, all reflux valves shall be fitted with an external counterweight arm to ensure non-slam closure.

External spring assisted closure will also be permitted. Valves with a stainless-steel perforated cone, or resilient conical diaphragm, are also acceptable.

Wafer-type reflux valves shall have ductile iron bodies with domed 316 stainless steel gates. Seats shall be machined with a dove-tail groove to accommodate an O-ring to ensure drip-tight sealing.

Valves shall be installed between suitable retaining flanges, which shall be independent of any other piece of equipment.

Valves shall be guaranteed to be leak tight in their particular application.”

PSL 3.11 Manholes and Surface Boxes

Add the following sub-clause:

“PSL 3.11.7 Pipeline Markers

Where so instructed by the Engineer or as shown on the drawings, the Contractor shall erect pipeline markers. These markers will be precast concrete units manufactured out of 25 Mpa concrete to the dimensions shown on the drawings and shall comply with SABS 1200 GA Concrete (Small Works).”

Add the following new sub-clause:

“PSL 3.12 Padlocks for Manholes, Air Valve Chambers, Reservoirs etc.

All padlocks for use in locking manholes, air valves chambers, valve chambers, reservoirs etc shall be “lock-a-like” 50 mm “VIRO” or similar approved with all working mechanisms treated with copper slip.”

PSL 4 Plant

PSL 4.1 Handling and Rigging

Add the following:

“The plant and rigging equipment used for the handling of pipes shall be such that no pipe shall be overstressed during any operation.

In the transportation, loading and unloading of pipes, the Contractor shall at all times operate and maintain an adequate fleet of vehicles to ensure that pipes or their protective linings and coatings are not damaged. In particular, the use of excavation equipment for handling of pipes will not be permitted.

Coated pipes shall be moved with the use of padded slings of width sufficient to prevent damage to the coating. Chain slings, hooks, wire ropes, rope slings without canvas covers, composition belt slings with protruding rivets and any other equipment liable to damage the coating shall not be used. Slings shall be suitably rated for the loads to be handled and in good condition. The use of deteriorating and frayed slings is prohibited.

All pipes are to be lifted and handled with the aid of a "spreader" lifting beam. Special care shall be taken to ensure that no damages occur to pipes or coatings as a result of pipes sliding on or hitting adjacent pipes. The dragging or skidding of pipes and specials in contact with the ground shall not be permitted.

Whenever pipes are stacked, or otherwise stockpiled, or are transported, use shall be made of suitable resilient material as dunnage which shall not disintegrate or deteriorate when exposed to the elements for prolonged periods or under loads from adjacent pipes. Pipes shall be stacked with a minimum clearance of 50 mm between adjacent pipe walls and a minimum of 200 mm clear of the ground.

The ends of the pipes should be kept covered by suitable end pieces to prevent damage to the lining through the intrusion of foreign matter. Level, cleared ground, free of vegetation should be chosen for the stacking site. Fire breaks are essential and pipes must be protected from damage by vandals or animals."

Add the following sub-clause:

"PSL 4.1.1 Stacking of Ductile Iron Pipes

The pipes shall be stacked in uniform stacks, sockets at the same end, as described below:

Bottom Layer: The bottom layer shall be laid on 2 timbers, arranged in parallel; one timber being 1m from the socket end and the other 1m from the spigot end. The pipes shall be laid parallel with one another. The sockets touch and shall not be in contact with the ground.

The pipes at the two ends shall be secured at the socket and spigot with large wooden wedges nailed to the timbers. The intermediate pipes shall be secured at the spigot end only, using smaller wedges.

Upper Layers: Each tier consists of parallel pipes laid in line vertically. Each tier is separated by timbers slightly thicker than the difference in diameter (socket – barrel).

Fittings and accessories shall be packed in robust timber crates and secured in position to prevent chaffing in transit.

The Contractor shall supply all necessary timber dunnage/crating necessary to stack the pipes in accordance with the above specification. Timber dunnage shall be sufficiently robust to prevent crushing or breaking and shall be of sufficient size to prevent contact with the ground.

PSL 5 Construction

PSL 5.1 Laying

PSL 5.1.4 Depths and Cover

Add the following:

"Water mains shall be so laid in road verges that the minimum cover from the finished surface level to the top of the pipe barrel is 800 mm. Under carriageways, water mains shall be laid horizontally and so that the minimum cover is 1000 mm, the change to the cover under the carriageway from the verge being effected as specified in Subclause 5.1.4.2 of SABS 1200 L. Bulk supply mains shall be laid so that the minimum cover, in all situations, is 1000mm."

PSL 5.2.3 Welding

Add the following Sub-clause:

"PSL 5.2.3.1 Site Welded Joints

Plain ended steel pipes and plain ends of corresponding specials are to be joined together by welding in accordance with American Standard API 1104:1964. The pipe ends are to be prepared in accordance with that standard. Welding shall generally commence at the top of the joint and proceed downwards. In addition to the root weld, at least two further passes shall be made, none of which is to exceed 3mm in depth.

The Engineer shall have the right to specify that Qualification Tests be carried out for each welder employed on the works. No welder shall be employed who has not passed such tests and for whom a recent pass certificate issued by a competent authority cannot be produced.

Site welded joints are to be tested by radiographic examination or other approved method as ordered by the Engineer. All testing of welds is to be carried out by an inspection firm to be approved by the Engineer and all costs of testing are to be included in the rates tendered.

In the event of any welded joint proving unsatisfactory when the pipeline is subjected to radiographic or hydraulic tests, the contractor shall be held responsible for all costs involved in repairing the joint or cutting it out and welding a new section of pipe, as may be ordered by the Engineer, and thereafter restoring the lining and wrapping, if these have become damaged, all to the satisfaction of the Engineer.

After jointing and testing, the protective lining and wrappings are to be rendered continuous with the same materials as applied to the body of the pipe. Holiday detection tests shall be carried out in the field to ensure continuity of lining and wrapping

The tendered prices for supplying, transporting, laying, jointing and testing of pipes are to include for all the work described above and for the supply of all necessary materials, including welding, all necessary plant and labour.

Add the following new sub-clause:

PSL 5.2.5 Cut pipes

Cut pipes may be used where required as closure lengths. The cut ends shall be dressed square and to a smooth even finish which shall not be inferior to that of the ends of uncut pipes. The finished dimensions of ends cut on site must be within the tolerances applicable to the ends of the particular types of pipes to be laid. The cost of cutting and trimming pipes shall be included in the rates tendered for laying and jointing pipes.

Add the following new sub-clause:

“PSL 5.11 Pipeline Markers

Markers are to be erected 300 mm off the edge of the pipe trench to the left of the trench and at right angles to the trench centre line at all horizontal changes of direction and on both sides of all road and river crossings, at valve chambers and at intermediate intervals as agreed with the Engineer.

At bends the marker will be erected at the P.I. point of these 300 mm offset lines.”

PSL 6 Tolerances

PSL 6.3 Control Points

Add the following:

“On completion of the contract, the Contractor shall provide the Engineer with a list of as built coordinates (Accurate to 1.0 m) for all air valves, scour valves, isolation valves and standpipes. The cost of providing this information shall be deemed to be included in the rates tendered for the individual items.”

PSL 7 Testing

PSL 7.2.2 Radiographic Examination

Add to the end of the sub clause the words “as amended”. 10% field radiographic testing will be required under this contract.”

Add the following Sub-clause:

“PSL 7.2.3 Radiographic Testing in the Field

10% of all welds made in the field shall be tested radiographically by an independent specialist firm. The welds to be tested shall be selected by the Engineer or his representative. The standard of acceptance shall be in accordance with API standard 1104. Should the welds so tested prove unacceptable, they shall be repaired by the contractor and retested. In addition the two nearest untested welds, one on each side of the unacceptable weld shall also be tested radiographically. Should these welds also prove unsatisfactory, two further welds shall be tested. Such testing will be repeated until all welds are found to be acceptable.

PSL 7.3 *Standard Hydraulic Pipe Test*

PSL 7.3.1 Test Pressure and Time of Test

Add the following to subclause 7.3.1.2:

"The test pressure for field testing of the section of pipeline under test, shall be 1,50 times the maximum working pressure.

The maximum working pressure, for testing purposes, shall be deemed to be the pressure rating of the pipe being tested."

Add the following new sub-clause:

"PSL 7.5 Testing of Valves

All valves shall be pressure tested according to SABS 664 or other applicable code at the appropriate test pressure. Test certificates shall be issued to the Engineer upon delivery to site.

No separate payment shall be made for testing of valves and hydrants and the scheduled rates for the supply and installation of valves shall include for all costs in respect of testing."

PSL 8 *Measurement and Payment*

PSL 8.2 *Scheduled Items*

PSL 8.2.1 Supply, Lay and Bed Pipes Complete with Couplings

Until all the specified work has been completed and all requirements complied with, pipes will be regarded as "materials on site".

PSL 8.2.2 Extra-over 8.2.1 for the Supplying, Laying and Bedding of Specials Complete with Couplings.

Until all the specified work has been completed and all requirements complied with, specials and couplings will be regarded as "materials on site".

PSL 8.2.3 Extra-over 8.2.1 for the Supply, Fixing and Bedding of Valves

Until all the specified work has been completed and all requirements complied with valves will be regarded as "materials on site".

Add the following new payment items:

"PSL 8.2.16 Pipeline Markers..... Unit: No.

The unit of measurement will be the number of markers erected and accepted by the Engineer and the rate will include for all materials, manufacturing, delivery, painting and erection of each unit.

PSL 8.2.17 Valve Markers..... Unit : No.

The unit of measurement will be the number of markers erected and accepted by the Engineer and the rate will include for all materials, manufacturing, delivery, painting and erection of each unit.

PSL 8.2.18 Wrapping of all buried flanges and couplings..... Unit : No.

The unit of measurement will be the number of buried flanges or couplings wrapped in accordance with the specified requirements. The rate will include for all materials, manufacturing, delivery, painting and erection of each unit. Separate items will be scheduled for different pipe diameters.

PSL 8.2.19 Wrapping of pipes..... Unit : m².

The unit of measurement will be the square metre of pipe wrapped in accordance with the specified requirements. The rate will include for all materials, manufacturing, delivery, wrapping and erection of each unit.

PSLB BEDDING (PIPES) (SABS 1200 LB)

PSLB 3 Materials

PSLB 3.1 *Selected Granular Material*

Replace with the following:

“Selected granular material shall be regarded as a clean river sand or any other granular, non-cohesive, vegetation free material subject to the approval of the Engineer. The maximum particle size shall be 19 mm. This material may occur in-situ, be imported or selected from trench excavations.

PSLB 3.2 *Selected Fill Material*

Replace with the following:

“Selected fill material shall be material that has a PI less than 12 and does not contain vegetation or stones exceeding 20 mm. Selected fill material may occur in-situ, be imported or selected from trench excavations.

PSLB 3.3 *Bedding*

All medium pressure pipes shall be classed as flexible pipes and shall be bedded in accordance with Drawing LB 2 of SABS 1200 LB.

All concrete pipes shall be classed as rigid and shall be bedded in accordance with Drawing LB 3 of SABS 1200 LB.

PSLB 8 Measurement and Payment

PSLB 8.1.3 *Volume of Bedding Materials*

Add the following:

“The volume of bedding materials will be computed from dimensions shown on the drawings. The volume occupied by the pipe (measured to the outer diameter) shall be excluded from the bedding volume not be measured.”

PS LF ERF CONNECTIONS (WATER)

PSLF 2 INTERPRETATIONS

PSLF 2.3 DEFINITIONS AND ABBREVIATIONS.

Saddle. *Remove* the word “metal”

Stop tap. *Add* “also commonly called ball-o-stop valve” after the last word.

PSLF 3 MATERIALS

PSLF 3.1.7 Saddles. The saddles shall be of the type of ... or equivalent.

PSLF 3.2.2.1 General. The meters shall be of the ‘Elster Kent Above Ground Concentric Meterbox’ type or equivalent.

PSLF 3.6 MARKINGS AND MARKER POSTS. No markings or marker posts are required.

PSLF 5 CONSTRUCTION

PSLF 5.5.1 Meters. Replace the words in the first line “...position shown on the drawings” with “...on the cadastral boundary of the property and/or outside the existing boundary fence of the property”

PSLF 5.7.2 Maintenance. Replace the words “period of maintenance” in the first line with “Defects Liability Period”.

PSLF 7 TESTING

PSLF 7.3.2 Site Test. Replace the words “methods specified in the project specification” with the words “method proposed by the Contractor and approved by the Engineer”

PSLF 8 MEASUREMENT AND PAYMENT

PSLF 8.2.1 Provide Erf Connections Complete. *Delete* the words “meters, surface boxes, marker posts” and *add* “meters to be scheduled separately”

PSLF 8.2.2 Supply, Lay, and Test Erf Connections. *Delete* the whole clause.

PSLF 8.2.3 Extra-Over Item 8.2.2 for Specials. *Delete* the whole clause.

PSLF 8.2.4 *Replace* the clause to read Install Meters Complete with Couplings.....Unit: No. The rate shall cover the cost of supplying all materials (excluding Meters) and for handling, transporting, installing, jointing, cutting, commissioning, listing and submitting a record of installations to the Engineer. Meters shall be provided by the Employer; the Contractor shall fetch the Meters from the Employer’s stores.

PARTICULAR SPECIFICATIONS

PS 4.3 Site Establishment

PS 4.3.1 Services and facilities provided by the Employer:

(a) Area for contractor's site establishment

An area shall be allocated to the Contractor in communication with the Employer.

The Contractor shall use this area only for the purposes of erecting his site offices, workshops, stores and other facilities required for the execution of the Contract. The Contractor shall not use the area nor allow it to be used for any purposes not directly associated with the execution of the Contract.

The Contractor shall be responsible for arranging, at his own cost, for the provision of all services he may require in the area, as well as elsewhere on the Site.

Should the Contractor deem the area made available to be inadequate or unsuitable for the Contractor's particular needs, then the Contractor shall be at liberty to make his own arrangements with the owners of other sites which he considers are better suited to his needs; provided always that the use by the Contractor of any area other than that made available to him shall be subject to the prior written approval of the Employer's Agent, which approval shall not be unreasonably withheld; and provided further that the Contractor shall have no claim against the Employer in respect of any costs incurred by him, either directly or indirectly in consequence of utilizing any area other than that made available to him, and which costs exceed those costs allowed for by the Contractor in his Tender.

(b) Water Sources

Reticulated potable water supplies are available to the Site. The responsible water supply authority in the area of the Site is the Msunduzi Municipality.

Should the Contractor, in complying with his obligations in terms of sub-clause C3.4.2.2(b): Water, wish to utilize such water supply, he shall himself be responsible for making his own arrangements with the responsible water supply authority for the supply of all water that he may require from such reticulation network for construction purposes as well as for domestic consumption.

If so required by the responsible water supply authority, the Contractor shall further be responsible, at his own cost, for making or otherwise providing metered connections to the available services at the positions specified by the water authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered/given by the Employer that the existing available reticulated water supply will necessarily be adequate for the Contractor's purposes nor that such supply is in any way guaranteed.

All charges as may be levied by the water supply authority in respect of water consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of sub-clause C3.4.2.2(b), be deemed to be included in

the sums tendered by the Contractor for the various Preliminary and General items listed in the Bill of Quantities, as well as in the rates tendered by the Contractor for the various other items listed in the Bill of Quantities which require the consumption of water.

The Contractor shall, when reasonably required by the Employer's Agent, provide documentary proof that all amounts as may have become due and payable by the Contractor to the responsible water authority have been promptly paid in full.

(c) Electricity supply

Reticulated electrical power supply is available in the vicinity of the Site.

(d) Excrement disposal

No water-borne sewage or other off-site excrement disposal systems are available in the vicinity of the Site.

PS 4.3.2 Facilities provided by the Contractor

(a) Facilities for the Employer's Agent

The Contractor shall provide on the Site, for the duration of the Contract and for the exclusive use of the Employer's Agent and/or his Representative (as applicable), the various facilities described hereunder. All such facilities shall be provided promptly on the commencement of the Contract and failure on the part of the Contractor to provide any facility required in terms of this specification shall constitute grounds for the Employer's Agent to withhold payment of the Contractor's tendered Preliminary and General items until the facility has been provided or restored as the case may be.

(i) Office accommodation

No separate office is required for the Employer's Agent or his Representative, but the Contractor must provide a suitable office desk with lockable drawers, an office chair and a lockable plan cupboard in one of his offices, for the exclusive use of the Employer's Agent and his Representative.

The Employer's Agent and his Representative shall be allowed free use of all the Contractor's site facilities.

The Employer's Agent and the Employer's Agent's Representative shall be allowed free use of survey equipment and assistants to carry out control work as and when required, and the Contractor shall provide all pegs, concrete, tools and other necessary items as well as all necessary labour for excavation, bush clearing, mixing and placing of concrete, as and when required for the control of the setting out of the Works.

The Contractor shall provide within his own site establishment facilities, a suitably furnished office or other venue capable of comfortably accommodating a minimum of six (6) persons at site meetings. The Employer's Agent shall be allowed free use of such venue for conducting any other meetings concerning the Contract at all reasonable times.

(ii) Contract Nameboards

The Contractor shall provide, erect and maintain two contract nameboards at such positions and locations directed by the Employer's Agent, which nameboards shall, unless otherwise specified elsewhere in the Contract, comply with the recommendations for the standard board of the South African Association of Consulting Employer's Agents, with regard to size, painting, decorating and detail, and the requirements described hereunder.

Each nameboard shall be made of tempered hardboard with a thickness of at least 12 mm, so braced on the reverse side as to prevent warping and shall be mounted on two or more, as necessary, firmly planted poles. The painting of the boards shall comply with the relevant requirements of CKS 193 and the colours of the paints shall be an acceptable match to the applicable colours given in SABS 1091.

The Contractor shall keep the contract nameboards in good state of repair for the duration of the Contract and shall remove them on completion of the Contract.

(iii) Survey equipment and assistants

Survey equipment

The Contractor shall, for the duration of the Contract, provide the following survey equipment for the exclusive use of the Employer's Agent and his staff:

- 1 upright reading automatic level with tripod;
- 1 metric levelling staff with protective cover bag;
- 6 ranging rods;
- 1 100 meter Stilon tape measure;
- 1 $\pm$ 2 kg hammer.

All such survey equipment provided by the Contractor shall be in good condition, properly calibrated and fit for the purpose and shall be kept fully serviceable at all times by the Contractor at his own cost. The Contractor shall have any defective equipment repaired or replaced at his own cost within 12 hours after notification by the Employer's Agent's staff.

Where required by the Employer's Agent, the Contractor shall at his own cost, promptly arrange for the recalibration of survey equipment provided.

The Contractor shall keep the equipment continuously insured against any loss, damage or breakage and he shall indemnify the Employer's Agent and the Employer against any claims in this regard.

Survey assistants

The Contractor shall make available one suitably educated survey assistant for use on and about the Site at all reasonable times

(b) Water

The Contractor shall, at his own expense, be responsible for obtaining and distributing all water as may be required for the purposes of executing the Contract, including water for both construction purposes and domestic use, as well as for making all arrangements in connection therewith.

The Contractor shall further, at his own expense, be responsible for providing all necessities for procuring, storing, transporting and applying water required for the execution of the Contract, including but not limited to all piping, valves, tanks, pumps, meters and other plant and equipment, as well as for all work and superintendence associated therewith.

The sources of all water utilized for the purposes of the Contract shall be subject to the prior approval of the Employer's Agent, which approval shall not be unreasonably withheld.

The Contractor shall comply with all prevailing legislation in respect of drawing water from natural and other sources and shall, when required by the Employer's Agent, produce proof of such compliance. The distribution of water shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

All water provided by the Contractor for construction purposes shall be clean, free from undesirable concentrations of deleterious salts and other materials and shall comply with any further relevant specifications of the Contract. The Contractor shall, whenever reasonably required by the Employer's Agent, produce test results demonstrating such compliance. Water provided by the Contractor for human consumption shall be healthy and potable to the satisfaction of the health authorities in the area of the Site.

No separate payment will be made to the Contractor for the obtainment and consumption of water which will be deemed to be included in the Contractor's tendered rates.

(c) Electricity

The Contractor shall, at his own expense, be responsible for obtaining and distributing all electricity as he may require for the purposes of executing the Contract, including electricity for both construction purposes and domestic use, as well as for making all arrangements in connection therewith.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of electricity, the costs of which will be deemed to be in the Contractor's tendered rates and prices.

(d) Excrement Disposal

The Contractor shall, at his own expense, be responsible for safely and hygienically dealing with and disposing of all human excrement and similar matter generated on the Site during the course of the Contract, to the satisfaction of the responsible health authorities in the area of the Site and the Employer's Agent. All such excrement shall be removed from the Site and shall not be disposed of by the Contractor on the Site.

The Contractor shall further comply with any other requirements in this regard as may be stated in the Contract.

No separate payment will be made to the Contractor in respect of discharging his obligations in terms of this sub-clause and the costs thereof shall be deemed to be included within the Contractor's tendered Preliminary and General Items.

(e) Employer's Agent's Laboratory

No testing laboratory is required for use by the Employer's Agent but all quality control testing shall be carried out by the Contractor, with the cost thereof deemed to be included in his tendered rates.

The Contractor shall arrange for process control testing to be undertaken by a laboratory to be approved by the Employer's Agent.

A provisional sum will be allowed for in the schedule to allow for the use of an independent laboratory to effect check tests as detailed by the Employer's Agent.

PS 4.3.3 Site Usage:

The Contractor is required to make full provision for all his own requirements and that of his staff and employees according to the relevant legislation and regulations applicable to the area in which he sites his facilities. Sleeping accommodation will not be allowed on the Site of the Work except upon explicit approval of the Employer.

To avoid any misunderstanding or unnecessary conflict with the local community in respect of the accommodation of workers, the Contractor is required to consult with the Employer in this regard at the commencement of the Contract.

The provision of security for the Contractor's Site Establishment, for the full duration of the contract, shall be his own responsibility and no claims for additional security measures taken during the Contract will be considered other than as provided for in the Conditions of Contract.

PS 4.3.4 Permits and wayleaves

The Employer shall be responsible to obtain all the wayleaves required for this Contract.

PS 4.3.5 Features requiring Special Attention:

(a) Site Maintenance

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

On completion of the Works, the Contractor shall remove all temporary offices, sheds, fences etc. and shall reinstate the camp site to the satisfaction of the Employer's Agent.

(b) Subcontractors

All matters pertaining to subcontractors (including Nominated Subcontractors) and the work executed by them shall be dealt with directly between the Employer's Agent and the Contractor in the context of all subcontract work being an integral part of the Works for which the Contractor is responsible.

The Employer's Agent will not liaise directly with any subcontractors nor will he issue instructions concerning the subcontract works directly to any subcontractor.

All matters arising from the subcontract agreements shall be dealt with directly between the Contractor and the subcontractors and the Employer's Agent will not become involved.

(c) Access to Properties

The Contractor shall organize the work to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work, and except as hereunder provided, shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working. In this respect the Contractor's attention is drawn to Clause 5.4 of the General Conditions of Contract

If, as a result of restricted road reserve widths and the nature of the work, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions to provide access to erven and properties.

(d) Protection of Excavations

Unless otherwise permitted in writing by the Employer's Agent, all excavations are to be protected by means of fencing or other appropriate means including watchmen if necessary as the Works are within a residential area.

No excavations may be left open over weekends and Public Holidays unless properly protected. The cost of backfilling any excavations and the re-opening thereof, to comply with this requirement shall be for the Contractor's account.

(e) Employment of Developing Contractors

Whilst no restrictions are placed on the reservation of specific work for Local "Developing Contractors", it is recommended that appropriate portions of the Works be "contracted out" to such individuals and contractors, who are resident in the project area. The Tenderer will be responsible for all contractual requirements.

(f) Employment of Local Labour

It is the intention that this Contract should make maximum use of the local labour force that is presently under-employed. To this end the Contractor shall limit the utilization on the Contract of non-local employees to that of key personnel only and to employ and train local labour to the extent necessary for the execution and completion of this Contract. All unskilled labour MUST be obtained from the area in which the Works are being undertaken.

The Contractor shall fill in the form entitled Key Personnel in the Forms to be completed by the Tenderer. The data stated on the above-mentioned form will be strictly monitored during the Contract period and any deviations therefrom shall be subject to the prior approval of the Employer's Agent, which approval shall not be unreasonably withheld.

(g) Monthly Statements and Payment Certificates

The statement to be submitted by the Contractor in terms of Clause 6.10.1 of the General Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Employer's Agent, in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit two paper copies of the statement.

For the purposes of the Employer's Agent's payment certificate, the Contractor shall subsequently be responsible, at his own cost, for making such adjustments to his statement as may be required by the Employer's Agent for the purposes of accurately reflecting the actual quantities and amounts which the Employer's Agent deems to be due and payable to the Contractor in the payment certificate.

The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Employer's Agent within three (3) normal working days from the date on which the Employer's Agent communicated to the Contractor the adjustments required. The Contractor shall submit to the Employer's Agent five (5) sets of paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting such adjusted statement for the purposes of the Employer's Agent's payment certificate will be added to the times allowed to the Employer's Agent in terms of Sub-clause 6.10.4 of the Conditions of Contract to submit the signed payment certificate to the Employer and the Contractor. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

(h) Construction in Restricted Areas

Working spaces will sometimes be restricted. The construction method used in these restricted areas largely depends on the Contractor's Plant. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices tendered will be deemed to include full compensation for any difficulties encountered by the Contractor while working in restricted areas. Neither extra payment, nor any claim for payment due to these difficulties will be considered.

(i) Notices, Signs, Barricades and Advertisements

All notices, signs and barricades, as well as advertisements, may be used only if approved by the Employer's Agent. The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his tendered rates.

The Employer's Agent shall have the right to instruct the Contractor to move any sign, notice or advertisement to another position, or to remove it from the Site of the Works if in his opinion it is unsatisfactory, inconvenient or dangerous.

(j) 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 staff, equipment and transport to ensure adequate supervision and positive control of the Works at all times. The cost of supervision and process control, including testing 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 Standardised 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, measurements and levels to demonstrate the achievement of compliance with the Specifications.

(k) Spoil Material

No indiscriminate spoiling of material will be allowed. All surplus or unsuitable material shall be spoiled in designated areas as directed by the Employer's Agent.

(l) Finishing, Testing, Tidying and Period of Maintenance

In view of the intense concentration of construction activities likely to be experienced during the Contract period, progressive and systematic finishing and tidying will form an essential part of this Contract. On no account must spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily impede the activities of others, and in the event of this occurring, the Employer shall have the right to withhold payment for as long as may be necessary in respect of the relevant Works in the area(s) concerned without thereby prejudicing the rights of others to institute claims against the Contractor on the ground of unnecessary obstruction.

Finishing, testing and tidying must not be deferred to the end of the Contract. The Contractor will be entitled, subject to reaching prior agreement with the Employer's Agent, to request that work in specific areas be inspected and certified as complete, prior to certification of completion of the whole of the works included in the Contract, in accordance with the provisions of Sub-clause 5.14.2 of the General Conditions of Contract, provided always that the works in any such specific area will not be certified as complete, until the whole of the works within the specific area concerned, including all finishing, testing and tidying, has been fully completed to the satisfaction of the Employer's Agent.

All finishing, testing and tidying shall be carried out to the best advantage of the project as a whole.

(m) Courtesy

In all dealings with the public the Contractor shall bear in mind their right to enjoy the use of the roads and services and access to their properties and that the Employer desires to interfere as little as possible with these rights.

At all points of contact with the public the Contractor and his staff are requested to handle discussions and disputes with deliberate courtesy and understanding.

The Ward Councilor shall be contacted prior to commencement of any works and the Contractor is obliged to work with the appointed representatives of the local community in all matters relating to the employment of local labour and related issues.

(n) The Compensation for Occupational Injuries and Diseases Act (Act 130 of 1993) - (COID Act)

Contractors are required to register as employers in terms of the COID Act and must pay the assessments due in terms of the COID Act relative to their employee records including all sub-contractors and community-based labour.

In this specific contract the Contractor further acknowledges that the Employer shall have the right, without prejudice, to deduct any shortfall in compensation due to any employee of the Contractor (or sub-contractor) from monies due or which may become due to the Contractor, and so effect settlement of the matter.

(o) The Labour Relations Act (Act 66 of 1995) (LR ACT)

Contractors are required to register as employers in terms of the LR Act.

Contractors are required to pay all employee and employer contributions to the Unemployment Benefits Fund, other than in respect of casual employees defined as persons who work for less than eight hours in any one week, or in respect of persons who by virtue of lawful reasons are exempt therefrom.

(p) The Basic Conditions of Employment Act (Act 3 of 1983) (BCE ACT)

Contractors in their capacity as employers are required to comply with the provisions of the BCE Act with special reference to their employees' terms and conditions of employment.

(q) The Income Tax Act (Act 58 of 1962)

Contractors in their capacity both as business enterprises and employers are obliged to register and comply with the requirements of the Receiver of Revenue.

(r) The Value Added Tax Act (Act 89 of 1991)

Contractors in their capacity as business enterprises are required, if their annual turnover exceeds or is expected to exceed the limit as determined by the SARS from time-to-time, to register as VAT vendors with the Receiver of Revenue for the purpose of paying, recovering, charging and returning VAT to the State via the Receiver of Revenue.

It is recorded that the Employer in this contract is registered as a VAT vendor.

(s) The Employer's Agenting Profession Act of South Africa (Act 114 of 1990)

Where work undertaken in connection with this contract falls within the meaning of "kinds of work reserved for professional Employer's Agents" as fully set out in of the Engineering Profession Act of South Africa 1990, or any amendments thereof, only persons registered in terms of the above Act, may assume full responsibility, according to competency under the Act, for the respective sections and phases of such work, as described in the Act, particularly in regard to design, supervision of construction and installation, and commission where applicable.

The Tenderer shall submit a certificate with the tender certifying compliance with all these requirements in connection with the preparation and submission of the tender and shall give an undertaking to comply in full during the contract period. Where applicable the Tenderer shall submit at the time of tendering the name(s), qualifications and address(es) of the Professional Employer's Agent(s) responsible for the various disciplines and portions of the work comprising this contract.

(t) Compliance with Legislation

Contractors will be deemed by virtue of submitting a tender to have undertaken to comply fully for all purposes under this contract with all current legislation and related regulations. The above Acts as amended from time to time, are listed for the attention and convenience of the Contractor, without prejudice and without in any way relieving the Contractor of the obligation to continuously comply with all the laws of South Africa for the entire duration of this contract including the defects liability period the cost of so doing being expressly included in the contract sum.

(u) Non Compliance with Legislation

The Employer in this contract will not under any circumstances be, or become party to, any act or omission by the Contractor and/or the Contractor's Sub-contractors and/or employees, which contravenes South African law.

If at any time during this contract, including the defects liability period, the Employer and/or the Employer's Agent and/or the Employer's Agent's Representative discover any such contravention, then the Employer shall have the right without prejudice to terminate this contract forthwith, take possession of the works and declare any monies due or which may become due to the Contractor as forfeited by the Contractor, notwithstanding any other clause to the contrary.

(v) Use of Explosives

Prior to the use of explosives at any specific location, the Contractor shall obtain permission for blasting from the Employer's Agent. The safety of existing Works and services, and of persons, etc., shall remain the responsibility of the Contractor, who shall abide by all the relevant laws and regulations.

The Contractor shall pay special attention regarding the use of explosives in the vicinity of the Oil pipeline and any additional costs arising from special requirements and/or procedures that may be required shall be deemed to be included in the rates for hard rock excavation.

(w) Existing Services and Buildings

Although the plans may show the approximate position of existing services and buildings, neither the Employer nor the Employer's Agent will accept the responsibility for the accuracy thereof.

Where the Contractor anticipates that it will be impossible for him to carry out the work without causing damage to existing services, Works or buildings he shall forward a proposal on the method of construction for approval by the Employer's Agent.

Where any existing services are crossed or temporarily removed, the Contractor shall be responsible for the repair and / or reinstatement of the crossings to the satisfaction of the Employer's Agent.

Any damage done to existing Works or buildings shall be immediately notified to the owners concerned and to the Employer's Agent.

Unless it is established by the Employer's Agent that the Contractor exercised reasonable care and damage was unavoidable, the Contractor shall be held responsible for the damage to any existing Works or buildings and for the costs of repair, including any claims which may arise as a result thereof.

(x) Security of Contractor's Site

The provision and sustainment of security for the Contractor's Site Establishment shall be his own responsibility, and no claims for additional security measures taken during the currency of the Contract will be considered other than as provided for in the General Conditions of Contract.

(y) Contractor's Construction Manager

Within 14 days of the award of Contract, the Contractor shall advise the Employer in writing, together with a CV, of the name of the responsible person in charge of this Contract.

In amplification of Clause 7.5 of the General Conditions of Contract:

It shall be noted that the Contractor shall be required to strictly observe his obligations regarding adequate full time superintendence of the Works, with particular reference to accuracy of setting out, excavations, correct steel fixing, properly constructed formwork, etc. in order to achieve the high standard of workmanship required of him.

Adequate facilities for superintendence of his work shall be provided by the Contractor and the Employer's Agents engineering staff must under no circumstances be expected to act in this capacity on his behalf.

(z) Liaison Officer

If required in terms of the contract, the Contractor shall employ a Liaison Officer for the full duration of the contract. In the event that a Liaison Officer is required, the contractor must make allowance for a CLO in his general obligations.

PS 4.3.6 Delays Due to Adverse weather conditions

Critical Path Method

In terms of GCC Clause 5.12.2 of the Conditions of Contract, extension of time will be considered for **abnormal rainfall**. The numbers of days per month on which work is expected not to be possible as a result of **normal rainfall**, and for which the Contractor shall make provision in his/her tendered rates, prices and programme, are listed in Table PS-4.1 hereafter. Only the number of days lost as a result of adverse weather conditions, exceeding the number of days listed in Table PS-4.1, will qualify for consideration of extension of time.

**TABLE PS-4.1:
 EXPECTED NUMBER OF WORKING DAYS LOST PER MONTH DUE TO NORMAL RAINFALL**

MONTH	Expected number of working days lost as result of normal rainfall	Average monthly Rainfall (mm)
JANUARY	*4	138
FEBRUARY	2	89
MARCH	2	100
APRIL	1	51
MAY	0.5	15
JUNE	0.5	17
JULY	0.3	11
AUGUST	0.8	30
SEPTEMBER	1	37
OCTOBER	2	85
NOVEMBER	3	109
DECEMBER	*3	137
TOTAL	23.2 days	819

*(Based on information obtained from the Weather Bureau, Department of Environment Affairs, Pretoria. The average monthly rainfall figures quoted for Albertfalls Station No. U2R003A01, are included for information only, and shall not be taken into consideration for calculation of extension of time. *The number of working days lost for December and January allows for the builders' holidays from 15 December to 2 January, both days included.)*

During the execution of the Works, the Employer's Agent's Representative will certify a day lost due to abnormal rainfall and adverse weather conditions only:

- If no work was possible on the relevant working day on any item which is on the critical path according to the latest approved construction programme; or
- If less than 30% of the work force and plant on site could work during that specific working day.

Extension of time as a result of abnormal rainfall and adverse weather conditions shall be calculated monthly being equal to the number of working days certified by the Employer's Agent's Representative as lost due to rainfall and adverse weather conditions, less the number of days allowed for as in Table PS-14.1, which could result in a negative figure for certain months. The total extension of time as a result of abnormal climatic conditions for which the Contractor may apply, shall be the cumulative algebraic sum of the monthly extensions. Should the sum thus obtained be negative, the extension of time shall be taken as nil."

PS 5 OCCUPATIONAL HEALTH AND SAFETY

(Read with SANS 1921 - 1: 2004 Clause 4.18 and the Particular Safety Specification)

PS 5.1 General Statement

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full responsibility to conform to all the provisions of the Occupational Health and Safety Act No 85 and Amendment Act No 181 of 1993, and the OHSA 1993 Construction Regulations 2014 issued on 07 February 2014 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of the Occupational Health and Safety Act by executing the Agreement form included in Part 4: Annexures.

PS 5.2 Health and Safety Specifications and Plans to be Submitted at Tender Stage

(a) Employer's Health and Safety Specification

The Employer's Health and Safety Specification is included in this document as part of the Project Specifications.

(b) Contractor's Health and Safety Plan

The successful Tenderer shall, on receipt of notification that his offer is accepted, submit without delay his own documented Health and Safety Plan for the execution of the Work under the contract. His Health and Safety Plan must at least cover the following:

- (i) a proper risk assessment of the works, risk items, work methods and procedures in terms of Regulations 7 to 28;
- (ii) pro-active identification of potential hazards and unsafe working conditions;
- (iii) provision of a safe working environment and equipment;
- (iv) statements of methods to ensure the health and safety of Sub-Contractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 5*);
 - monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;
 - details of the Construction Manager, Construction Supervisor, the Construction Health and Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 6 and other applicable regulations; and
 - details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2014.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

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

PS 5.3 Cost of Compliance with the OHSA Construction Regulations

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract. Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

Items that may qualify for remuneration will be specified in the Safety Specifications included or in the Project specifications.

PS 6 USE OF PROPRIETARY NAMES

The use of proprietary names in no way indicates preference for a particular product. Rather, this usage is to illustrate to the tenderer the type and nature of product sought by the Employer. Equipment with similar materials of constructions, similar functionality and no material deviation from the product used for illustrative purposes will be deemed to be “similar approved”.

B. PARTICULAR SAFETY SPECIFICATION (PSS-1)

Refer to Annexure 3 & 4

C. ENVIRONMENTAL MANAGEMENT PROGRAMME (PSS-2)

Refer to Annexure 5

PART 4

ANNEXURES

C O N T E N T S

ITEM	ITEM TITLE	PAGE No.
1	PRO FORMA FORMS TO BE COMPLETED BY SUCCESSFUL TENDERER:	
1.1	PERFORMANCE GUARANTEE.	C4.1/3
1.2	AGREEMENT IN TERMS OF OCCUPATIONAL HEALTH AND SAFETY ACT No. 85 OF 1993	C4.1/6
1.3	CERTIFICATE OF AUTHORITY	C4.1/8
1.4	DISCLOSURE STATEMENT (APPOINTMENT OF AD-HOC ADJUDICATION BOARD MEMBER)	C4.1/9
1.5	MONTHLY DATA SHEET	C4.1/10
1.6	NOTIFICATION OF CONSTRUCTION WORK	C4.1/11
2	LIST OF TENDER DRAWINGS	C4.1/14
3	OHS SPECIFICATION	-
4	BASELINE RISK ASSESSMENT	-
5	ENVIRONMENTAL MANAGEMENT PROGRAMME	-

1.1 PRO FORMA PERFORMANCE GUARANTEE

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

Physical address:

"Employer" means:

"Contractor" means:

"Employer's Agent" 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

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate for 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 Employer's Agent of the Certificate of Completion of the Works or the date of payment in full of the Guaranteed Sum, whichever occurs first. The Employer's Agent 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 Employer's Agent 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 or 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 or 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)

Capacity

Witness signatory (1)

Witness signatory (2)

**1.2 PRO FORMA
AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL
HEALTH AND SAFETY ACT No. 85 OF 1993**

(Print clearly)

THIS AGREEMENT is made between

(hereinafter called the EMPLOYER of the one part, herein represented by

.....
in his capacity as

(hereinafter called the CONTRACTOR of the other part, herein represented by

.....
in his capacity as

duly authorised to sign on behalf of the Contractor.

WHEREAS the CONTRACTOR is the Mandatory of the EMPLOYER in consequence of an agreement between the CONTRACTOR and the EMPLOYER in respect of:

CONTRACT No.

CONTRACT TITLE:

.....
for the construction, completion and maintenance of the works;

AND WHEREAS the EMPLOYER and the CONTRACTOR have agreed to enter into an agreement in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act No. 85 of 1993, as amended by OHSA Amendment Act No. 181/1933 (hereinafter referred to as the ACT);

NOW THEREFORE the parties agree as follows:

1. The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.
2. The CONTRACTOR undertakes to fully comply with all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations, provided that should the EMPLOYER have prescribed certain arrangements and procedures, that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.
3. The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures, if any, imposed by the ACT and Regulations, and the CONTRACTOR expressly absolves the EMPLOYER and the Employer's CONSULTING ENGINEERS from being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedures in respect of the work included in the contract.
4. The CONTRACTOR agrees that any duly authorized officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the

CONTRACTOR has complied with his undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR, or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.

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

THUS SIGNED atfor and on behalf of the
CONTRACTOR on this the day of 20

SIGNATURE

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1. 2.

THUS SIGNED atfor and on behalf of the
EMPLOYER on this the day of 20

SIGNATURE

NAME AND SURNAME:

CAPACITY:

WITNESSES: 1. 2.

**1.3 PRO FORMA
CERTIFICATE OF AUTHORITY FOR SIGNATORY TO SIGN AGREEMENT IN
TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT No. 85 OF 1993,
AND CONSTRUCTIONS REGULATIONS (GOVERNMENT NOTICE 37305 07
FEBRUARY 2014) OR ANY AMENDMENT THERETO.**

The signatory for the company that the CONTRACTOR in terms of the above-mentioned Contract and the Mandatary in terms of the above-mentioned ACT shall confirm his or her authority thereto by attaching to this page a duly signed and dated copy of the relevant resolution of the board of directors. An example is given below:

(Print clearly)

"By resolution of the board of directors passed at a meeting held on 20.....

Mr/Mrs/Ms

whose signature appears below, has been duly authorized to sign the AGREEMENT IN TERMS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT No. 85 OF 1993, AND CONSTRUCTIONS REGULATIONS (GOVERNMENT NOTICE 37305 07 FEBRUARY 2014) OR ANY AMENDMENT THERETO on behalf of

(Name of Company)

SIGNED ON BEHALF OF THE COMPANY

SIGNATURE

NAME OF SIGNATORY (*Capitals print*) :

CAPACITY OF SIGNATORY

WITNESSES 1. Signature

Name

Date

2. Signature

Name

Date

1.4 PRO FORMA DISCLOSURE STATEMENT

(Please note that words in italics within brackets are items which should be stated)

(Date)

Contract: *(Name)*

Contractor: *(Name)*

Employer: *(Name)*

Employer's Agent: *(Name)*

Dear Sirs

I am willing and available to serve as ad-hoc Adjudication Board Member in the above mentioned Contract.

In accordance with the General Conditions of Contract for Construction Works Adjudication Board Rules relating to disclosure statements by selected or nominated persons to the adjudication, I hereby state that:

- I shall act with complete impartiality and know of nothing at this time, which could affect my impartiality.
- I have had no previous involvement with this project.
- I do not have any financial interest in this project.
- I am not currently employed by the Contractor, Employer or Employer's Agent.
- I do not have any financial connections with the Contractor, Employer or Employer's Agent.
- I do not have or have not had a personal relationship with any authoritative member of the Contractor, Employer or the Employer's Agent which could affect my impartiality.
- I undertake to immediately disclose to the parties any changes in the above position which could affect my impartiality or be perceived to affect same.

Should there be any deviation from the foregoing statements, details shall be given.

I further declare that I am experienced in the work which is carried out under the Contract and in interpreting contract documentation.

Name in full:

Signature:

**1.5 PRO FORMA
MONTHLY DATA SHEET: LABOUR DAYS, BENEFICIARY INFORMATION &
DAILY SITE ATTENDANCE REGISTER**

*(To be completed by the CONTRACTOR and submitted to the EMPLOYER'S AGENT with his
monthly payment statement)*

1.6 PRO FORMA NOTIFICATION OF CONSTRUCTION WORK

OCCUPATIONAL HEALTH AND SAFETY ACT, 1993 REGULATION 3 OF THE CONSTRUCTION REGULATIONS, 1993

NOTE: 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 OF THE SAME SITE HAD DONE SO PRIOR TO THE COMMENCEMENT OF WORK.

1(a) Name and postal address of principal Contractor:

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

1(b) Name and telephone number of principal Contractor's contact person:

.....Tel:

2. Principal Contractor's compensation registration number:

3(a) Name and postal address of Client:

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

3(b) Name and telephone number of Client's contact person or agent:

.....Tel:

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

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

4(b) Name and telephone number of designer(s) contact person:

.....Tel:

5. Name and telephone number of principal Contractor's construction supervisor on site appointed in terms of Regulation 6(1):

-Tel:
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:
.....
.....
.....

SIGUATURES: Date
Principal Contractor

..... Date
Client

2 LIST OF TENDER DRAWINGS

List of Tender Drawings as included under Volume 2 of the Tender Documentation:

Drawing No:	Drawing Title
	<u>LAYOUTS</u>
PRJ 130A – DW100	LOCALITY PLAN
PRJ 130A – DW001	KEY PLAN
PRJ 130A – DW002	LAYOUT AND LONG SECTION (SHEET 1 OF 2)
PRJ 130A – DW003	LAYOUT AND LONG SECTION (SHEET 2 OF 2)
	<u>STANDARD DETAILS</u>
PRJ 130A – DW301	AIR VALVE CHAMBER
PRJ 130A – DW302	SCOUR VALVE CHAMBER
PRJ 130A – DW303	ISOLATING VALVER CHAMBER
PRJ 130A – DW304	INLET CHAMBER PLAN, SECTION AND DETAILS
PRJ 130A – DW304a	OUTLET CHAMBER PLAN, SECTION AND DETAILS
PRJ 130A – DW305	TYPICAL CHAMBER LADDER DETAILS
PRJ 130A – DW306	TYPICAL BEDDING, PIPE SLEEVE AND ROAD CROSSING DETAILS
PRJ 130A – DW307	TYPICAL THRUST BLOCKS
PRJ 130A – DW308	MARKER POST & VALVE MARKER DETAIL
PRJ 130A – DW309	PLAN VIEW, 750KL ELEVATED TANK AND OVERFLOW INTO STORMWATER DETAILS
PRJ 130A – DW310	ELEVATED TANK SECTIONS AND DETAILS

CLIENT



MSUNDUZI LOCAL MUNICIPALITY



COPESVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750kL ELEVATED STEEL TANK PROJECT WITHIN WARD 30



**JTN Consulting
Engineers (Pty) Ltd.**
Reg No. 2013/03854/07

Head office
56 Ridge Road
Scottsville
Pietermaritzburg
3201

e-mail: admin@jtnconsulting.co.za
Tel (033) 342 3278
Fax (086) 554 5999

TENDER DRAWINGS

OCTOBER 2024

NAME :

DATE :

SIGNED BY :
CLIENT

NAME :

DATE :

SIGNED BY :
CONSULTANT

COPESVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER
PIPELINE AND 750kL ELEVATED STEEL TANK PROJECT WITHIN WARD 30

LIST OF DRAWINGS - CIVIL

<u>DRAWING NUMBER</u>	<u>DESCRIPTION</u>	REVISION	ORIGINAL SIZE
<u>LAYOUTS :</u>			
PRJ 130A - DW100	LOCALITY PLAN	C	A1
PRJ 130A - DW001	KEY PLAN	C	A1
PRJ 130A - DW002	LAYOUT AND LONG SECTION (SHEET 1 OF 2)	C	A1
PRJ 130A - DW003	LAYOUT AND LONG SECTION (SHEET 2 OF 2)	C	A1
<u>STANDARD DETAILS :</u>			
PRJ 130A - DW301	AIR VALVE CHAMBER	C	A1
PRJ 130A - DW302	SCOUR VALVE CHAMBER	C	A1
PRJ 130A - DW303	ISOLATING VALVE CHAMBER	C	A1
PRJ 130A - DW304	INLET CHAMBER PLAN, SECTION AND DETAILS	C	A1
PRJ 130A - DW304a	OUTLET CHAMBER PLAN, SECTION AND DETAILS	C	A1
PRJ 130A - DW305	TYPICAL CHAMBER LADDER DETAILS	C	A1
PRJ 130A - DW306	TYPICAL PIPE BEDDING, PIPE SLEEVE AND ROAD CROSSING DETAILS	C	A1
PRJ 130A - DW307	TYPICAL THRUST BLOCK	C	A1
PRJ 130A - DW308	MARKER POST & VALVE MARKER DETAIL	C	A1
PRJ 130A - DW309	PLAN VIEW , 750 KL ELEVATED TANK AND OVERFLOW INTO STORMWATER DETAILS	C	A1
PRJ 130A - DW310	ELEVATED TANK SECTIONS AND DETAILS	C	A1

NOTE
ALL DRAWINGS REDUCED FROM ORIGINAL SIZE



WATER NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 SERIES AND THE PROJECT SPECIFICATIONS.
- ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT INFORMATION PRIOR TO CONSTRUCTION.
- EXISTING SERVICES TO BE PROVED PRIOR TO CONSTRUCTION.
- SURVEY AND DESIGN INFORMATION IS BASED ON THE WGS 84 CO-ORDINATE SYSTEM.
- FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT.
- MINIMUM PIPE COVER TO BE 1000mm.
- ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.



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Tel (033) 342 3278
Fax (086) 554 5999

FOR TENDER

DATE :

SIGNED BY :
CONSULTING ENGINEER

C	29-10-24	FOR TENDER	AG	SD
B	02-09-24	FOR TENDER	AG	SD
A	28-03-24	FOR TENDER	AG	SD
REV	DATE	DESCRIPTION	BY	CHK
DRG. NO.	REFERENCE DRAWINGS			
CLIENT LOGO				
				
CLIENT NAME				
MSUNDUZI MUNICIPALITY				
PROJECT TITLE				
COPESVILLE WATER SCHEME PHASE 3C - RUPAR CRESCENT BULK WATER PIPELINE AND 750KL ELEVATED STEEL TANK PROJECT WITHIN WARD 30				
DRAWING TITLE				
LOCALITY PLAN				
	RESPONSIBLE PERSON		DATE	
DESIGNED	A.GANASS		29-10-2024	
CHECKED	S.DELOMONEY		29-10-2024	
DRAWN	A.GANASS		29-10-2024	
CHECKED	S.DELOMONEY		29-10-2024	
SCALES	AS SHOWN	SHEET SIZE	A1	
DRAWING NO. PRJ 130A-DW 100			REVISION C	



WATER NOTES:

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- FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT.
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A	28-03-24	FOR TENDER	AG	SD
REV	DATE	DESCRIPTION	BY	CHK
DRG. NO.	REFERENCE DRAWINGS			

CLIENT LOGO



CITY OF CHOICE
PIETERMARITZBURG
MSUNDUZI

CLIENT NAME

MSUNDUZI MUNICIPALITY

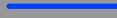
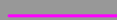
PROJECT TITLE

**COPEVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750KL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30**

DRAWING TITLE

KEY PLAN

	RESPONSIBLE PERSON		DATE
DESIGNED	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
DRAWN	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
SCALES	AS SHOWN	SHEET SIZE	A1
DRAWING NO. PRJ 130A-DW 001			REVISION C

LEGEND	
KEY	DESCRIPTION
	PROPOSED 250mm Ø PIPE
	EXISTING WATER PIPES
	EXISTING SEWER PIPES
	AIR VALVE (AV)
	ISOLATING VALVE (IV)
	SCOUR VALVE (SV)
	ELEVATED TANK



SETTING OUT DATA			
NODE	Y	X	INVERT
PI-005 [88]	56498.268	3270728.722	785.374
PI-006 [86]	56430.334	3270829.672	789.438
PI-007 [82]	56272.094	3271045.612	792.509
PI-008 [83]	56321.207	3271128.653	802.289
PI-009 [92]	56327.481	3271150.959	803.339
PI-010 [84]	56342.600	3271171.530	805.579
PI-011 [85]	56364.148	3271168.136	807.575
PI-012 [16]	56398.051	3271148.002	810.148
PI-013 [14]	56415.389	3271160.936	809.870

Water Air/Scour Valves									
Chainage	ID	Y-Coord	X-Coord	NGL	Invert	Depth	Diameter	Type	
406.670	160-1	56356.288	3270927.988	796.283	794.918	1.364	80 mm	AV-2S	
563.238	153-1	56277.466	3271054.685	794.560	792.225	2.336	80 mm	SV	
575.478	153-2	56283.702	3271065.217	800.207	798.355	1.852	100 mm	AV-2S	
746.547	158-1	56367.235	3271154.425	811.339	810.183	1.157	80 mm	AV-2S	

- ## WATER NOTES:
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 2. ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION, ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
 3. THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT INFORMATION PRIOR TO CONSTRUCTION.
 4. EXISTING SERVICES TO BE PROVIDED PRIOR TO CONSTRUCTION.
 5. SURVEY AND DESIGN INFORMATION IS BASED ON THE WGS 84 CO-ORDINATE SYSTEM.
 6. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT.
 7. MINIMUM PIPE COVER TO BE 1000mm.
 8. ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.



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FOR TENDER

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REV	DATE	DESCRIPTION	BY	CHK

DRG. NO.	REFERENCE DRAWINGS
----------	--------------------

CLIENT LOGO



CLIENT NAME

MSUNDUZI
MUNICIPALITY

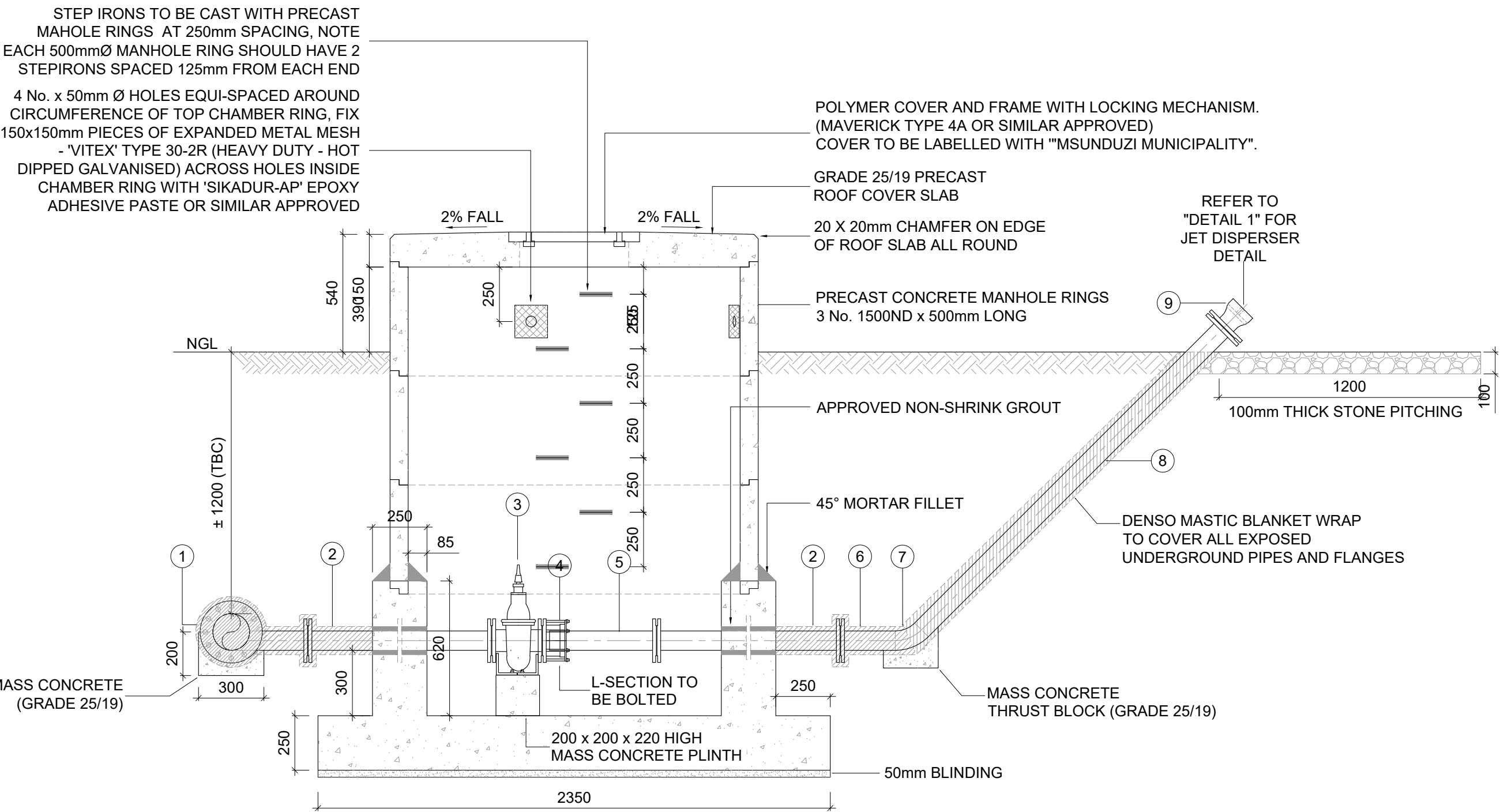
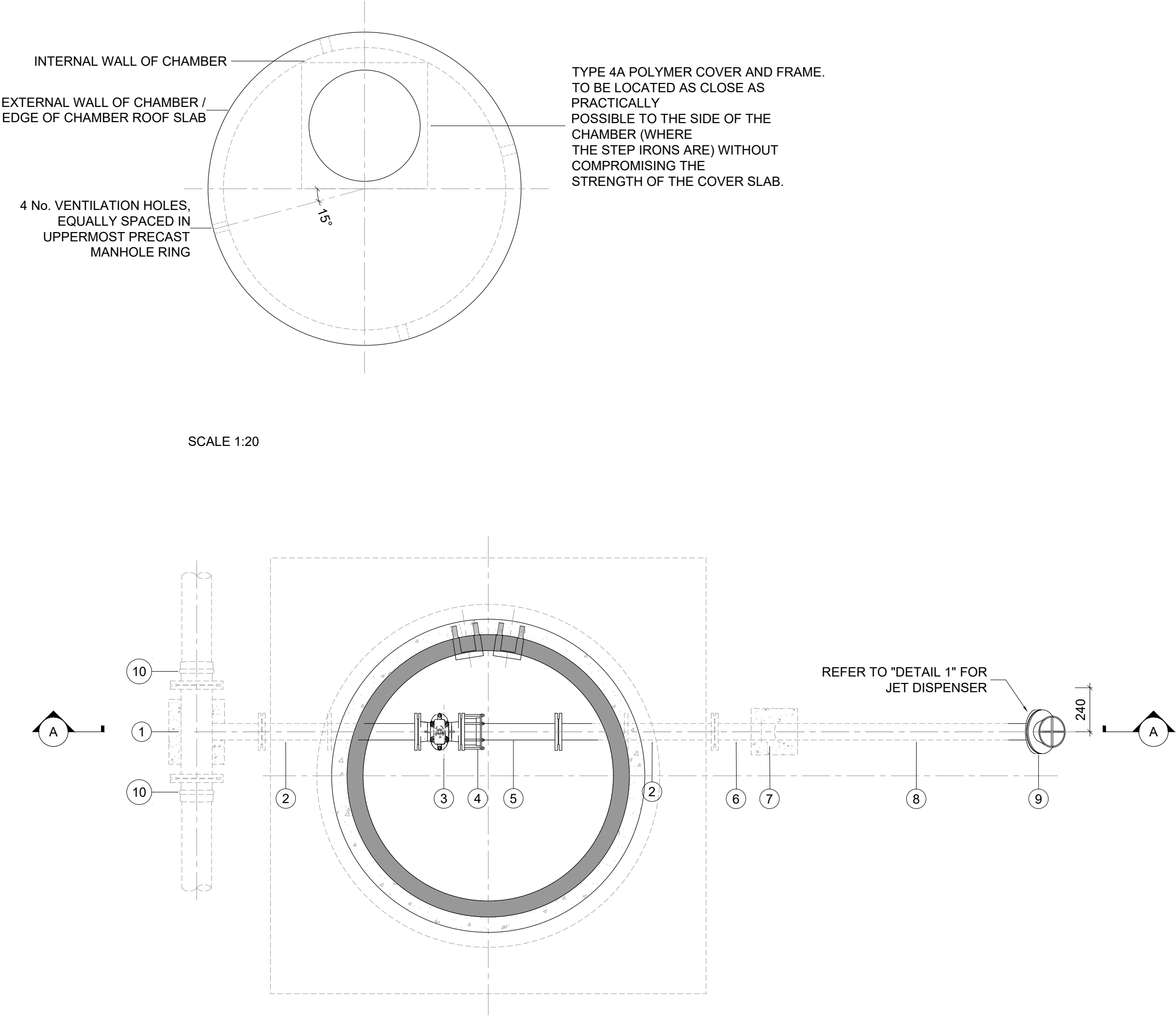
PROJECT TITLE

COPESVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750kL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30

DRAWING TITLE

LAYOUT AND LONGSECTION
(SHEET 2 OF 2)

	RESPONSIBLE PERSON	DATE
DESIGNED	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
DRAWN	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
SCALES	AS SHOWN	A1
DRAWING NO. PRJ 130A-DW 003		REVISION C



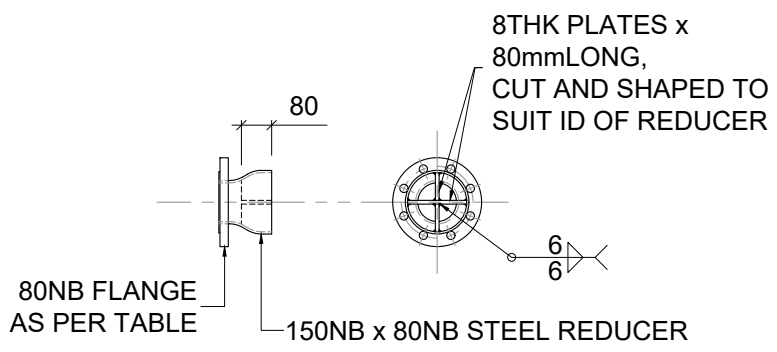
SECTION A-A
SCALE 1:20

NOTES:

- ALL WORK IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200.
- ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER.
- ALL PIPE FITTINGS AND DIMENSIONS ARE TO BE CHECKED ON SITE, ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION.
- ALL PIPEWORK TO BE GMS UNLESS STATED OTHERWISE.
- ALL FLANGES SHALL BE RATED AND DRILLED TO SABS 1123.
- ALL BOLTS TO BE STAINLESS STEEL.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS.
- ALL BURIED FITTINGS AND FLANGES ARE TO BE WRAPPED IN DENSO MASTIC BLANKET WRAPPING.
- ALL CONCRETE IS TO BE GRADE 25/19 UNLESS STATED OTHERWISE.
- ALL FLANGE FITTINGS AND VALVES ARE TO SUIT THE VALVE CLASS SHOWN ON LONG SECTIONS.
- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS, ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY ACT, (LATEST REVISION) AND THE CONSTRUCTION REGULATIONS.
- THE MAIN CONTRACTOR IS TO ENSURE THAT A COMPETENT PERSON, APPROVED BY THE SOUTH AFRICAN QUALIFICATION AUTHORITY SUPERVISES AND APPROVES ALL ASPECTS OF THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, LATEST REVISION.
- ALL TEMPORARY WORKS TO BE DESIGNED, DETAILED, SUPERVISED AND CERTIFIED BY A COMPETENT PERSON OR PROFESSIONAL ENGINEER AS DEFINED IN THE OHS ACT.
- THE WORKS WILL BE INSPECTED FROM TIME TO TIME BY THE CONSULTING ENGINEER TO ASCERTAIN THAT THE CONTRACTOR IS CARRYING OUT THE WORK IN GENERAL CONFORMITY WITH THE ENGINEERING DRAWINGS AND DOCUMENTS.

SUCH INSPECTIONS ARE NOT CARRIED OUT FOR THE BENEFIT OF THE CONTRACTOR, AND DO NOT RELIEVE HIM OF THE RESPONSIBILITY FOR THE PROPER CONSTRUCTION OF THE WORKS IN ACCORDANCE WITH THE ENGINEERING DRAWINGS, DOCUMENTS & GOOD BUILDING PRACTICE.

ITEM	PIPELINE DIAMETER	NOMINAL DIAMETER	QTY	DESCRIPTION	SKETCH	PN
①	250mmØ uPVC PIPE	250 x 150 x 250	1	GMS REDUCING TEE, F.A.E.		16/25
	300mmØ STEEL PIPE	300 x 150 x 300				
	400mmØ STEEL PIPE	400 x 200 x 400				
	500mmØ STEEL PIPE	500 x 250 x 500				
②	250mmØ uPVC PIPE	250	2	GMS PIPE, F.B.E. WITH PUDDLE FLANGE, (LENGTH TBC ON SITE)		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				
③	250mmØ uPVC PIPE	250	1	WEDGE GATE VALVE, F.B.E. TO SABS 664		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				
④	250mmØ uPVC PIPE	250	1	FLANGE ADAPTOR VJ OR SIMILAR APPROVED		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				
⑤	250mmØ uPVC PIPE	250	1	GMS PIPE, F.O.E. (LENGTH TBC ON SITE)		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				
⑥	250mmØ uPVC PIPE	250	1	GMS PIPE, F.O.E. (LENGTH TBC ON SITE)		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				
⑦	250mmØ uPVC PIPE	250	1	45° GMS BEND		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				
⑧	250mmØ uPVC PIPE	250	1	GMS PIPE, F.O.E. WELDED ONTO 45° BEND (LENGTH TBC ON SITE TO DISCHARGE ABOVE GROUND)		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				
⑨	250mmØ uPVC PIPE	250	1	JET DISPENSER, SEE DETAIL		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				
⑩	250mmØ uPVC PIPE	250	2	KLAMBON FLANGE ADAPTER		16/25
	300mmØ STEEL PIPE	300				
	400mmØ STEEL PIPE	400				
	500mmØ STEEL PIPE	500				



ABBREVIATION KEY

ABRV.	DESCRIPTION	SKETCH
F.O.E.	FLANGED ONE END	
F.B.E.	FLANGED BOTH ENDS	
F.A.E.	FLANGED ALL ENDS	

WATER NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 SERIES AND THE PROJECT SPECIFICATIONS.
- ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT INFORMATION PRIOR TO CONSTRUCTION.
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FOR TENDER

DATE :

SIGNED BY :
CONSULTING ENGINEER

C	29-10-24	FOR TENDER	AG	SD
B	02-09-24	FOR TENDER	AG	SD
A	28-03-24	FOR TENDER	AG	SD
REV	DATE	DESCRIPTION	BY	CHK

DRG. NO. REFERENCE DRAWINGS

CLIENT LOGO

CITY OF CHOICE
PIETERMARITZBURG
MSUNDUZI

CLIENT NAME

**MSUNDUZI
MUNICIPALITY**

PROJECT TITLE

**COPESVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750kL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30**

DRAWING TITLE

**SCOUR VALVE
CHAMBER**

	RESPONSIBLE PERSON	DATE
DESIGNED	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
DRAWN	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
SCALES	AS SHOWN	SHEET SIZE A1
DRAWING NO.		REVISION
PRJ130A-CW302		C

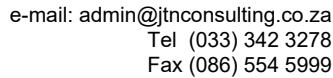


- SUCH INSPECTIONS ARE NOT CARRIED OUT FOR THE BENEFIT OF THE CONTRACTOR, AND DO NOT RELIEVE HIM OF THE RESPONSIBILITY FOR THE PROPER CONSTRUCTION OF THE WORKS IN ACCORDANCE WITH THE ENGINEERING DRAWINGS, DOCUMENTS & GOOD BUILDING PRACTICE.

ABBREVIATION KEY

ABRV.	DESCRIPTION	SKETCH
F.O.E.	FLANGED ONE END	
F.B.E.	FLANGED BOTH ENDS	
F.A.E.	FLANGED ALL ENDS.	

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8. ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.



CONSULTING ENGINEER

DRG. NO.	REFERENCE DRAWINGS
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CITY OF CHOICE

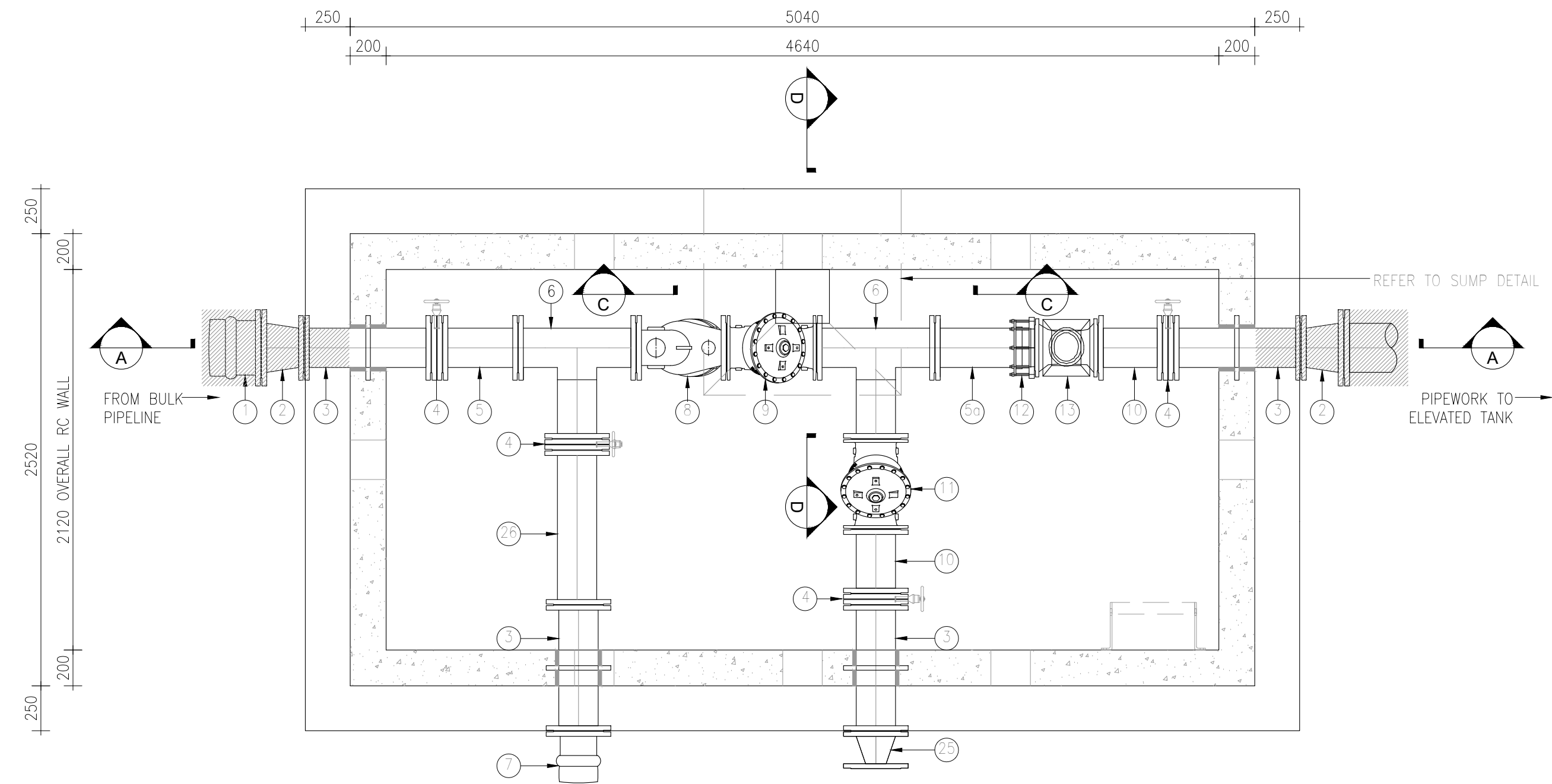
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MSUNDUZI**

MSUNDUZI
MUNICIPALITY

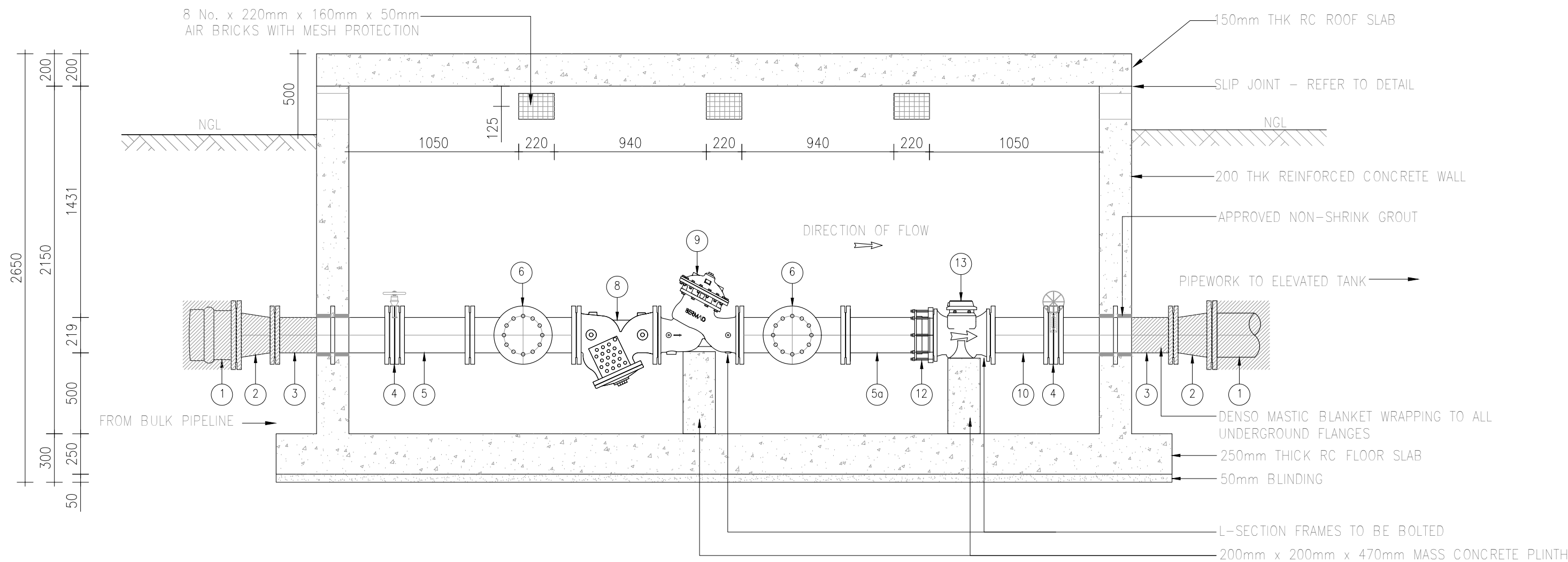
COPESVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750KL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30

ISOLATING VALVE CHAMBER

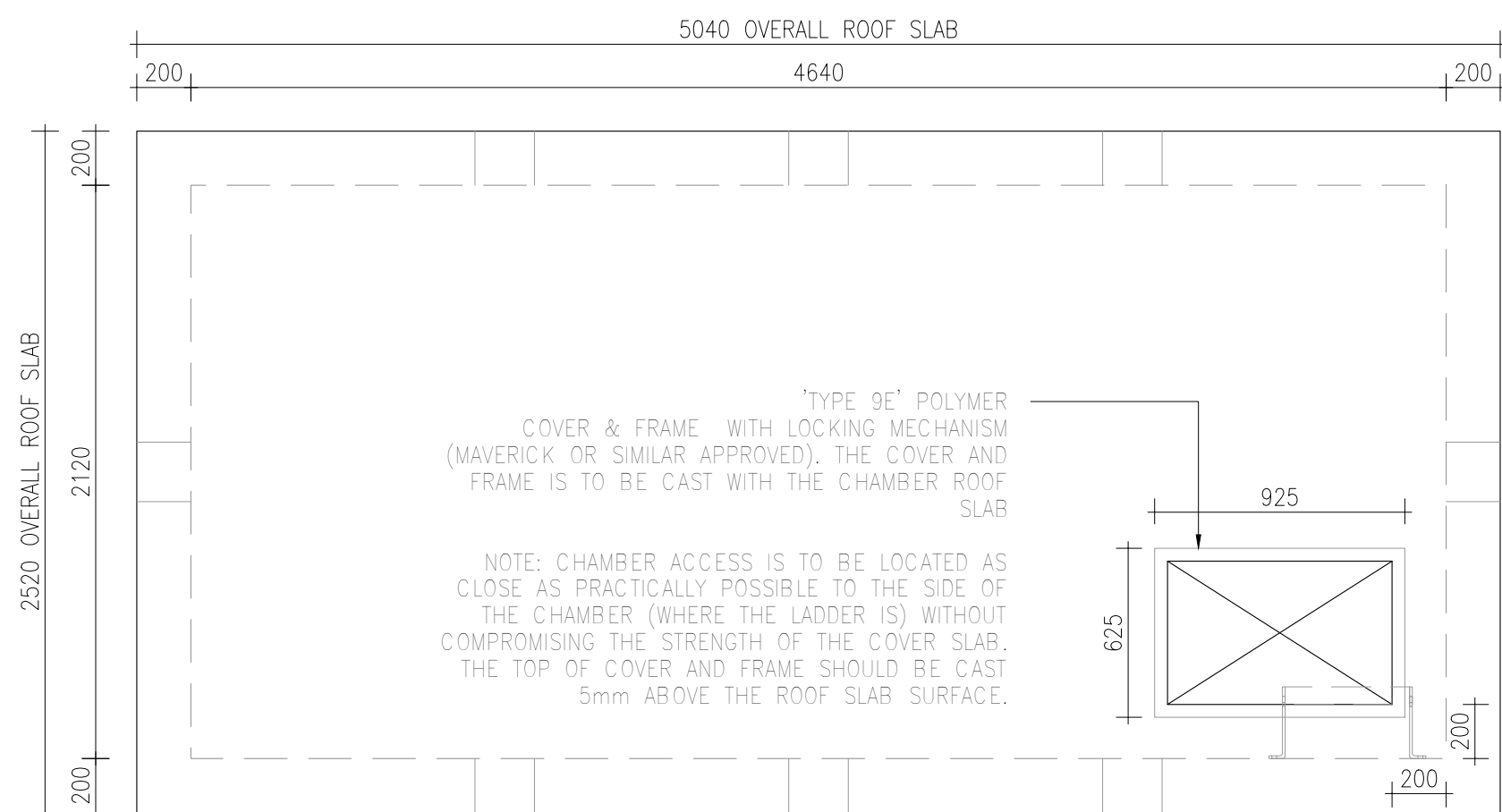
	RESPONSIBLE PERSON		DATE
DESIGNED	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
DRAWN	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
SCALES	AS SHOWN	SHEET SIZE	A1
DRAWING NO.			REVISION
PRJ130A-CW303			C



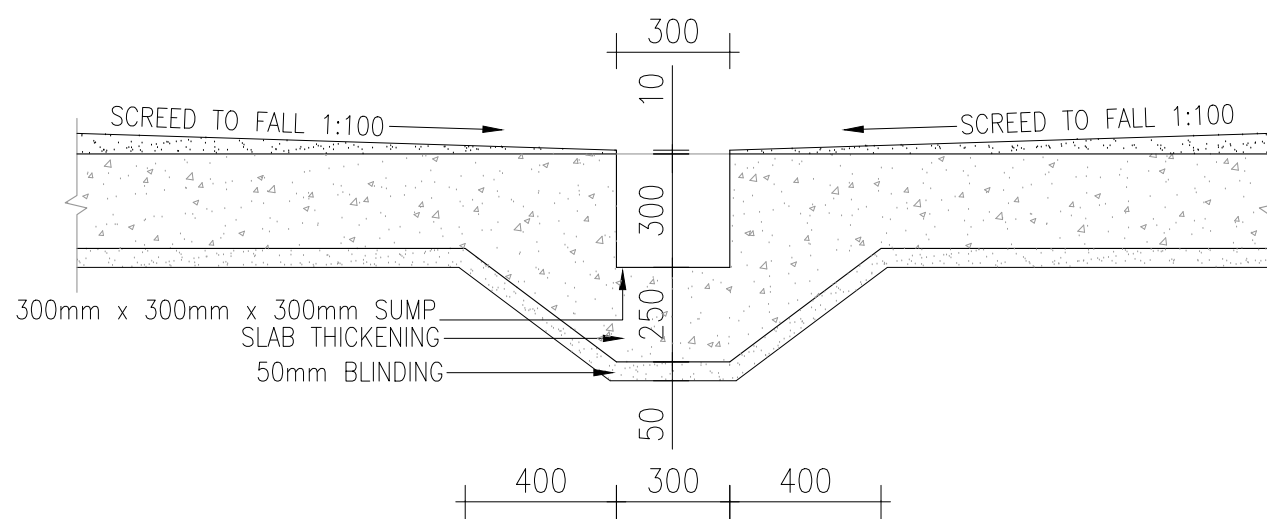
PLAN OF INLET CHAMBER
SCALE: 1:25



SECTION A-A
SCALE: 1:20



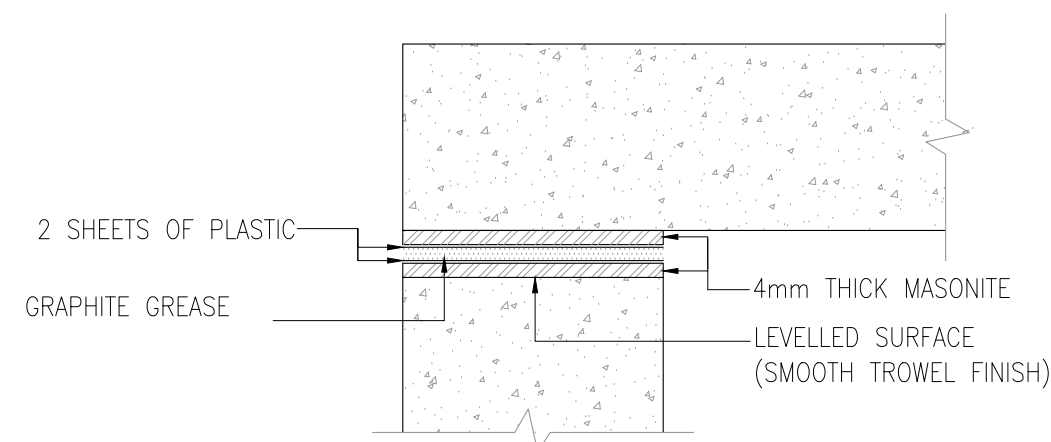
ROOF SLAB
SCALE: 1:20



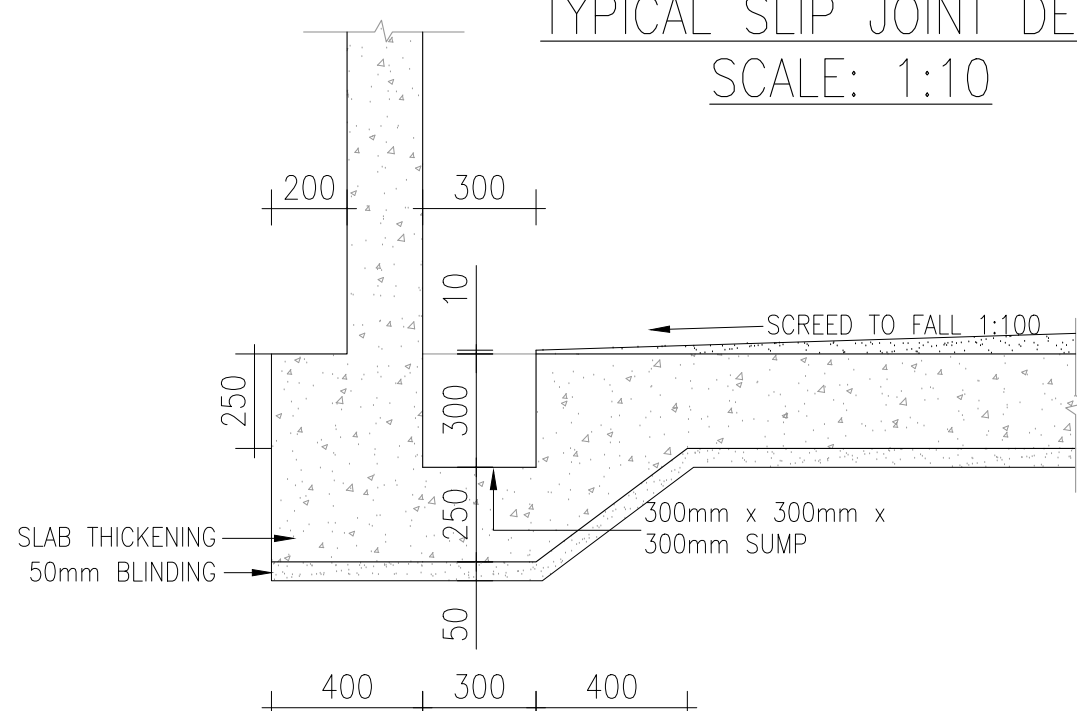
SECTION C-C
SCALE: 1:20

ITEM	NOMINAL DIAMETER	QTY	DESCRIPTION	SKETCH	PN
①	250	1	CI FLANGE ADAPTOR		16
②	250 x 200	2	GMS FLANGED REDUCER		16
③	200	4	GMS PUDDLE PIPE, F.B.E. WITH PUDDLE FLANGE		16
④	200	4	FLANGED BUTTERFLY VALVE, ARMI OR SIMILAR APPROVED		16
⑤	200	1	GMS PIPE, F.O.E		16
⑥	200	1	GMS PIPE, F.O.E		16
⑦	200	2	F.B.E EQUAL TEE WITH EXTENDED LENGTH		16
⑧	200	1	CI FLANGE ADAPTOR		16
⑨	200	1	FLANGED STRAINER BERMAD OR SIMILAR APPROVED		16
⑩	200	1	FLANGED FLOW CONTROL VALVE BERMAD OR SIMILAR APPROVED		16
⑪	200	2	GMS PIPE, 328mm LONG, F.B.E		16
⑫	200	1	FLANGED PRESSURE RELEASE VALVE BERMAD OR SIMILAR APPROVED		16
⑬	200	1	FLANGED WATER METER SENSUS OR SIMILAR APPROVED		16
⑭	200 x 100	1	GMS FLANGED REDUCER		16
⑮	200	1	GMS PIPE, 900mm LONG, F.O.E		16

ABRV.	DESCRIPTION	SKETCH
F.O.E.	FLANGED ONE END	
F.B.E.	FLANGED BOTH ENDS	
F.A.E.	FLANGED ALL ENDS	



TYPICAL SLIP JOINT DETAIL
SCALE: 1:10



SECTION D-D
SCALE: 1:20

CONCRETE NOTES

- ALL WORK IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200.
- ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- FOUNDATION EXCAVATIONS TO BE APPROVED BY THE STRUCTURAL / GEOTECHNICAL ENGINEER.
- REINFORCING TO BE CHECKED BY THE ENGINEER. 48 HOURS NOTICE REQUIRED.
- POSITION OF CONSTRUCTION JOINTS TO BE APPROVED BY THE ENGINEER.
- CONCRETE STRENGTHS @ 28 DAYS:
BLINDING : 15 MPa
MASS CONCRETE : 25 MPa
BASES : 25 MPa
SLABS : 25 MPa
WALLS : 25 MPa
- COVER TO STEEL REINFORCING:
SLABS : 25mm
WALLS : 30mm
BASES : 50mm
UPSTANDS : 25mm
- STRIPPING OF FORMWORK:
SLABS : 10 DAYS
CUBE RESULTS TO BE APPROVED PRIOR TO STRIPPING OF FORMWORK.
- ALL SHARP EXPOSED EDGES TO BE CHAMFERED 20 x 20mm.

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE NATIONAL BUILDING REGULATIONS, ENVIRONMENTAL AND OCCUPATIONAL HEALTH AND SAFETY ACT, (LATEST REVISION) AND THE CONSTRUCTION REGULATIONS.
- THE MAIN CONTRACTOR IS TO ENSURE THAT A COMPETENT PERSON, APPROVED BY THE SOUTH AFRICAN QUALIFICATION AUTHORITY SUPERVISES AND APPROVES ALL ASPECTS OF THE REQUIREMENTS OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, LATEST REVISION.
- ALL TEMPORARY WORKS TO BE DESIGNED, DETAILED, SUPERVISED AND CERTIFIED BY A COMPETENT PERSON OR PROFESSIONAL ENGINEER AS DEFINED IN THE OHS ACT.
- THE WORKS WILL BE INSPECTED FROM TIME TO TIME BY THE CONSULTING ENGINEER TO ASCERTAIN THAT THE CONTRACTOR IS CARRYING OUT THE WORK IN GENERAL CONFORMITY WITH THE ENGINEERING DRAWINGS AND DOCUMENTS.

SUCH INSPECTIONS ARE NOT CARRIED OUT FOR THE BENEFIT OF THE CONTRACTOR, AND DO NOT RELIEVE HIM OF THE RESPONSIBILITY FOR THE PROPER CONSTRUCTION OF THE WORKS IN ACCORDANCE WITH THE ENGINEERING DRAWINGS, DOCUMENTS & GOOD BUILDING PRACTICE.

NOTES:

- ALL PIPE FITTINGS AND DIMENSIONS ARE TO BE CHECKED ON SITE, ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION.
- ALL PIPEWORK TO BE GMS UNLESS STATED OTHERWISE.
- ALL FLANGES SHALL BE RATED AND DRILLED TO SABS 1123.
- ALL BOLTS TO BE HOT-DIPPED GALVANISED.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS.
- ALL BURIED FITTINGS AND FLANGES ARE TO BE WRAPPED IN DENSIO MASTIC BLANKET WRAPPING.
- ALL CONCRETE IS TO BE GRADE 25/19 UNLESS STATED OTHERWISE.
- ALL FLANGE FITTINGS AND VALVES ARE TO SUIT THE CLASS SHOWN ON LONG SECTIONS.

WATER NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 SERIES AND THE PROJECT SPECIFICATIONS.
- ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT INFORMATION PRIOR TO CONSTRUCTION.
- EXISTING SERVICES TO BE PROVED PRIOR TO CONSTRUCTION.
- SURVEY AND DESIGN INFORMATION IS BASED ON THE WGS 84 CO-ORDINATE SYSTEM.
- FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT.
- MINIMUM PIPE COVER TO BE 1000mm.
- ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.



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Reg No. 2013/0385407

e-mail: admin@jtnconsulting.co.za
Tel (033) 342 3278
Fax (086) 554 5999

FOR TENDER

DATE : _____

SIGNED BY : _____

CONSULTING ENGINEER

C	29-10-24	FOR TENDER	AG	SD
B	02-09-24	FOR TENDER	AG	SD
A	28-03-24	FOR TENDER	AG	SD
REV	DATE	DESCRIPTION	BY	CHK

DRG. NO. REFERENCE DRAWINGS

CLIENT LOGO



CLIENT NAME

MSUNDUZI
MUNICIPALITY

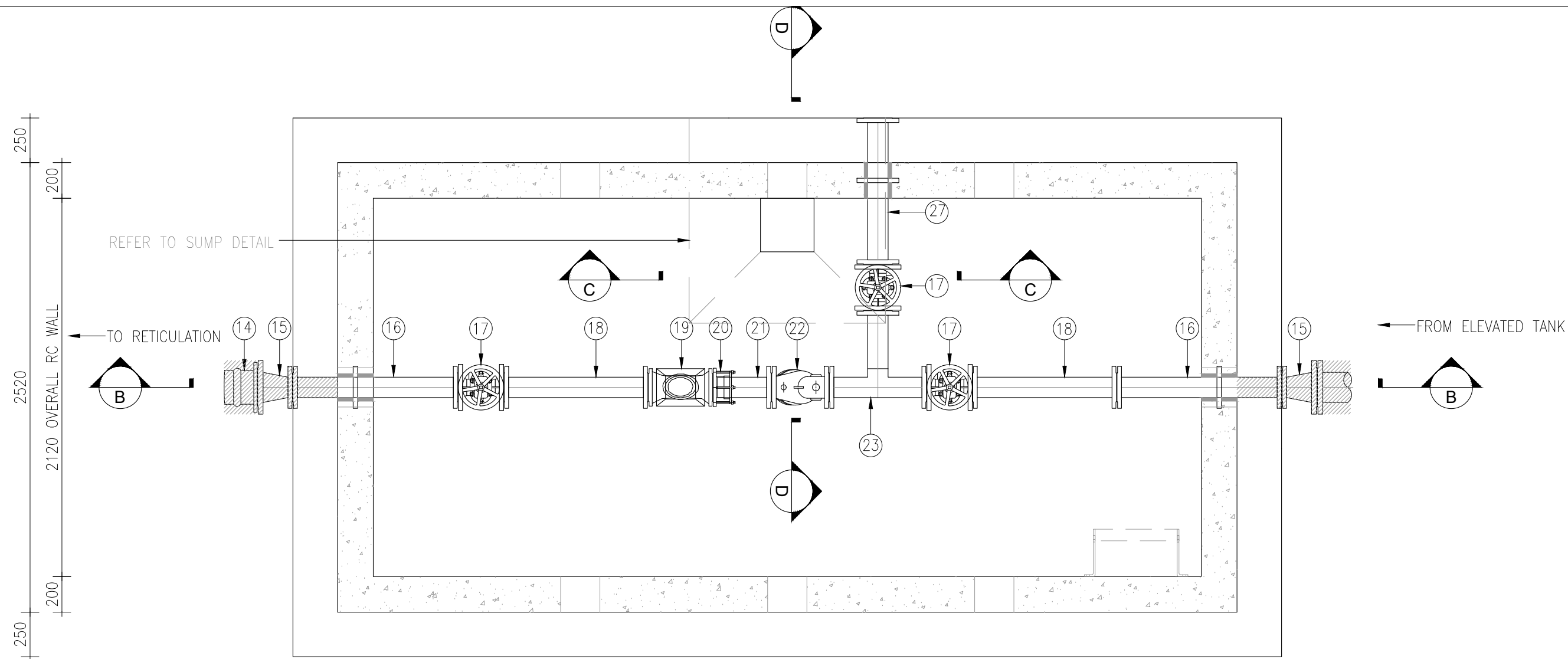
PROJECT TITLE

COPESVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750KL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30

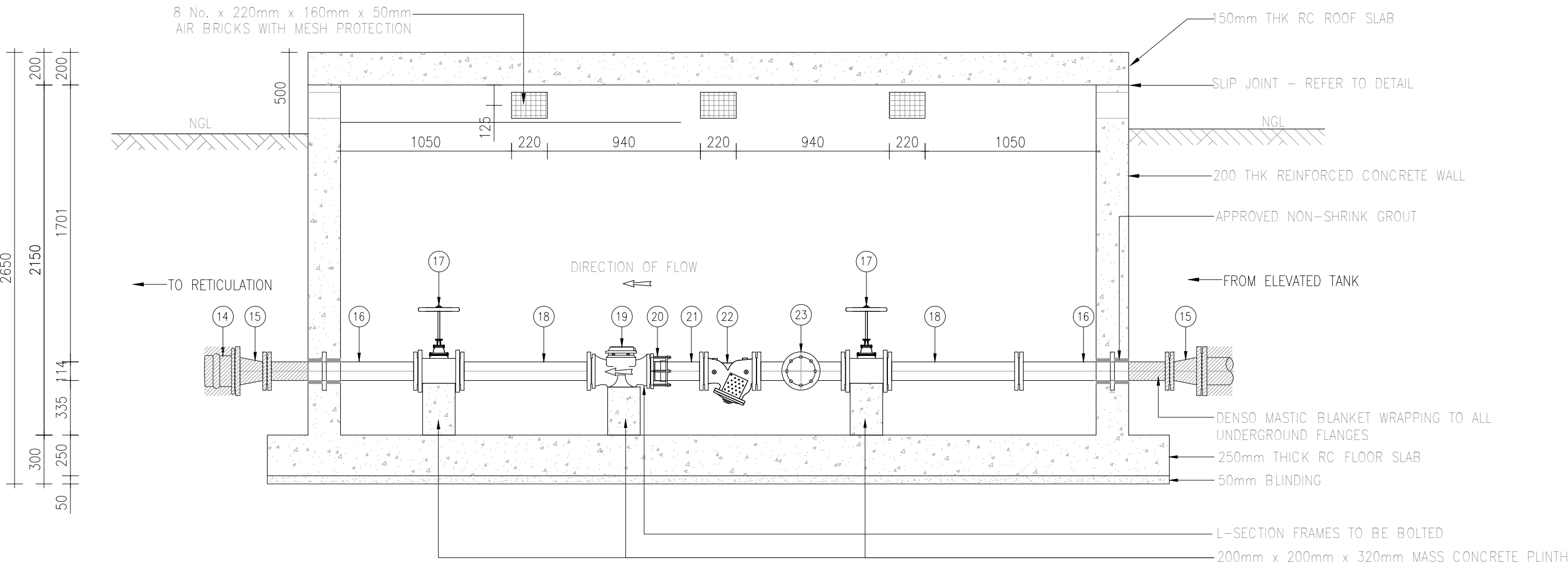
DRAWING TITLE

INLET CHAMBER
PLAN, SECTION AND DETAILS

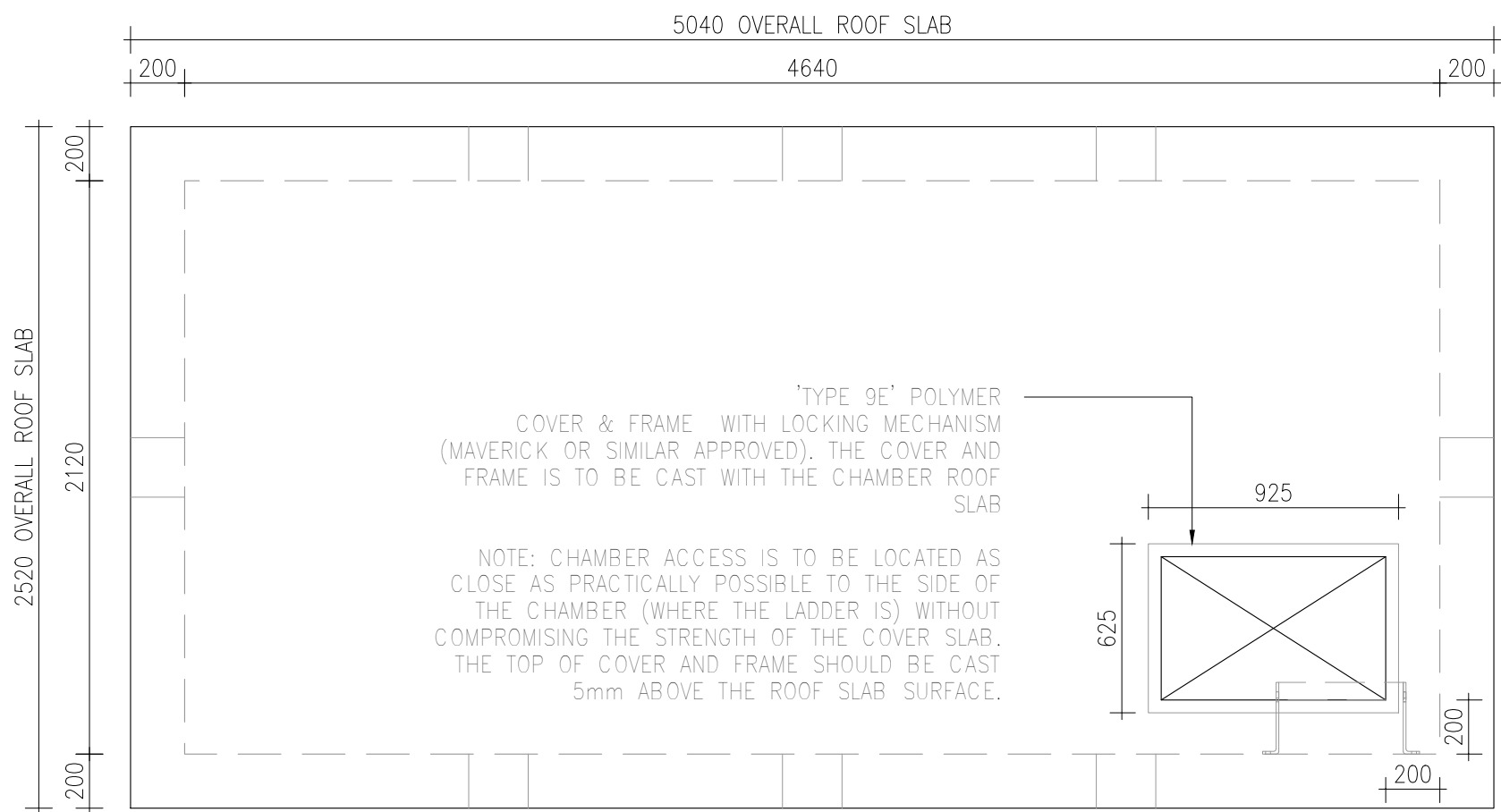
	RESPONSIBLE PERSON	DATE
DESIGNED	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
DRAWN	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
SCALES	AS SHOWN	SHEET SIZE A1
DRAWING NO.	PRJ130A-CW304	REVISION C



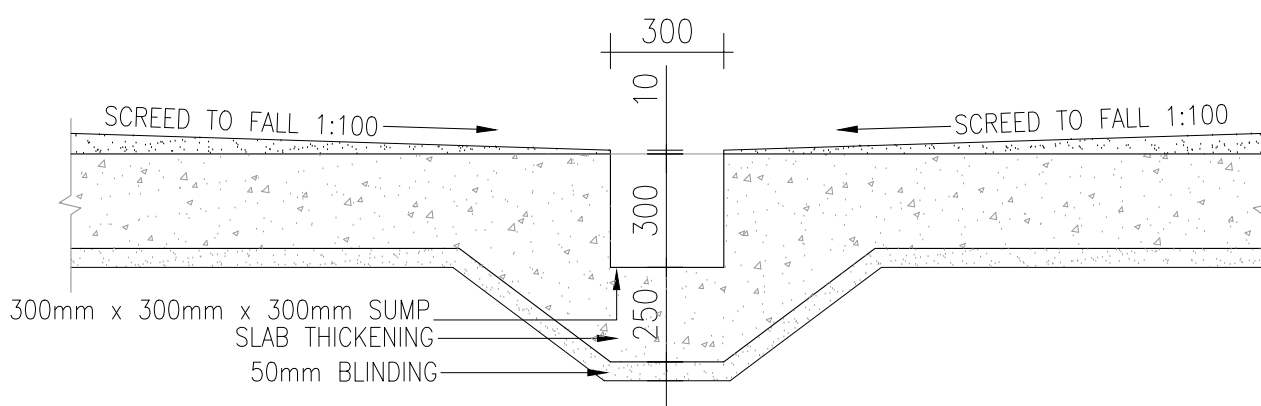
PLAN OF OUTLET CHAMBER
SCALE: 1:25



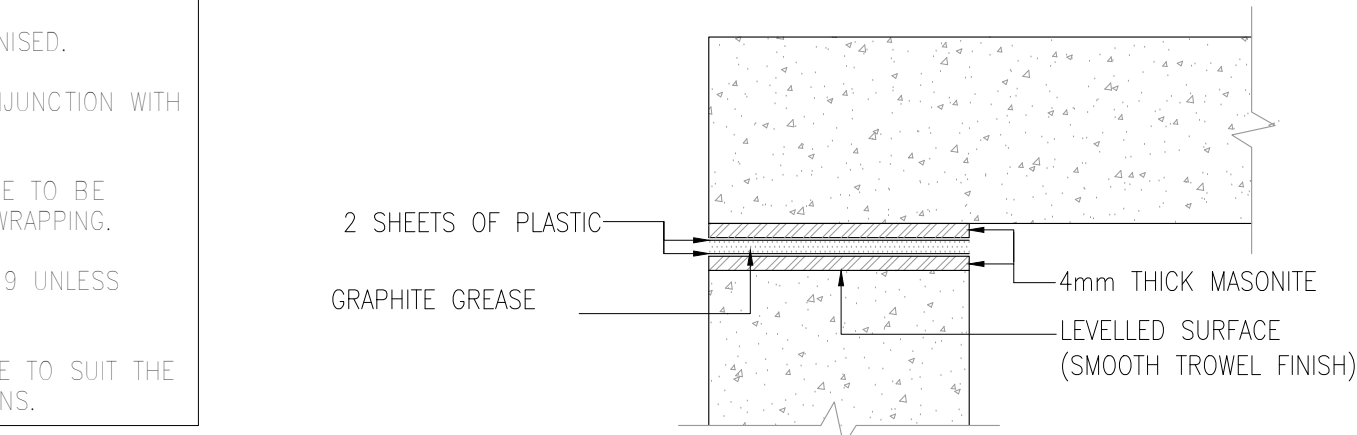
SECTION B-B
SCALE: 1:20



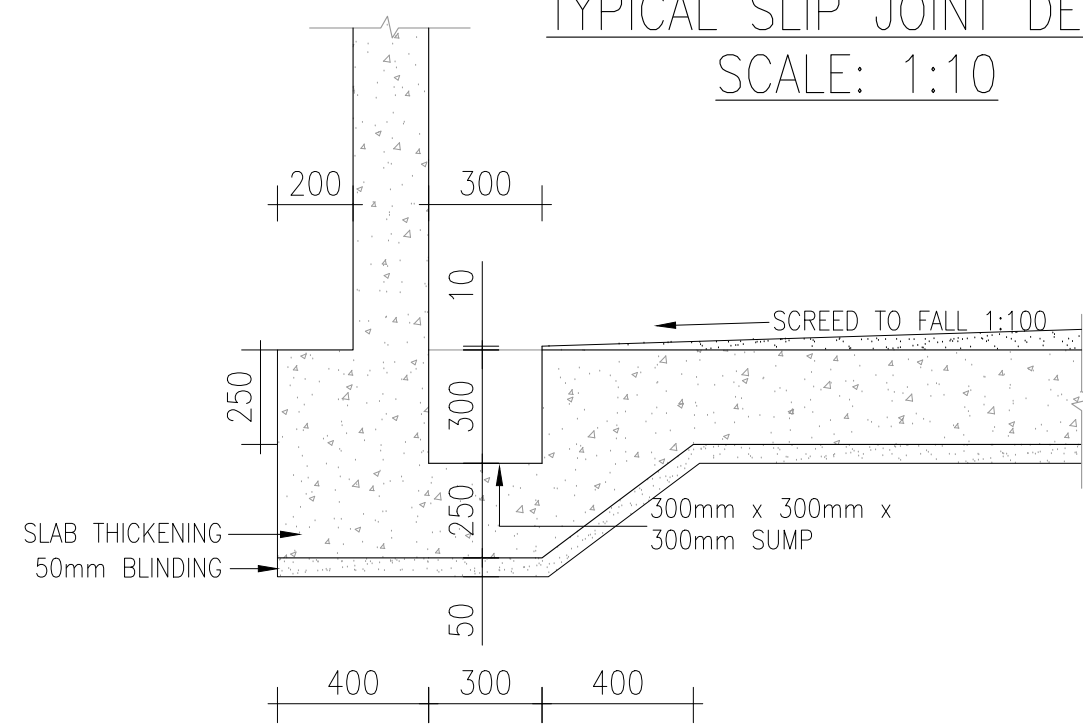
ROOF SLAB
SCALE: 1:20



SECTION C-C
SCALE: 1:20



TYPICAL SLIP JOINT DETAIL
SCALE: 1:10



SECTION D-D
SCALE: 1:20

CONCRETE NOTES

- ALL WORK IN ACCORDANCE WITH THE RELEVANT SECTIONS OF SANS 1200.
- ALL DIMENSIONS AND LEVELS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- FOUNDATION EXCAVATIONS TO BE APPROVED BY THE STRUCTURAL / GEOTECHNICAL ENGINEER.
- REINFORCING TO BE CHECKED BY THE ENGINEER. 48 HOURS NOTICE REQUIRED
- POSITION OF CONSTRUCTION JOINTS TO BE APPROVED BY THE ENGINEER.
- CONCRETE STRENGTHS @ 28 DAYS:
BLINDING : 15 MPa
MASS CONCRETE : 25 MPa
BASES : 25 MPa
SLABS : 25 MPa
WALLS : 25 MPa
- COVER TO STEEL REINFORCING:
SLABS : 25mm
WALLS : 30mm
BASES : 50mm
UPSTANDS : 25mm
- STRIPPING OF FORMWORK:
SLAB'S : 10 DAYS
CUBE RESULTS TO BE APPROVED PRIOR TO STRIPPING OF FORMWORK.
- ALL SHARP EXPOSED EDGES TO BE CHAMFERED 20 x 20mm.

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NOTES:

- ALL PIPE FITTINGS AND DIMENSIONS ARE TO BE CHECKED ON SITE, ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER PRIOR TO FABRICATION.
- ALL PIPEWORK TO BE GWS UNLESS STATED OTHERWISE.
- ALL FLANGES SHALL BE RATED AND DRILLED TO SABS 1123.
- ALL BOLTS TO BE HOT-DIPPED GALVANISED.
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT DRAWINGS.
- ALL BURIED FITTINGS AND FLANGES ARE TO BE WRAPPED IN DENSIO MASTIC BLANKET WRAPPING.
- ALL CONCRETE IS TO BE GRADE 25/19 UNLESS STATED OTHERWISE.
- ALL FLANGE FITTINGS AND VALVES ARE TO SUIT THE CLASS SHOWN ON LONG SECTIONS.

ITEM	NOMINAL DIAMETER	QTY	DESCRIPTION	SKETCH	PN
14	150	1	C1 FLANGE ADAPTOR		16
15	150 x 100	2	GMS FLANGED REDUCER		16
16	100	2	GMS PUDDLE PIPE, F.B.E. WITH PUDDLE FLANGE		16
17	100	3	FLANGED RSV GATE VALVE, SABS 664		16
18	100	2	GMS PIPE, F.B.E		16
19	100	1	FLANGED WATER METER SENSUS OR SIMILAR APPROVED		16
20	100	1	FLANGE ADAPTOR VJ OR SIMILAR APPROVED		16
21	100	1	GMS PIPE, 300mm LONG, F.O.E		16
22	100	1	FLANGED STRAINER BERMAID OR SIMILAR APPROVED		16
23	100	1	F.A.E EQUAL TEE WITH EXTENDED LENGTH		16
27	100	1	GMS PUDDLE PIPE, F.B.E. WITH PUDDLE FLANGE		16

ABRV.	DESCRIPTION	SKETCH
F.O.E.	FLANGED ONE END	
F.B.E.	FLANGED BOTH ENDS	
F.A.E.	FLANGED ALL ENDS	

WATER NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 SERIES AND THE PROJECT SPECIFICATIONS.
- ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT INFORMATION PRIOR TO CONSTRUCTION.
- EXISTING SERVICES TO BE PROVED PRIOR TO CONSTRUCTION.
- SURVEY AND DESIGN INFORMATION IS BASED ON THE WGS 84 CO-ORDINATE SYSTEM.
- FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT.
- MINIMUM PIPE COVER TO BE 1000mm.
- ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.



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Reg No. 2013/0385407

e-mail: admin@jtnconsulting.co.za
Tel (033) 342 3278
Fax (086) 554 5999

FOR TENDER

DATE : _____

SIGNED BY : _____

CONSULTING ENGINEER

REV	DATE	DESCRIPTION	BY	CHK
C	29-10-24	FOR TENDER	AG	SD
B	02-09-24	FOR TENDER	AG	SD
A	28-03-24	FOR TENDER	AG	SD

DRG. NO. REFERENCE DRAWINGS

CLIENT LOGO



CLIENT NAME

MSUNDUZI
MUNICIPALITY

PROJECT TITLE

COPESVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750kL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30

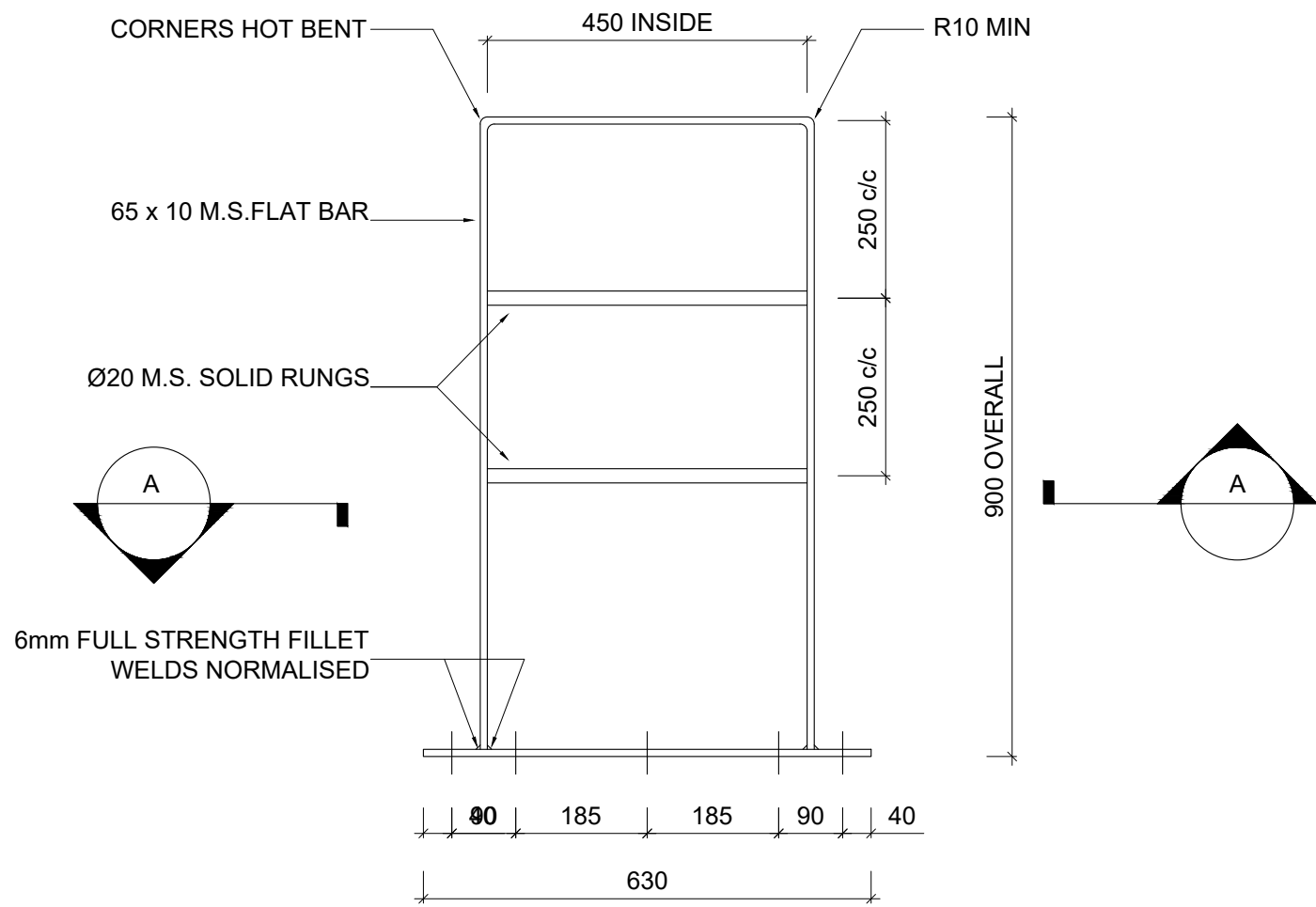
DRAWING TITLE

OUTLET CHAMBER
PLAN, SECTION AND DETAILS

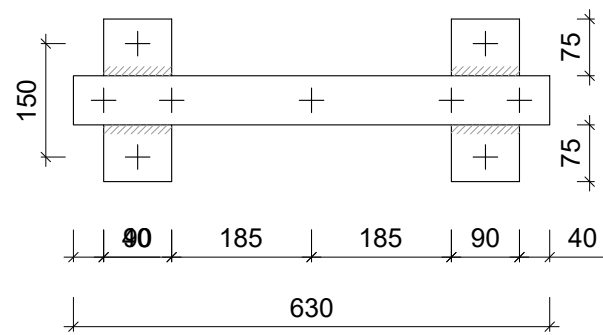
	RESPONSIBLE PERSON	DATE
DESIGNED	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
DRAWN	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
SCALES	AS SHOWN	SHEET SIZE A1
DRAWING NO.	PRJ130A-CW304a	REVISION C

SCALE 1:20

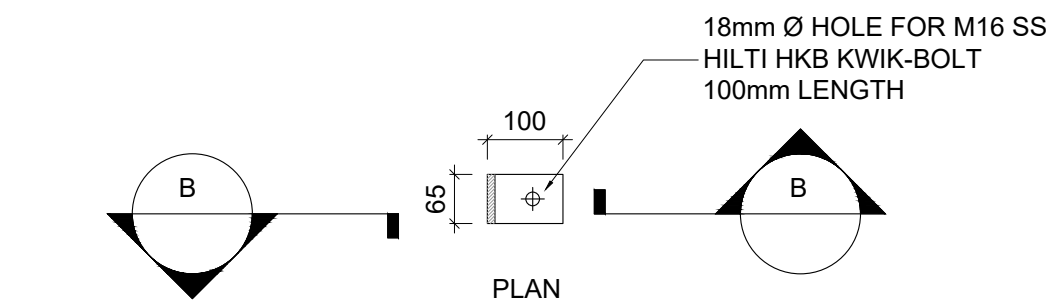
TABLE 11									
QUANT REQD	DIM	A	B	C	D	E	F	G	DRAWING NUMBER & DESCRIPTION
3	mm	2900	2520	380	250	825	825	1100	PRJ130-CW303 - BULK METER CHAMBER
1	mm	2900	2520	380	250	825	825	1100	PRJ130-CW304 - RUPAR INLET & OUTLET CHAMBER



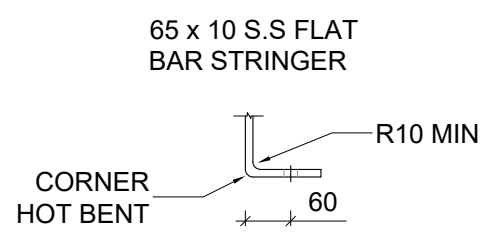
SCALE 1:10



SCALE 1:10



SCALE 1:10



SCALE 1:10

2. 240 GRIT FRO 304.

1. WELDING PROCEDURES SHALL BE ONLY THOSE RECOMMENDED BY THE STAINLESS STEEL MANUFACTURER OR BY THE SOUTH AFRICAN INSTITUTE OF WELDING. ONLY WELDERS CODED TO ASME IX, 1995 SHALL BE EMPLOYED

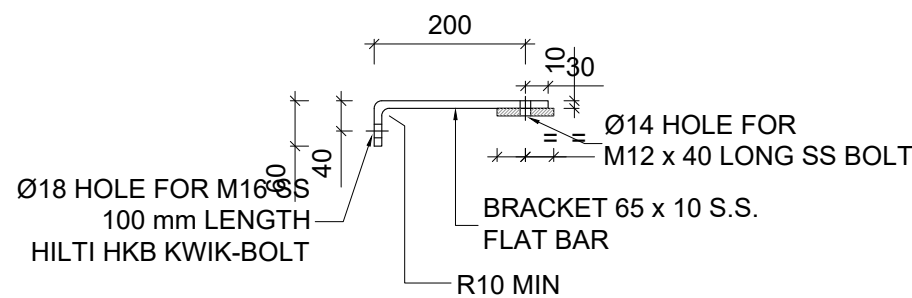
- ## PICKLING AND PASSIVATION

- NB: ALL STEEL WORK SHALL BE IN ACCORDANCE WITH
SANS 10160. 'THE STRUCTURAL USE OF STEEL'
ALL STAINLESS STEEL TO BE GRADE 304.

THIS DRAWING COMPLIES WITH THE GENERAL SAFETY
REGULATIONS 13A OF THE OCCUPATIONAL HEALTH AND
SAFETY ACT 85 OF 1993.

SCALE 1:10

SCALE 1:10



SCALE 1:10

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DRG. NO.	REFERENCE DRAWINGS

CLIENT LOGO



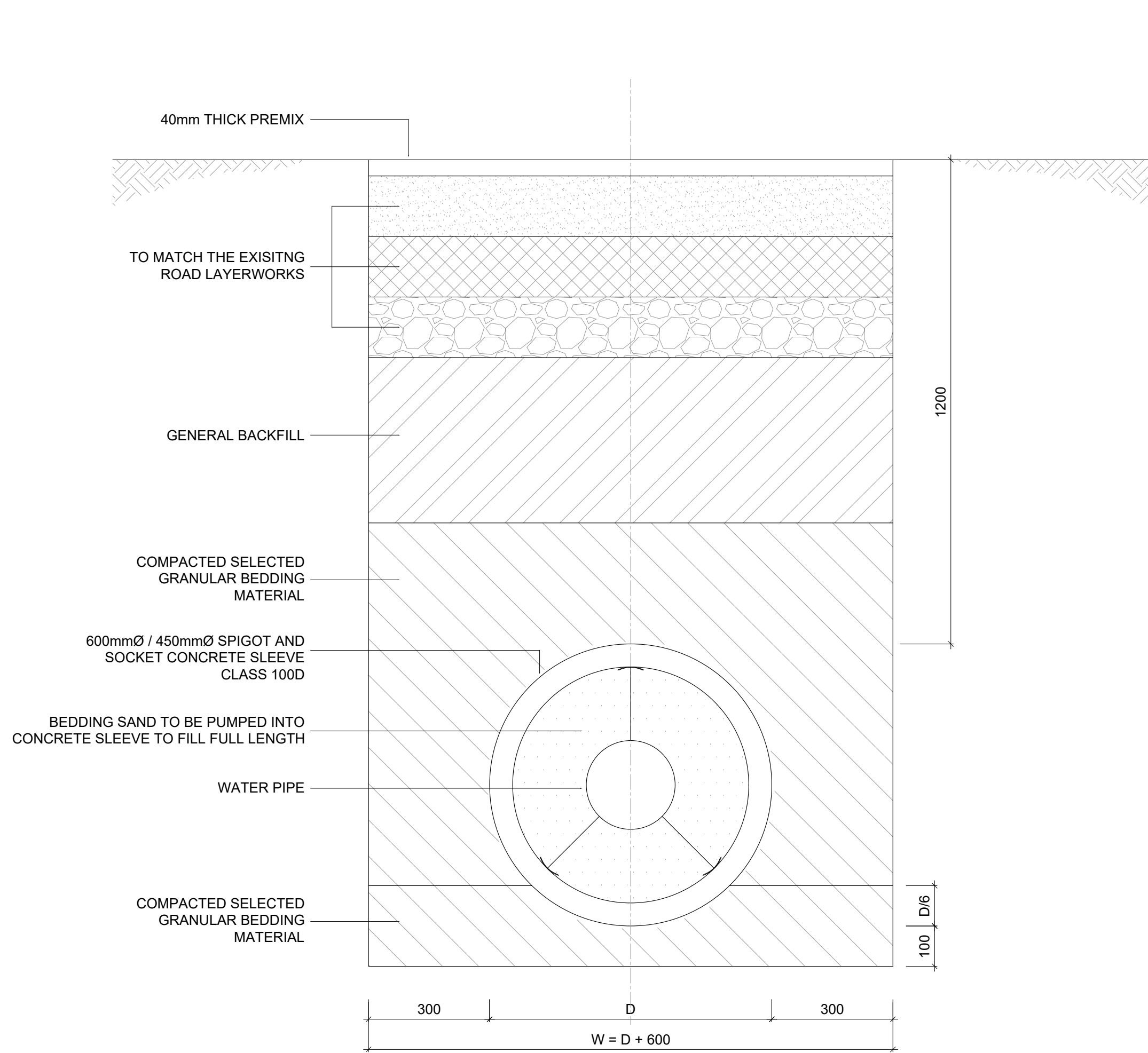
CLIENT NAME

PROJECT TITLE

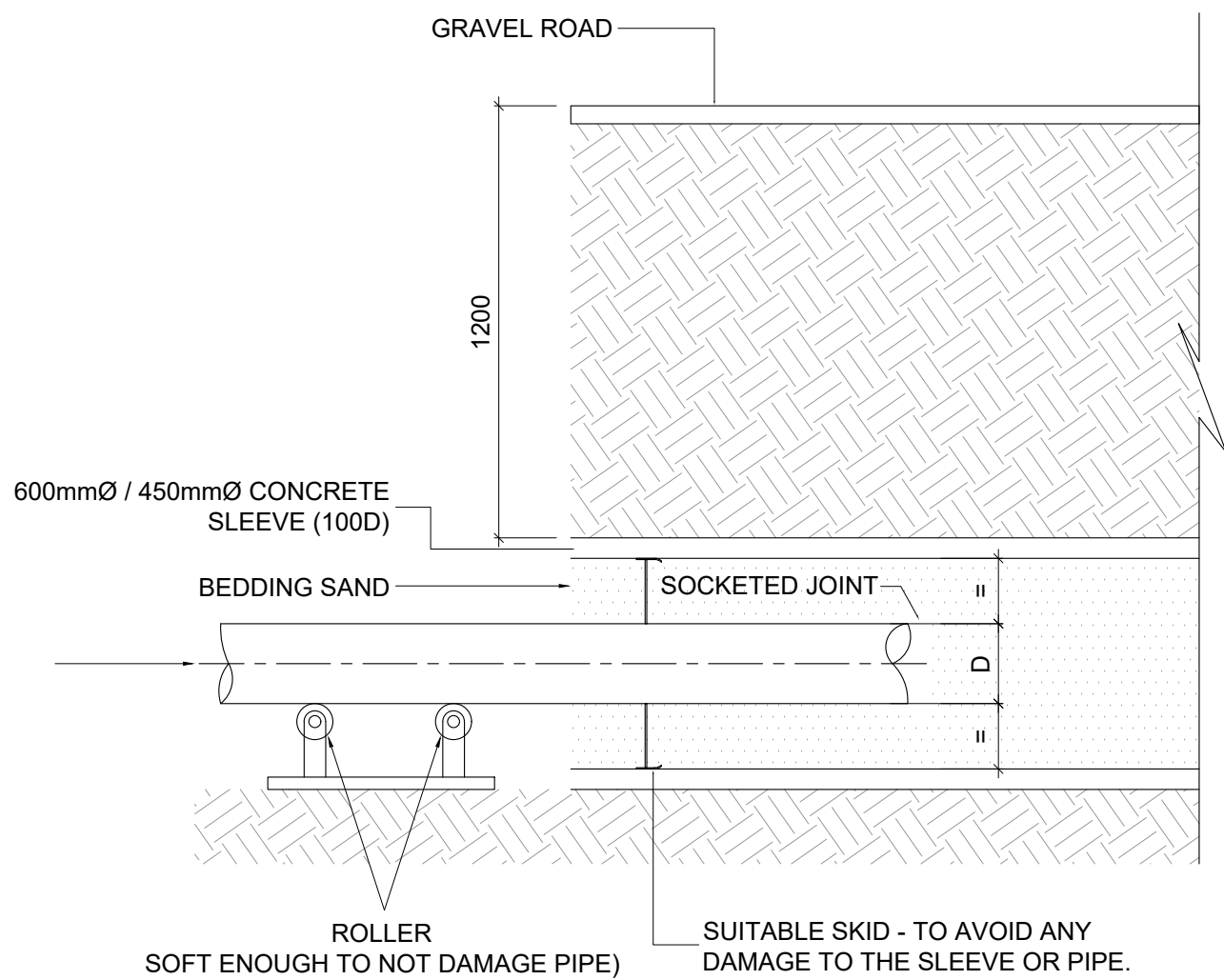
COPESVILLE WATER SCHEME
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BULK WATER PIPELINE AND 750KL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30

DRAWING TITLE

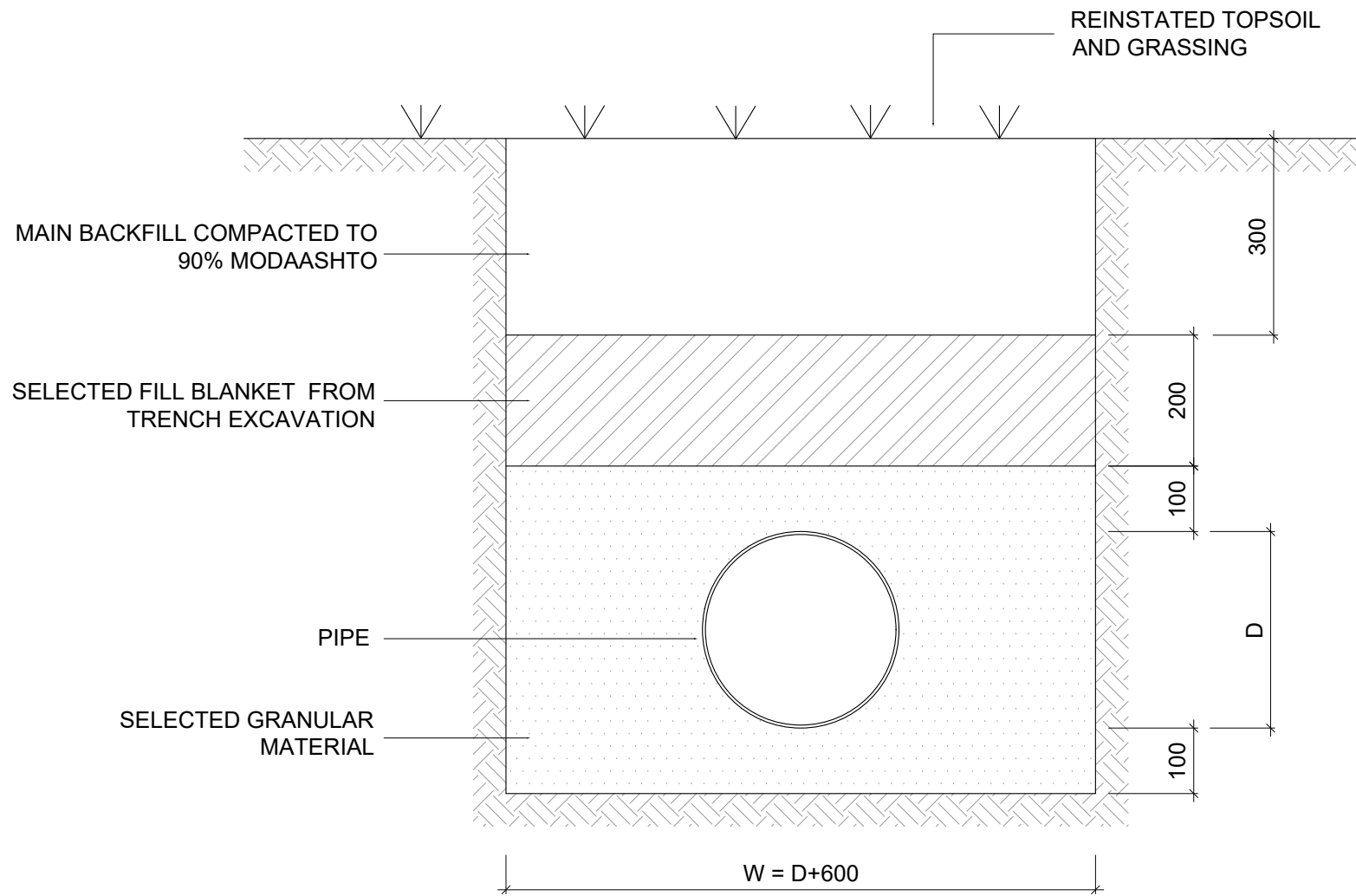
	RESPONSIBLE PERSON		DATE
DESIGNED	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
DRAWN	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
SCALES	AS SHOWN	SHEET SIZE	A1
DRAWING NO.			REVISION
PRJ130A-CW305			C



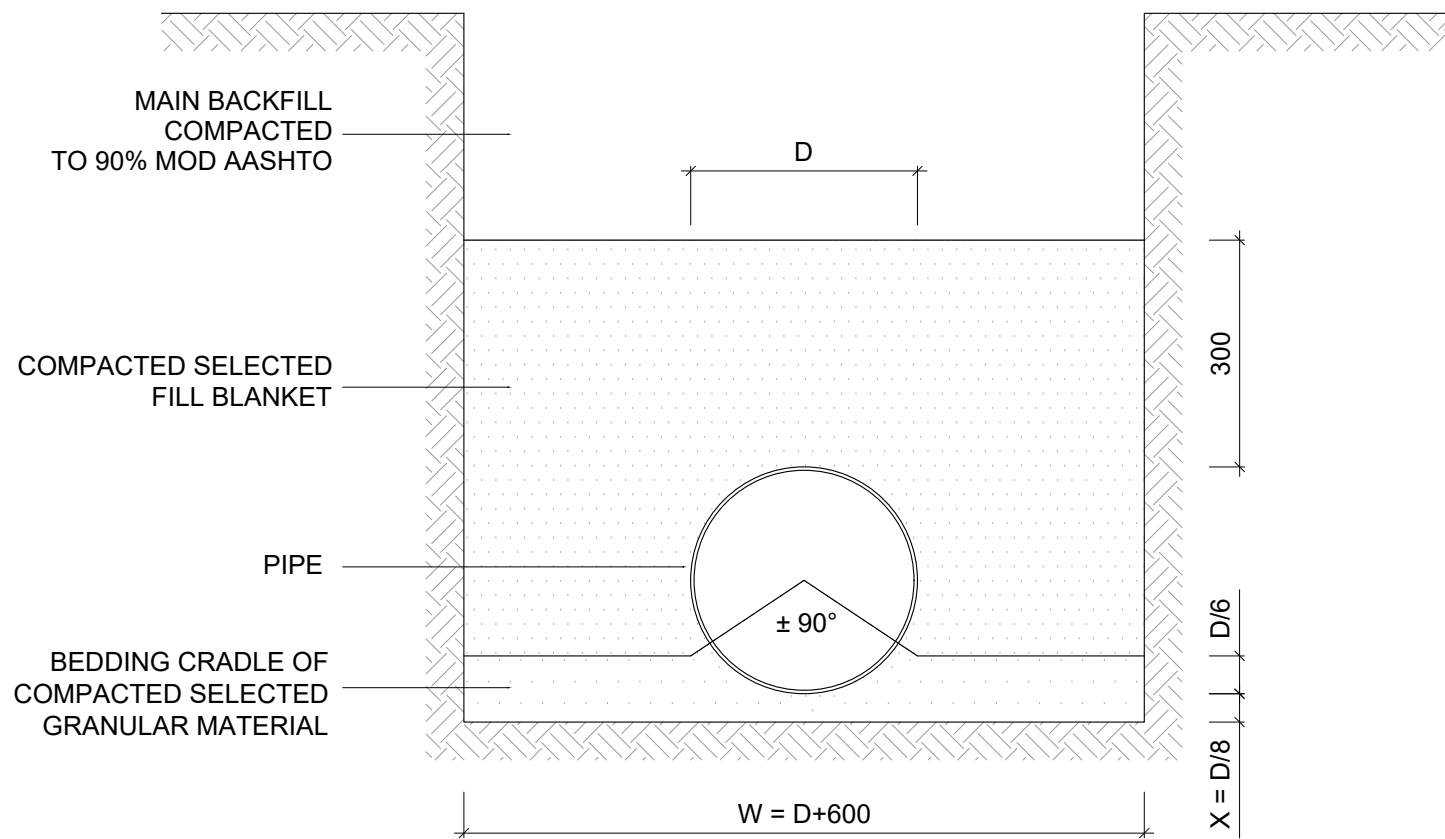
TYPICAL SECTION OF SURFACED ROAD CROSSING
SCALE 1:10



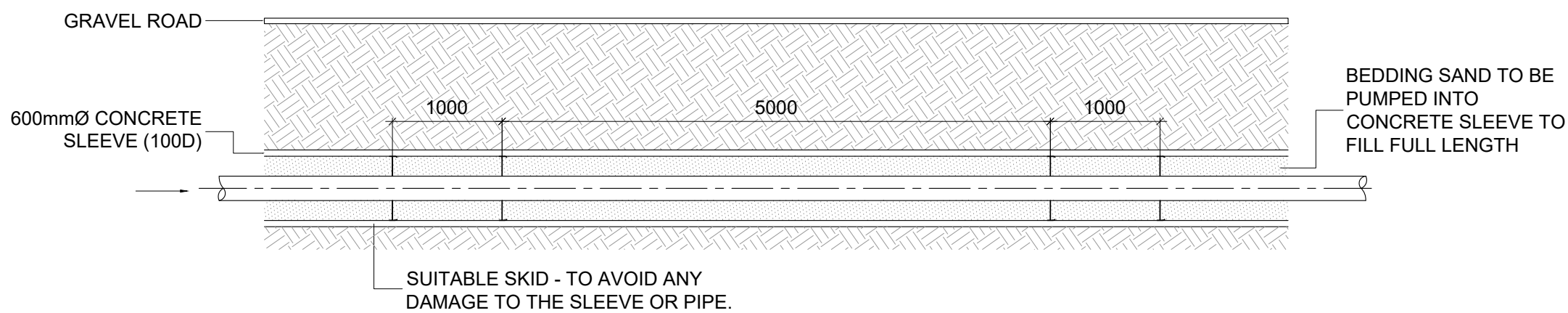
INSTALLATION STEP 1
SCALE 1:20



TYPICAL SECTION OF PIPE BEDDING DETAILS (FLEXIBLE PIPES)
SCALE 1:10



TYPICAL SECTION OF PIPE BEDDING DETAILS (RIGID PIPE CLASS C)
SCALE 1:10



COMPLETED INSTALLATION
SCALE 1:50

WATER NOTES:

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 SERIES AND THE PROJECT SPECIFICATIONS.
2. ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
3. THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT INFORMATION PRIOR TO CONSTRUCTION.
4. EXISTING SERVICES TO BE PROVED PRIOR TO CONSTRUCTION.
5. SURVEY AND DESIGN INFORMATION IS BASED ON THE WGS 84 CO-ORDINATE SYSTEM.
6. FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT.
7. MINIMUM PIPE COVER TO BE 1000mm.
8. ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.



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DATE :

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REV	DATE	DESCRIPTION	BY	CHK
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DRG. NO.	REFERENCE DRAWINGS

CLIENT LOGO



CLIENT NAME

**MSUNDUZI
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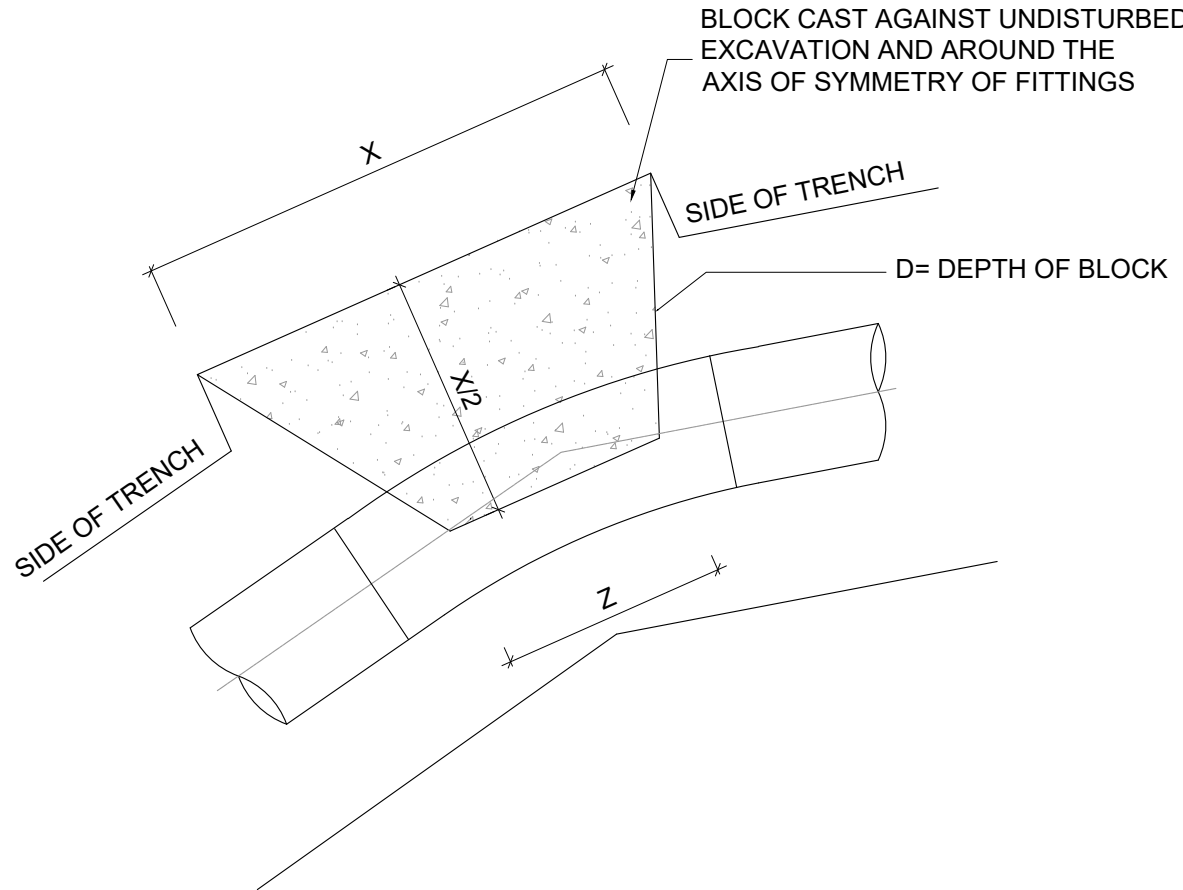
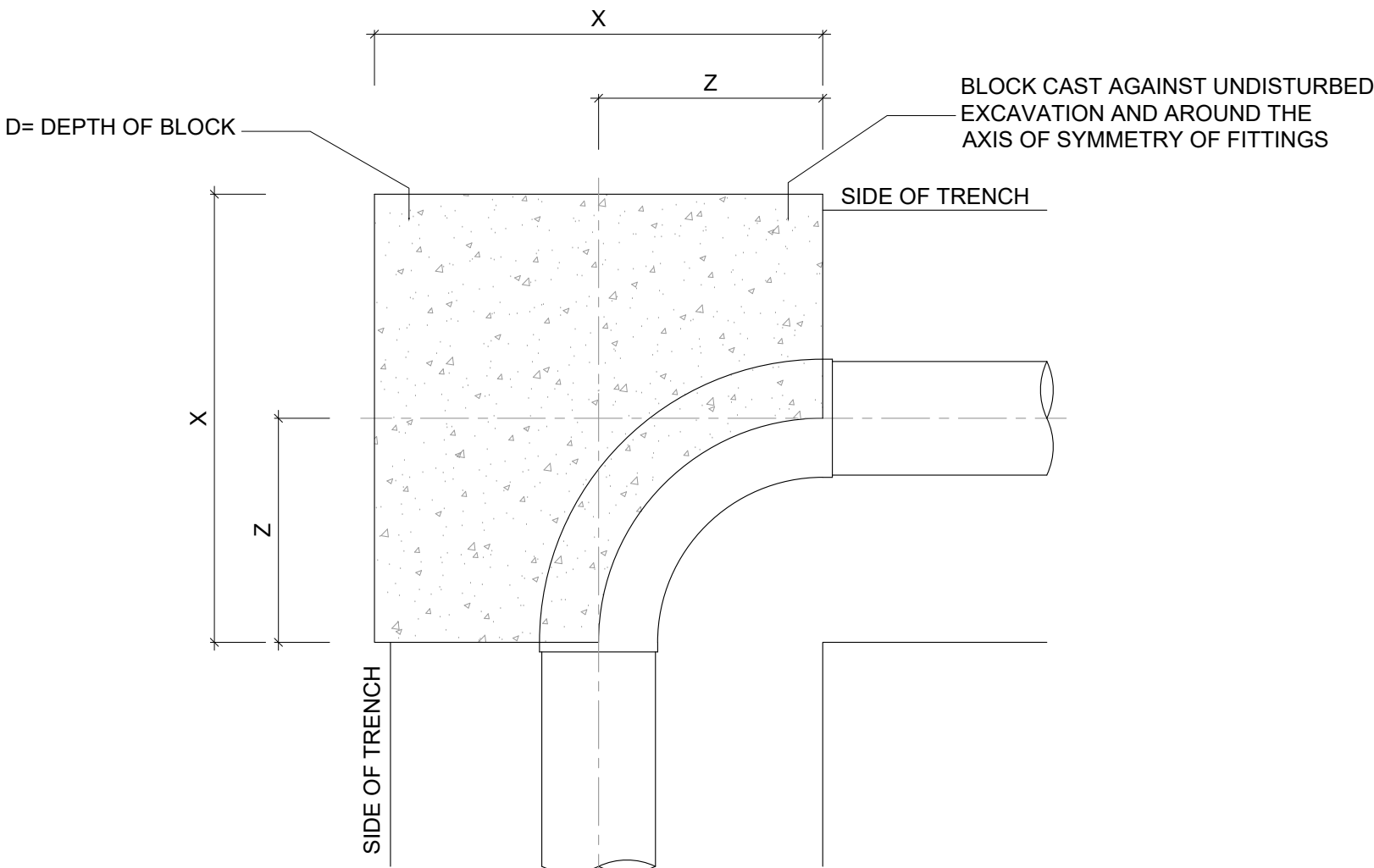
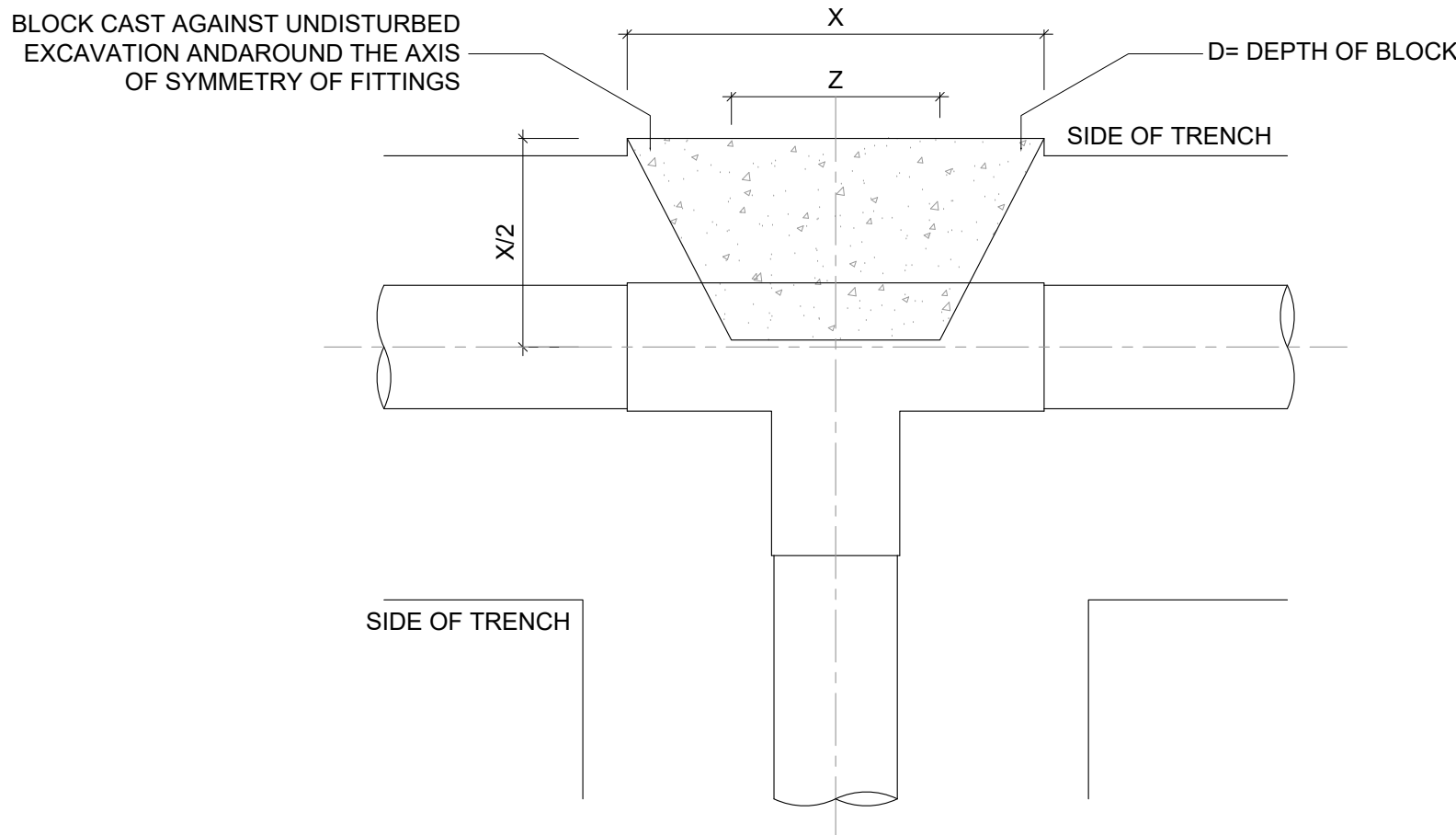
PROJECT TITLE

**COPESVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750kL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30**

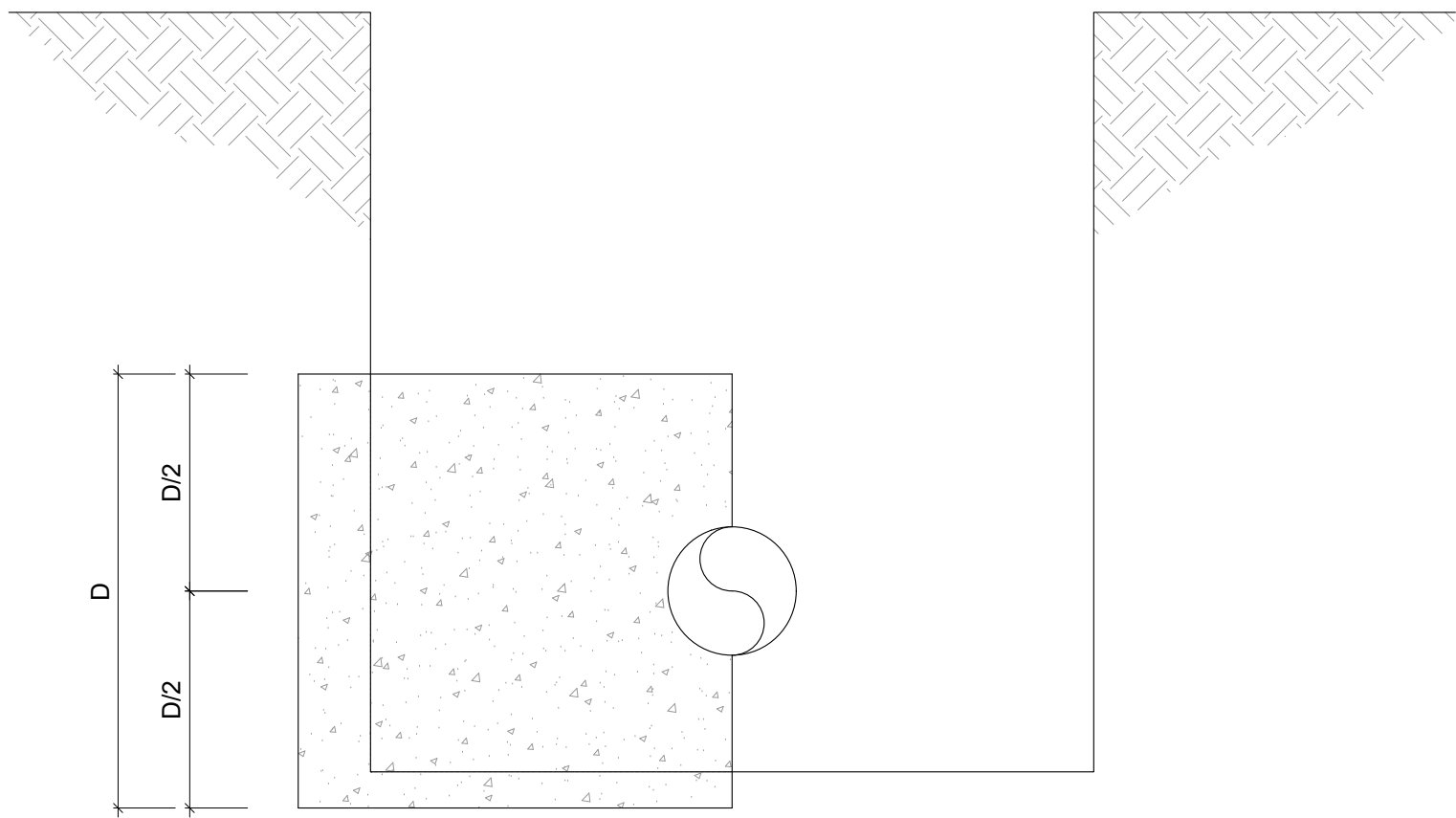
DRAWING TITLE

**TYPICAL PIPE BEDDING,
PIPE SLEEVE AND
ROAD CROSSING DETAILS**

	RESPONSIBLE PERSON	DATE
DESIGNED	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
DRAWN	A.GANASS	29-10-2024
CHECKED	S.DELOMONEY	29-10-2024
SCALES	AS SHOWN	SHEET SIZE A1
DRAWING NO.		REVISION
PRJ130A-CW306		C



11¼, 22½, AND 45° BEND



BEARING CAPACITY - ASSUMED 100 kPA (TO BE CONFIRMED BASED ON SITE CONDITIONS)																		
PIPE MATERIAL	T-JUNCTION & ISOLATING VALVE				90° BEND				11¼° BEND				22½° BEND			45° BEND		
	PIPE (mm)	X (mm)	D (mm)	Z (mm)	PIPE (mm)	X (mm)	D (mm)	Z (mm)	PIPE (mm)	X (mm)	D (mm)	Z (mm)	X (mm)	D (mm)	Z (mm)	X (mm)	D (mm)	Z (mm)
uPVC CLASS 16	250	1200	1100	800	250	1250	1000	800	250	500	500	250	800	600	400	1200	800	600
STEEL GRADE X42	300	1500	1200	900	300	1500	1200	900	300	700	500	400	900	800	450	1200	1200	600
STEEL GRADE X42	400	2100	1500	1200	400	2100	1500	1000	400	900	700	500	1300	1000	800	1600	1500	1000
STEEL GRADE X42	500	2500	2000	1500	500	2500	2000	1250	500	1100	900	750	1600	1200	800	2100	1800	1200

- NOTES
- BLOCK CAST AGAINST UNDISTURBED EXCAVATION AND AROUND THE AXIS OF SYMMETRY OF FITTINGS.
 - CONCRETE GRADE 25/19mm FOR ALL THRUST BLOCK.

WATER NOTES:

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 SERIES AND THE PROJECT SPECIFICATIONS
- ALL DIMENSIONS TO BE CHECKED ON SITE PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE REPORTED TO THE ENGINEER.
- THE CONTRACTOR IS TO CONFIRM ALL LEVELS AND SETTING OUT INFORMATION PRIOR TO CONSTRUCTION.
- EXISTING SERVICES TO BE PROVED PRIOR TO CONSTRUCTION.
- SURVEY AND DESIGN INFORMATION IS BASED ON THE WGS 84 CO-ORDINATE SYSTEM.
- FOR GEOTECHNICAL INFORMATION REFER TO GEOTECHNICAL REPORT.
- MINIMUM PIPE COVER TO BE 1000mm.
- ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.



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3201

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4241

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Tel (033) 342 3278
Fax (086) 554 5999

FOR TENDER

DATE :

SIGNED BY :
CONSULTING ENGINEER

C	29-10-24	FOR TENDER	AG	SD
B	02-09-24	FOR TENDER	AG	SD
A	28-03-24	FOR TENDER	AG	SD
REV	DATE	DESCRIPTION	BY	CHK

DRG. NO. REFERENCE DRAWINGS

CLIENT LOGO



CLIENT NAME

MSUNDUZI
MUNICIPALITY

PROJECT TITLE

COPESVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750kL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30

DRAWING TITLE

TYPICAL THRUST BLOCK

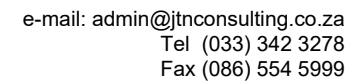
	RESPONSIBLE PERSON		DATE
DESIGNED	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
DRAWN	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
SCALES	AS SHOWN	SHEET SIZE	A1
DRAWING NO. PRJ130A-CW307			REVISION C



CONCRETE MIX : USING PC15SL AND 12mm CRUSHED STONE			
BATCHING	CEMENT PC15SL	CONCRETE SAND	CRUSHED STONE
SMALL BATCHES	1 PART	1½ PARTS	1½ PARTS
1 - POCKET BATCHES	1 POCKET	1 BARROW	1 BARROW i.e. SEE NOTE BELOW
TO BATCH 1m³	10 POCKETS	0.65 m³	0.65 m³

WATER NOTES:

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8. ALL BACKFILL TO BE COMPACTED TO 93% Mod AASHTO UNLESS OTHERWISE SPECIFIED.



DATE : _____

C	29-10-24	FOR TENDER	AG	SD
B	02-09-24	FOR TENDER	AG	SD
A	28-03-24	FOR TENDER	AG	SD

REV	DATE	DESCRIPTION	BY	CHK
-----	------	-------------	----	-----

DRG. NO.	REFERENCE DRAWINGS

CLIENT LOGO



MSUNDUZI
MUNICIPALITY

PROJECT TITLE

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BULK WATER PIPELINE AND 750kL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30

DRAWING TITLE

MARKER POST & VALVE MARKER DETAIL

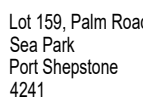
	RESPONSIBLE PERSON		DATE
DESIGNED	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
DRAWN	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
SCALES	AS SHOWN	SHEET SIZE	A1
DRAWING NO.			REVISION
PRJ130A-CW308			C



INLET PIPEWORK SCHEDULE TABLE

OUTLET PIPEWORK SCHEDULE TABLE

- ## WATER NOTES:
1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SABS 1200 SERIES AND THE PROJECT SPECIFICATIONS.
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FOR TENDER

DATE : _____

SIGNED BY : _____

C	29-10-24	FOR TENDER	AG	SD
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A	28-03-24	FOR TENDER	AG	SD
REV	DATE	DESCRIPTION	BY	CHK

DRG. NO.	REFERENCE DRAWINGS
----------	--------------------

CLIENT LOGO



CLIENT NAME

MSUNDUZI
MUNICIPALITY

PROJECT TITLE

COPESVILLE WATER SCHEME
PHASE 3C - RUPAR CRESCENT
BULK WATER PIPELINE AND 750KL
ELEVATED STEEL TANK PROJECT
WITHIN WARD 30

DRAWING TITLE

ELEVATED TANK SECTIONS AND DETAILS

	RESPONSIBLE PERSON		DATE
DESIGNED	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
DRAWN	A.GANASS		29-10-2024
CHECKED	S.DELOMONEY		29-10-2024
SCALES	AS SHOWN	SHEET SIZE	A1
DRAWING NO.			REVISION
PRJ130A-CW310			C