



BID No. :76/2021

TENDER DOCUMENT

FOR THE

HANKEY SANITATION UPGRADE (PHASE 3) CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON

**(CIVIL, STRUCTURAL,
MECHANICAL AND ELECTRICAL WORKS)**

VOLUME 1

(RETURNABLE DOCUMENT)

Name of Tenderer:

NOTE:

- The Form of Offer and Acceptance (C1.1) is on **page 88** of this document
- The Preferencing Schedule (B-BBEE Contributor Level) is on **page 69** of this document.

PREPARED FOR:

KOUGA LOCAL MUNICIPALITY
PO BOX 21
JEFFREYS BAY
6330
Tel: (042) 200 2200
Fax: (042) 200 8300

PREPARED BY:

JG AFRIKA (PTY) LTD
P.O. Box 27308
GREENACRES
6057
Tel: (041) 390 8700
Fax: (041) 363 1922

MARCH 2021

KOUGA LOCAL MUNICIPALITY

BID No.:76/2021

**HANKEY SANITATION UPGRADE (PHASE 3)
CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON**

(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)

GENERAL TENDER INFORMATION

TENDERS INVITED	:	Wednesday, 31 March 2021
ESTIMATED CIDB CONTRACTOR GRADING	:	6CE or higher
CLARIFICATION MEETING	:	A compulsory virtual clarification meeting to be held on Wednesday, 14 April 2021 at 12h00
VENUE FOR SITE VISIT/CLARIFICATION MEETING	:	Virtual on-line clarification meeting
CLOSING DATE	:	Friday, 30 April 2021
CLOSING TIME	:	12:00:00 PM / 12h00
CLOSING VENUE	:	Tender Box at the Municipal Office, Room 112 16 Woltemade Street (front) / 21 St. Croix Street (back), Jeffreys Bay, 6330
VALIDITY PERIOD OF TENDER	:	120 days
TENDER BOX	:	The Tender Documents (which includes the Form of Offer and Acceptance) completed in all respects, plus any additional supporting documentation required, must be submitted in a sealed envelope with the name and address of the tenderer, the tender No. and title and the closing date indicated on the envelope. The sealed envelope must be inserted into the appropriate official tender box before closing time. The onus remains with the tenderer to ensure that the tender is placed in the correct tender box.

KOUGA LOCAL MUNICIPALITY

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HANKEY AND CENTERTON**

(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)

PARTICULARS OF BIDDER	
------------------------------	--

Name of Bidder	
Contact Person:	
Postal Address	
Street Address	
Telephone Number	Code: Number:
Cellphone Number	
Facsimile Number	Code: Number:
E-Mail Address	
CSD Supplier Number (National Treasury)	
CIDB CRS Number	
Vat Registration Number	

KOUGA LOCAL MUNICIPALITY

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HANKEY AND CENTERTON**

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KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

**HANKEY SANITATION UPGRADE (PHASE 3)
CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON**

(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)

T1.1 Tender Notice and Invitation to Tender



BID NOTICE

**KOUGA LOCAL MUNICIPALITY (EC108)
DIRECTORATE: INFRASTRUCTURE AND ENGINEERING
NOTICE NO: 76/2021**

**HANKEY SANITATION UPGRADE (PHASE 3) CONSTRUCTION OF NEW AND UPGRADING OF EXISTING
SEWER PUMP STATIONS IN HANKEY AND CENTERTON: (CIVIL, STRUCTURAL, MECHANICAL AND
ELECTRICAL WORKS)**

Suitably qualified, capable and experienced Contractors are hereby invited to submit tenders for the Hankey Sanitation Upgrade (Phase 3) construction of new and upgrading of existing sewer pump stations in Hankey and Centerton.

Tenders

An electronic copy of the tender document will be available on E-Tender portal www.etender.gov.za or the municipal website www.kouga.gov.za as from Wednesday, 31 March 2021. After downloading the tender document from the website each prospective bidder, **MUST** email their contact details to tenders@kouga.gov.za and copied to jdutoit@kouga.gov.za.

A compulsory virtual clarification session will be arranged for those that have shown interest in bidding for this project on the **14 April 2021 @ 12h00**. A request to attend or join the virtual clarification session **MUST** be sent to tenders@kouga.gov.za and copied to jdutoit@kouga.gov.za before the **12 April 2021**. **Any RSVP or show of interest, received after the 12 April 2021 will not be considered. If you did not RSVP by sending a request to attend or join the virtual clarification meeting before the due date, your bid will not be considered. (Detail of this is in the tender document)**

Please note:

- Telegraphic, telephonic, telex, facsimile, email or late tenders will not be accepted.
- This contract will be evaluated on the 80/20 point scoring system.
- **The Guidelines for locally produced goods or locally manufactured goods with a stipulated minimum threshold will be applied (details in document).**
- **An estimated contractor CIDB Grading of 6CE or higher is required.**
- **A minimum functional assessment score of 70% will apply to this contract.**

- A valid SARS Tax compliance Status pin to be submitted.
- Prospective Service Providers must register on Kouga Municipality's Supplier database as per the registration requirements.
- The National Treasury Central Supplier Database Summary report must be submitted.
- In order to claim Preference points a valid originally or certified B-BBEE Status level Verification certificate or a Sworn Affidavit completed on the DTI format must be submitted to validate the claim.
- The Council reserves the right to accept any tender and, or part thereof, appoint more than one contractor, and does not bind itself to accept the lowest or any tender. The Council reserves the right to appoint any contractor.
- The validity period for submission must be 120 days from the closing date.
- Tenders that are deposited in the incorrect box or delivered to any other venue will not be considered.

Enquiries relating to this tender must be submitted in writing via e-mail to tenders@kouga.gov.za and copied to jdutoit@kouga.gov.za

Completed documents in a sealed envelope endorsed "**NOTICE NO: 76/2021: "HANKEY SANITATION UPGRADE (PHASE 3) CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON"**", must be placed in the Tender Box 21 St Croix Street (back entrance) or 16 Woltemade Street (front entrance), Jeffrey's Bay, Room 122 on or before **FRIDAY, 30 APRIL 2021 at 12:00.**

C. DU PLESSIS
MUNICIPAL MANAGER

P.O. Box 21
JEFFREYS BAY
6330

PART A

INVITATION TO BID

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE (NAME OF MUNICIPALITY/ MUNICIPAL ENTITY)					
BID NUMBER:	76/2021	CLOSING DATE:	30 APRIL 2021	CLOSING TIME:	12h00
DESCRIPTION	HANKEY SANITATION UPGRADE (PHASE 3): CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX ITUATED AT					
KOUGA LOCAL MUNICIPALITY, 16 Woltemade STREET, JEFFREYS BAY					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	☐ Yes ☐ No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT ☐ Yes ☐ No		
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]					
1. ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES ENCLOSE PROOF]		2. ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	☐ Yes ☐ No [IF YES, ANSWER PART B:3]	
3. TOTAL NUMBER OF ITEMS OFFERED			4. TOTAL BID PRICE	R	
5. SIGNATURE OF BIDDER			6. DATE		
7. CAPACITY UNDER WHICH THIS BID IS SIGNED					
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:			TECHNICAL INFORMATION MAY BE DIRECTED TO:		
DEPARTMENT	Supply Chain Management		CONTACT PERSON	Mr Jacques du Toit	
CONTACT PERSON			TELEPHONE NUMBER	042-200-2200	
TELEPHONE NUMBER	042-200-2200		FACSIMILE NUMBER	n/a	
FACSIMILE NUMBER			E-MAIL ADDRESS	jdutoit@kouga.gov.za	
E-MAIL ADDRESS	tenders@kouga.gov.za				

**PART B
TERMS AND CONDITIONS FOR BIDDING**

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

CAPACITY UNDER WHICH THIS BID IS SIGNED:

DATE:

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

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(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in the CIDB Standard for Uniformity in Engineering and Construction Works Contracts as published in Board Notice 423 of 2019 of 08 August 2019 (see www.cidb.org.za).

The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the Standard Conditions of Tender.

"Bid" should read "tender", and vice versa, throughout the document – implying both words have the same meaning.

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

Clause Number	Tender Data
---------------	-------------

F.1	General
F.1.1	Actions

The Employer is **KOUGA LOCAL MUNICIPALITY**.

F.1.2	Tender Documents
--------------	-------------------------

Add the following:

The following documents form part of this tender:

VOLUME 2 : The General Conditions of Contract for Construction Works (Third Edition) 2015 as published by the South African Institution of Civil Engineering. This publication is available and tenderers must obtain copies at their own cost from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, e-mail: civilinfo@saice.org.za.

VOLUME 3: The SANS Standard Specifications for Civil Engineering Construction prepared by Standards South Africa (SANS 1200). These publications are obtainable, and tenderers must obtain copies at their own cost from Standards South Africa, Private Bag X191, PRETORIA, 0001.

Volumes 2 and 3 may also be inspected, by appointment, at the offices of the Employer during normal office hours.

The Tender Documents issued by the Employer comprise:

VOLUME 1: The Tender Document (this document), in which are bound:

THE TENDER

Part T1: Tendering Procedures

T1.1 Tender Notice and Invitation to Tender

T1.2 Tender Data

Part T2: Returnable documents

T2.1 List of Returnable Documents

T2.2 Returnable Schedules

THE CONTRACT

Part C1: Agreements and Contract Data

- C1.1 Form of Offer and Acceptance
- C1.2 Contract Data
- C1.3 Form of Performance Guarantee
- C1.4 Form of Advance Payment Guarantee
- C1.5 Occupational Health and Safety Agreement
- C1.6 Protection of the Environmental Declaration
- C1.7 Insurance Broker's Warranty
- C1.8 Contract of Temporary Employment as Community Liaison Officer

Part C2: Pricing data

- C2.1 Pricing Instructions
- C2.2 Bill of Quantities

Part C3: Scope of Work

- C3.1 Description of the Works
- C3.2 Engineering
- C3.3 Procurement
- C3.4 Construction
- C3.5 Management
- C3.6 Works Specifications
- C3.7 Health and Safety Specifications
- C3.8 Environmental Management Plan
- C3.9 Contractor Conditions and Procedures Manual
- C3.10 Annexures

Part C4: Site Information

- C4.1 Site Information
- C4.2 Geotechnical Report

VOLUME 4: The following drawings issued with this tender:

Book of Drawings – to be issued in PDF Format, before the Tender Clarification Meeting, to all Tenderers who have pre-booked for the compulsory Bid Clarification Meeting.

F.1.3 Interpretation

F.1.3.2 *Delete the clause and replace with the following:*

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

F.1.4 Communication and Employer's Agent

Delete the first sentence of the clause and replace with the following:

Verbal or any other form of communication, from the Employer, its employees, agents or advisors during site visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded as binding on the Employer, unless communicated by the Employer in writing to suppliers by its Director: Supply Chain Management or his nominee.

The Employer's Agent, for the purposes of any communication between the Employer and Tenderer is:

Name	:	JG AFRIKA (Pty) Ltd
Represented By	:	Mr Viahn Parazee or any director or shareholder of the company
Address	:	Southern Life Gardens, Ground floor Block D, 70 2 nd Avenue Newton Park, 6057
Telephone	:	(041) 390 8700
Fax	:	(041) 363 1922
E-mail	:	ParazeeV@jgafrika.com

- F.1.5 Cancellation and Re-Invitation of Tenders**
Delete the full stop at the end of F.1.5.1 c) and replace with, or
Add the following after F.1.5.1 c):
d) there is a material irregularity in the tender process.
- F.1.6.2 Competitive negotiation procedure**
Add the following to F.1.6.2.1:
A competitive negotiation procedure will not be followed.
- F.1.6.3 Proposal procedure using the two-stage system**
Add the following between F.1.6.3 and F.1.6.3.1:
A two-stage system will not be followed.
- Add the following after F.1.6.3.2.2
- F.1.6.4 Objections, complaints, queries and disputes/ Appeals in terms of Section 62 of the Systems Act/ Access to court**
- F.1.6.4.1 Disputes, objections, complaints and queries**
In terms of Regulations 49 and 50 of the Local Government: Municipal Finance Management Act, 56 of 2003 – Municipal Supply Chain Management Regulations (Board Notice 868 of 2005):
a) Persons aggrieved by decisions or actions taken by the Kouga Local Municipality in the implementation of its supply chain management system, may lodge within fourteen (14) days of the decision or action, a written objection or complaint or query or dispute against the decision or action.
- F.1.6.4.2 Appeals**
a) In terms of Section 62 of the Local Government: Municipal Systems Act, 32 of 2000 a person whose rights are affected by a decision taken by the Municipality, may appeal against that decision by giving written notice of the appeal and reasons to the Municipal Manager within 21 days of the date of the notification of the decision.
b) An appeal must contain the following:
i) Must be in writing
ii) It must set out the reasons for the appeal
iii) It must state in which way the Appellant's rights were affected by the decision;
iv) It must state the remedy sought; and
v) It must be accompanied with a copy of the notification advising the person of the decision
- F.1.6.4.3 Right to approach the courts and rights in terms of Promotion of Administrative Justice Act, 3 of 2000 and Promotion of Access to Information Act, 2 of 2000**
The sub- clauses above do not influence any affected person's rights to approach the High Court at any time or its rights in terms of the Promotion of Administrative Justice Act and Promotion of Access to Information Act.
- F.1.6.4.4** All requests referring to sub clauses F.1.6.4.1 and F.1.6.4.2 must be submitted in writing to:
The Municipal Manager, Kouga Local Municipality, PO Box 21, Jeffreys Bay, 6330.
- F.1.6.4.5** All requests referring to clause F.1.6.4.2 3 regarding access to information or reasons must be submitted in writing to:
The Municipal Manager, Kouga Local Municipality, PO Box 21, Jeffreys Bay, 6330.
- F.1.7 Kouga Local Municipality Supplier Database Registration**
Tenderers are required to be registered on the Kouga Local Municipality's Supplier Database as a service provider. Tenderers must register as such upon being requested to do so in writing and within the period contained in such a request, failing which no orders can be raised or payments processed from the resulting contract. In the case of Joint Venture partnerships this requirement will apply individually to each party of the Joint Venture.
- Tenderers who wish to register on the Kouga Local Municipality's Supplier Database may collect registration forms from the Supplier Management Unit located within the Supplier Management / Registration Office, 16 Woltemade Road, Jeffreys Bay.
- F.1.8 National Treasury Web Based Central Supplier Database (CSD) Registration**
Tenderers are required to be registered on the National Treasury Web Based Central Supplier Database (CSD) as a service provider. Tenderers must register as such upon being requested to do so in writing and within the period contained in such a request, failing which no orders can be raised or

payments processed from the resulting contract. In the case of Joint Venture partnerships this requirement will apply individually to each party of the Joint Venture.

Tenderers who wish to register on the National Treasury Web Based Central Supplier Database (CSD) may do so via the web address **<https://secure.csd.gov.za>**.

It is each tenderer's responsibility to keep all the information on the National Treasury Web Based Central Supplier Database (CSD) updated.

F.2 Tenderer's obligations

F.2.1 Eligibility

*Delete the heading **Eligibility** and Replace with **Responsiveness Criteria***

F.2.1.1 *Delete the clause and replace with the following:*

Tenderers must submit a tender offer that complies in all aspects to the conditions as detailed in this document. Only those tenders that comply in all aspects with the tender conditions, specifications, pricing instructions and contract conditions will be declared responsive.

Add the following after F.2.1.2:

F.2.1.3 Only those tender submissions from which it can be established that a clear and unambiguous offer has been made to Employer, by whom the offer has been made and what the offer constitutes, will be declared responsive.

F.2.1.4 Only those tenders that satisfy the following criteria will be declared responsive:

F.2.1.4.1 **Construction Industry Development Board (CIDB) Registration**

Only those tenders submitted by tenderers who are registered, or capable of being registered, with an active status with the CIDB, in a contractor grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered, or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations, for a CE class of construction work, will be declared responsive. Tenderers must obtain such active status upon being requested to do so in writing and within the period contained in such a request, failing which their tenders will be declared non-responsive.

Joint Ventures are eligible to submit tenders provided that:

- a) every member of the joint venture is registered with an active status with the CIDB;
- b) the lead partner has a contractor grading designation of not lower than one level below the required grading designation in the CE class of construction work; and
- c) the combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **6CE class of construction work** or a value determined in accordance with Regulation 25 (1B) or 25 (7A) of the Construction Industry Development Regulations.

For alpha-numerics associated with the contractor Grading Designations see Annex G attached.

F.2.1.4.2 **Compliance with requirements of Kouga Local Municipality's SCM Policy and procedures**

Only those tenders that are compliant with the requirements below will be declared responsive:

- a) Full name of entity submitting tender to be provided;
- b) Identification number or company or other registration number to be provided;
- c) Tax reference number to be provided;
- d) VAT registration number to be provided;
- e) A completed **Certificate of Authority for Partnerships/ Joint Ventures/ Consortiums** to be provided authorising the tender to be made and the signatory to sign the tender on the partnership /joint venture/consortium's behalf (applicable schedule to be completed);
- f) A copy of the partnership / joint venture / consortium agreement to be provided;
- g) A completed **Declaration of Interest – State Employees** to be provided and which does not indicate any non-compliance with the legal requirements relating to state employees (applicable schedule to be completed);
- h) A completed **Declaration – Conflict of Interest** and **Declaration of Bidder's past Supply Chain Management Practices** to be provided and which does not indicate any conflict or past practises that renders the tender non-responsive (applicable schedules to be completed);
- i) A completed **Certificate of Independent Bid Determination** to be provided and which does not indicate any non-compliance with the requirements of the schedule (applicable schedule to be completed);
- j) The tenderer (including any of its directors or members), has not been restricted in terms of abuse of the Supply Chain Management Policy;
- k) The tenderer's tax matters with SARS are in order;
- l) The tenderer is not an advisor or consultant contracted with the Employer;
- m) The tenderer is not a person, advisor, corporate entity or a director of such corporate entity, involved with the bid specification committee.

F.2.1.4.3 Minimum score for functionality compliance

In order to be considered for a contract in terms of this tender, **tenderers MUST achieve the minimum score for functionality as stated below. VERIFIABLE PROOF MUST BE SUBMITTED** in the applicable Returnable Schedules.

The description of the functionality criteria and the maximum possible score for each is shown in the table below. The score achieved for functionality will be the sum of the scores achieved, in the evaluation process, for the individual criteria.

CRITERIA	APPLICATION OF THE CRITERIA	WEIGHT/100
Company Experience Schedule 11A	Demonstrated experience of the tendering entity with respect to Civil and Structural work on <u>Pump Stations or similar comparable projects</u> by completing each row in the Returnable Schedule 11A of work experience in full. 4 x completed projects > R10m (excl VAT) 3 x completed projects > R10m (excl VAT) 2 x completed projects > R10m (excl VAT) 1 x completed projects > R10m (excl VAT) Demonstrated experience of the tendering entity with respect to Mechanical and Electrical Works on <u>Pump Station or comparable projects</u> by completing each row in the Returnable Schedule 11B of work experience in full. 4 x completed projects > R5m (excl VAT) 3 x completed projects > R5m (excl VAT) 2 x completed projects > R5m (excl VAT) 1 x completed projects > R5m (excl VAT)	(Max 40 points) 20 points 15 points 10 points 5 points 20 points 15 points 10 points 5 points
Key Personnel Schedule 12A	Contracts Manager Built / Civil Environment Qualification: - B Eng / BSc / B Tech - National Diploma - No Qualification (s) or CV attached Experience in Built / Civil Environment: 10+ years 6 – 9 years 3 – 5 years 0 - 2 years	(Max 10 points) 3 points 2 points 0 points 7 points 5 points 3 points 0 points
Key Personnel Schedule 12B	Full-Time Construction Manager (Site Agent) – Civil and Structural Built / Civil Environment Qualification: - B Eng / BSc / B Tech - National Diploma - No Qualification (s) or CV attached Experience in Built / Civil Environment: 10+ years 6 – 9 years 3 – 5 years 0 - 2 years	(Max 10 points) 3 points 2 points 0 points 7 points 5 points 2 points 0 points
Key Personnel Schedule 12C	Part Time Electrical Site Agent National Diploma (Electrical) Minimum No Minimum National Diploma (Electrical) Experience in Built / Civil Environment: 10+ years 6 – 9 years 3 – 5 years 0 - 2 years	(Max 10 points) 3 points 0 points 7 points 5 points 2 points 0 points

CRITERIA	APPLICATION OF THE CRITERIA	WEIGHT/100
Key Personnel Schedule 12D	OH&S Officer (SACPMP Registered) Experience in Built / Civil Environment: • 10+ years • 6 – 9 years • 3 – 5 years • 1 - 2 years	(Max 5 points) 5 points 4 points 3 points 1 point
Locality	Locality (Municipal billing clearance certificate/ Lease agreement/ Latest tax invoices for municipal account of address where company operates from in its Business Name): • Kouga Local Municipality Area • Sarah Baartman District and Nelson Mandela Bay Municipal Area • Outside the above areas	(max 25 points) 25 points 20 points 10 points
Maximum possible score for Functionality		100

The minimum score for functionality is **70%**. Tenderers that fail to achieve the minimum score for functionality will be declared as non-responsive.

If any of the work scope component will be Sub-Contracted, or be executed by a Joint Venture partner, a signed Sub-Contractor's Agreement or a signed JV-Agreement **MUST** be included in this Tender Document, to submit a valid and responsive tender.

Where the entity tendering is a Joint Venture the tender must be accompanied by a statement describing exactly what aspects of the work will be undertaken by each party to the joint venture (appended to Schedule 10, Part T2.2: Returnable Schedules).

Where the tenderer intends to sub-contract any of the work components listed above, full details of the intended sub-contractor and portions of work to be undertaken by them shall be provided with the tender. The verifiable experience of the sub-contractor relevant to the component of work to be performed by them will be taken into consideration when allocating scores.

Tenderers shall ensure that all relevant information has been submitted with the tender offer in the prescribed format to ensure optimal scoring of functionality points for each Evaluation Criteria. Failure to provide all information **IN THIS TENDER SUBMISSION** could result in the tenderer not being able to achieve the specified minimum scoring.

F.2.1.4.4 Local Content

- a) The supplier shall study the terms and conditions as stated in the **Local Content Declaration / Annexure C** returnable schedule.

- F.2.1.4.4.1 The stipulated minimum threshold percentages for local production and content for this bid are as follows:

Description of services, works or goods	Stipulated minimum threshold
Cement and Concrete	100%
Steel Reinforcing	100%
Pumps & Motors	70%
Electrical Components & Cables	70%
Mechanical Components	70%

- F.2.1.4.4.2 Only tenders with locally produced or locally manufactured raw material or input will be considered. If the raw material or input to be used for a specific item is not available locally, bidders should obtain written authorisation from the Department of Trade and Industry (DTI) (Chief Director: Industrial Procurement, tel. 012 394 3927 and fax 012 394 4927) should there be a need to import such raw material or input.

- F.2.1.4.4.3 A copy of the authorisation letter must be submitted together with the bid document at the closing date and time of the bid.
- F.2.1.4.4.4 The Employer is obliged and must ensure that contracts for **the designated sector** are awarded at prices that are market related taking into account, among others, benchmark prices designated by the DTI for the sector, value for money and economies of scale. Where appropriate, prices may be negotiated with preferred bidders in accordance with provisions for Negotiation with Preferred Bidders as set out in the Kouga Local Municipality's SCM Policy.
- F.2.1.4.4.5 A bid will be declared non-responsive / disqualified if the **Local Content Declaration / Annexure C** returnable schedule as well as the authorisation letter referred to above (if applicable) are not submitted as part of the bid documentation at the closing date and time of the bid.
- F.2.1.4.4.6 For further information relating to the local production and content legislation, bidders may refer to website http://www.thedti.gov.za/industrial_development/ip.jsp, or may contact the Chief Director: Industrial Procurement at the DTI at telephone number (012) 394 3927 and fax (012) 394 4927, the Director: Fleet Procurement, at telephone number (012) 394 3927, or the DTI Contact Centre no 0861 843384.

F.2.1.4.5 **Compulsory clarification meeting**

Tenderers are required to attend a compulsory clarification meeting and site visit at which they may familiarise themselves with aspects of the proposed work, services or supply and pose questions.

Details of the meeting(s) are stated in the General Tender Information.

Only those tenders submitted by tenderers who have signed the attendance register will be declared responsive.

F.2.1.4.6 **Good standing with Bargaining Council**

Only those tenders submitted by tenderers who are in good standing with the **Bargaining Council for the Civil Engineering Industry (BCCEI)** at the time of the tender award will be declared responsive. Tenderers must attach such proof to the schedule titled **Declaration in Respect of Compliance with Labour Legislation** or obtain such upon being requested to do so in writing and within the period contained in such a request, failing which their tenders will be declared non-responsive. Refer to Schedule 21 of the Returnable Schedules.

F.2.1.4.7 **Mandatory Sub-Contracting**

In terms of Regulation 9 of the Preferential Procurement Regulations, 2017, issued in terms of the Preferential Procurement Policy Framework Act (PPPFA) (Act No 5 of 2000), at least **20%** of the value of the Works shall be subcontracted to Exempt Micro-Enterprises (EMEs) or Qualifying Small Enterprises (QSEs) as defined in the PPPFA.

The Tenderer shall identify suitable EMEs or QSEs from the National Treasury's Central Supplier Database and/or the CIDB register of contractors.

The percentage value of work to be subcontracted to EMEs or QSEs shall be stated in the Preferencing Schedule (Schedule 20). Failure to sub-contract the stipulated minimum percentage for the advancement of EMEs and QMEs will result in the tender being declared non-responsive.

The Primary Contractor shall employ a Full-Time SMME Manager to manager the following functions :

Schedule various Work Packages for the SMME Sub-Contractors – all work packages must be CIDB Level 1 and 2, and shall primarily be work scope aspects which can be done by hand and small plant, and shall not include more than 50% material supply components.

a) **Manage the SMME Tender Procurement processes :**

- i. compile the Tender Documentation for the SMME Tender process;
- ii. advertise for the SMME Work Scope packages, in co-ordination with the Employer;
- iii. conduct a Site Meeting inspection with all prospective SMME Sub-Contractors;
- iv. explain in detail the Work Scope Packages & the Pricing Structure;
- v. explain the expected Time Frames to Commence each Work Package and the expected Construction Duration, and Completion Date;
- vi. manage the Final Price negotiations with each SMME Sub-Contractor;
- vii. evaluate the SMME Sub-Contractor's tenders;

- viii. appoint and arrange to sign the Sub-Contract with each SMME Sub-Contractor.
- b) Train and assist each SMME Sub-Contractor to be able to execute the allocated work Packages
- c) Monitor the quality and performance of each SMME Sub-Contractor on a daily basis;
- d) Monitor the material purchases of each SMME Sub-Contractor on a daily basis
- e) Monitor the labour force with the CLO, of each SMME Sub-Contractor on a daily basis
- f) Monitor the allocated budgets of each SMME Sub-Contractor on a daily basis;
- g) Report monthly on all above aspects of each SMME Sub-Contractor to the Contract Manager and the Engineer.

The Primary Contractor must note that a 5% Financial Penalty shall be deducted from the Contractor's Payment Certificate if the SMME Target of 20% has not been reached at Practical Completion Stage. The 20% shall be calculated on the total Final Contract Value, with No deductions made for any P&G or P.Sum costs.

F.2.3 Check documents

Delete the clause and replace with the following:

The Tenderer should check the tender documents on receipt for completeness, missing or duplicated pages, indistinct figures or writing and any obvious errors. The Tenderer must notify the Employer's Agent at once of any such problems identified

F.2.7 Clarification meeting

Add the following after the second sentence:

The arrangements for the compulsory site visit/clarification meeting are as stated on the General Tender Information page and in the Responsiveness Criteria (if applicable).

Tenderers should be represented at the site visit/clarification meeting by a person who is suitably qualified and experienced to comprehend the implications of the work involved.

F.2.8 Seek Clarification

Add the following after the first sentence:

The tenderer warrants that it has:

- a) inspected the Specifications and read and fully understood the Conditions of Contract.
- b) read and fully understood the whole text of the Specifications and Price Schedule and thoroughly acquainted itself with the nature of the goods proposed and generally of all matters which may influence the Contract.
- c) visited the site(s) where delivery of the proposed works will take place, carefully examined existing conditions, the means of access to the site(s), the conditions under which the delivery is to be made, and acquainted itself with any limitations or restrictions that may be imposed by the Municipal or other Authorities in regard to access and transport of materials, plant and equipment to and from the site(s) and made the necessary provisions for any additional costs involved thereby.
- d) requested the Employer to clarify the requirements contained in the Specifications and Price Schedule, the exact meaning or interpretation of which is not clearly intelligible to the tenderer.
- e) received any notices to the tender documents which have been issued in accordance with the Employer's SCM Policy.

The Employer will therefore not be liable for the payment of any extra costs resulting from any claim submitted by the tenderer arising from any alleged ambiguity or uncertainty contained in the tender document.

F.2.12 Alternative tender offers

Add the following to F.2.12.1 at the end of the first sentence:

If a tenderer wishes to submit an alternative tender offer, he shall do so as a separate offer on a separate set of tender documents. The alternative tender offer shall be submitted in a separate sealed envelope on a separate Form of Offer, both clearly marked "Alternative Tender" in order to distinguish it from the main tender offer.

While it is not necessary to duplicate all parts of the main tender offer, the alternative tender offer shall be supported by the following documents as applicable:

- a) the schedule that compares the alternative(s) offered with the requirements of the issued tender documents
- b) preliminary designs, calculations, drawings and all other pertinent technical information and characteristics must be submitted with the alternative tender offer, in order to enable the Employer to evaluate the efficacy of the alternatives proposed
- c) revised Bills of Quantities, or parts thereof, highlighting the changes made, together with a revised Summary, the total of which has been carried to the Form of Offer
- d) details of any proposed amendments to the Pricing Assumptions

- F.2.12.3 *Add the following to F.2.12.1 at the end of the first sentence:*
An alternative of the highest ranked acceptable main tender offer that is priced higher than the main tender offer may be recommended for award, provided that the ranking of the alternative tender offer is higher than the ranking of the next ranked acceptable main tender offer.

The Employer's costs in confirming the acceptability of the alternative offer will be, *inter alia*, taken into account in considering the alternative offer.

The Employer will not be bound to consider alternative tenders and shall have sole discretion in this regard.

In the event that the alternative is accepted, the Contractor shall accept full responsibility that the alternative offer complies in all respects with the Employer's standards and requirements.

F.2.13 **Submitting a tender offer**

- F.2.13.1 *Add the following to F.2.13.1 at the end of the first sentence:*
Where the tendering entity is a joint venture it is recommended that the standard CIDB Joint Venture Agreement be used.

- F.2.13.3 *Add the following to F.2.13.3 at the end of the first sentence:*
Parts of each tender offer communicated on paper shall be submitted as an original, plus 0 (naught) copies.

- F.2.13.5 *Add the following to F.2.13.5 at the end of the first sentence:*
The Employer's address for delivery of tender offers and identification details to be shown on each tender offer package are:

Employer:	Kouga Local Municipality.
Physical address:	16 Woltemade Street, Jeffreys Bay.
Identification details:	Bid Number: 76/2021 Title of Contract: HANKEY SANITATION UPGRADE (PHASE 3) CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON

Sealed tenders with the Tenderer's name and address and the endorsement "**BID NO. 76/2021 : HANKEY SANITATION UPGRADE (PHASE 3) CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON FOR HANKEY AREAS**" on the envelope, must be placed in the appropriate official tender box at the abovementioned address.

- F.2.13.6 *Add the following to F.2.13.6:*
A two-envelope procedure will **not** be followed (F.3.5).

- F.2.13.10 *Add the following after F.2.13.9:*
By signing the offer part of C1.1 Form of Offer and Acceptance the tenderer declares that all information provided in the tender submission is true and correct.

- F.2.13.11 The Employer shall not formally issue tender documents in electronic format and shall only issue tender documents in hardcopy. An electronic version of the issued tender documents may be made available to the tenderer, upon written request in terms of this clause, subject to the following:
- Electronic copies of the issued tender documents, or parts thereof, will only be provided to tenderers who have been issued with the tender documents as contemplated in F.1.2 in hardcopy.
 - The electronic version shall not be regarded as a substitute for the issued tender documents.
 - The Employer shall not accept tenders submitted in electronic format. Only those tenders that have been completed on the issued hard copy tender document shall be considered, provided that printed Bills of Quantities, in the same format (that is, layout, billed items and quantities) as those issued electronically by the Employer, may be submitted with the tender as stated in F.2.13.2.
 - Where Addenda have been issued which amend the Bills of Quantities, then the printed Bills of Quantities shall take these into account. The pages of the issued Bills of Quantities should not be removed from the tender document.
 - The Employer accepts no responsibility or liability arising from any reliance on or use of the electronic version provided in terms of this clause. Tenderers are alerted to the fact that electronic versions of the tender documents may not reflect any notices or addenda that amend the tender document.
 - Any non-compliance with these provisions, including effecting any unauthorised alterations to the tender documents as contemplated in F.2.11, shall render the tender non-responsive. The Employer reserves the right to take any action against such tenderer allowed in law including, in circumstances where the tender had already been awarded, the right to cancel the contract.

- g) In requesting the electronic version of the tender documents or parts thereof, the tenderer is deemed to have read, understood and accepted all the above conditions.

F.2.15 **Closing time**

Add the following to F.2.15.1 after the first sentence:

- F.2.15.1 The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender.

F.2.16 **Tender offer validity**

Add the following to F.2.16.1 after the first sentence:

- F.2.16.1 The tender offer validity period is **(120 calendar days)**.

- F.2.16.2 *Delete the clause and replace with the following:*

Tender offers shall be deemed to remain valid until formal acceptance by the Employer of an offer at any time after the expiry date of the original tender offer validity period, unless the Employer is notified in writing of anything to the contrary, including any further conditions, by the tenderer.

Any further conditions introduced by the tenderer will be considered at the sole discretion of the Employer.

F.2.17 **Clarification of tender offer after submission**

Add the following to F.2.17 at the end of the third sentence:

A tender will be rejected as non-responsive if the tenderer fails to provide any clarification or supporting documents requested by the Employer within the time for submission stated in the Employer's written request for such clarification or documents.

F.2.18 **Provide other material**

Delete the following word in F.2.18.1:

- F.2.18.1 notarized

Add the following to F.2.18.1 at the end of the first paragraph:

Provide, on written request by the Employer, where the transaction value (tendered amount) inclusive of VAT **exceeds R 10 million:**

- a) audited annual financial statement for the past 3 years, or for the period since establishment if established during the past 3 years, if required by law to prepare annual financial statements for auditing;
- b) a certificate signed by the tenderer certifying that the tenderer has no undisputed commitments for municipal services towards a municipality or other service provider in respect of which payment is overdue for more than 30 days;
- c) particulars of any contracts awarded to the tenderer 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;
- d) a statement indicating whether any portion of the goods or services are expected to be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality or municipal entity is expected to be transferred out of the Republic.

Each party to a Consortium/Joint Venture shall submit separate certificates/statements in the above regard.

Add the following after F.2.18.2:

- F.2.18.3 Tenderers shall fully cooperate with the Employer's external service provider appointed to perform a due diligence review and risk assessment upon receipt of such written instruction from the Employer.

Failure to fully cooperate could result in a tender being declared as non-responsive.

F.2.18.4 **Compliance with Occupational Health and Safety Act, 85 of 1993**

Tenderers are to note the requirements of the Occupational Health and Safety Act, 85 of 1993 and the Construction Regulations, 2014 issued in terms of Section 43 of the Act. The Tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith.

In this regard the Tenderer shall submit with his tender or upon request, appended to Schedule 16: Health and Safety Plan in T2.2 : Returnable Schedules, a draft Health and Safety Plan in respect of the Works in sufficient detail to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act, Regulations and Health and Safety Specification in Part C3.7 Health and Safety Specifications for the works detailed in Part C3 Scope of works.

F.2.23 **Certificates**
Add the following after the first sentence:
The tenderer is required to submit the following:

F.2.23.1 **Evidence of tax compliance**
Tenderers shall be registered with the South African Revenue Service (SARS) and their tax affairs must be in order and they must be tax compliant. In this regard, it is the responsibility of the Tenderer to submit evidence in the form of a valid Tax Clearance Certificate issued by SARS to the Employer at the Supplier Management Unit located within the Supplier Management / Registration Office, 16 Woltemade Street, Jeffreys Bay, or included with this tender. The tenderer must also provide its Tax Compliance Status PIN number on the **Compulsory Enterprise Questionnaire**

Each party to a Consortium/Joint Venture shall submit a separate Tax Clearance Certificate.

Tenderers are to note that the Employer will not award a contract to a Tenderer whose tax matters are not in order.

F.2.23.2 **Broad-Based Black Economic Empowerment Status Level Documentation**
In order to qualify for preference points, it is the responsibility of the tenderer to submit documentary proof, either as certificates, sworn affidavits or any other requirement prescribed in terms of the B-BBEE Act, of its B-BBEE status level of contribution in accordance with the applicable Codes of good practise as issued by the Department of Trade and Industry, to the Kouga Local Municipality at the Supplier Management Unit located within the Supplier Management / Registration Office, 16 Woltemade Street, Jeffreys Bay or included with the tender submission.

Consortiums/Joint Ventures will qualify for preference points, provided that the **entity** submits the relevant certificate/scorecard in accordance with the applicable codes of good practise. Note that, in the case of unincorporated entities, a verified consolidated B-BBEE scorecard must be submitted in the form of a certificate with the tender.

Tenderers are further referred to the content of the **Preference Schedule** for the full terms and conditions applicable to the awarding of preference points.

The applicable code for this tender is the **Amended Codes for Measuring Broad-Based Black Economic Empowerment in the Construction Sector** unless in possession of a valid certificate in terms of the transitional arrangements contained in these Codes.

The tenderer shall indicate in Section 4 of the **Preference Schedule** the Level of Contribution in respect of the enterprise status or structure of the tendering entity (the supplier).

Add the follow new clause after F.2.23.2 :

F.2.24 **Proposed Deviations and Qualifications**

Where the tenderer cannot tender in all respects in accordance with the provisions contained in the tender documents, all deviations therefrom shall be clearly and separately listed in the schedule titled **Proposed Deviations and Qualifications by Tenderer** in T2.2 Returnable Schedules, or in a tenderer's covering letter expressly referenced in this schedule.

The tenderer accepts that the Employer will examine such deviations in terms of clause F.3.8.2 and shall not be bound to accept any such deviations or qualifications.

It must be clearly stated by the tenderer whether the sum tendered in the Tender Offer includes for all such deviations or qualifications listed or referred to in the schedule titled **Proposed Deviations and Qualifications by Tenderer** or not.

F.3 The Employer's undertakings

F.3.2 Issue Addenda

Delete the words "three days" from the first sentence and replace with:

"five working days where possible"

Add the following to F.3.2 at the end of the paragraph:

Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.

F.3.4 Opening of tender submissions

Add the following to F.3.4.2 at the end of the paragraph:

The location for opening of the tender offers is the Tender Submission Office at the address as stated on the General Tender Information page.

F.3.8 Test for responsiveness

F.3.8.2 *Delete par F.3.8.2 (c)*

Replace the final sentence of F.3.8.2 with the following:

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

Add the following after clause F.3.8.2

F.3.8.3 The Employer reserves the right to accept a tender offer which does not, in the Employer's opinion, materially and/or substantially deviate from the terms, conditions, and specifications of the tender documents.

F.3.9 Arithmetical errors, omissions and discrepancies

Add the following after clause F.3.9.2

F.3.9.3 In the event of tendered rates or lump sums being declared by the Employer to be unacceptable to it because they are not priced, either excessively low or high, or not in proper balance with other rates or lump sums, the Tenderer may be required to produce evidence and advance arguments in support of the tendered rates or lump sums objected to. If, after submission of such evidence and any further evidence requested, the Employer is still not satisfied with the tendered rates or lump sums objected to, it may request the tenderer to amend these rates and lump sums along the lines indicated by it.

The Tenderer will then have the option to alter and/or amend the rates and lump sums objected to and such other related amounts as are agreed on by the Employer, but this shall be done without altering the tender offer in accordance with this clause.

Should the Tenderer fail to amend his tender in a manner acceptable to and within the time stated by the Employer, the Employer may declare the tender as non-responsive.

F.3.10 Clarification of a tender offer

Delete the clause and replace with the following:

F.3.10 The Employer may, after the closing date, request additional information or clarification from tenderer, in writing on any matter affecting the evaluation of the tender offer or that could give rise to ambiguity in a contract arising from the tender offer.

F.3.11 Evaluation of tender offers

Add the following paragraph below the heading:

The preference point system applicable to this tender is either the 80/20 or 90/10 preference point system and the lowest responsive tender will be used to determine the applicable preference point system.

F.3.11.3(3) *Add the following after par F.3.11.3(3):*

In addition, the various deemed B-BBEE Status Level of Contributor in accordance with the relevant Codes can be attained and such tenderers must be awarded the appropriate number of points.

It should be noted that such Deemed B-BBEE Status Level of Contribution can be enhanced or discounted in accordance with the relevant clauses in the applicable Codes.

F.3.11.3(4) *Delete the heading and replace with the following:*

The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million

F.3.11.3(4)(a)(i) *Delete the first sentence of par F.3.11.3(4)(a)(i) and replace with the following:*

(4) (a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price tender) with a rand value equal to, or above R 30'000 and up to Rand value of R50'000'000 (all applicable taxes included):

Delete the text under the formula and replace with the following:

Where

Ps = Points scored for price of tender or offer under consideration;

Pt = Price of tender or offer under consideration; and

Pmin = Price of lowest acceptable tender or offer.

F.3.11.3(4)(a) *Amend the number of points for status level 3 as follows:*

B-BBEE status level of contributor	Number of points
3	14

F.3.11.3(5) *Delete the heading and replace with the following:*

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

F.3.11.3(5)(a)(i) *Delete the first sentence of par F.3.11.3(5)(a)(i) and replace with the following:*

(5) (a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price tender) with a rand value above R50'000'000 (all applicable taxes included):

Delete the text under the formula and replace with the following:

Where

Ps = Points scored for price of tender or offer under consideration;

Pt = Price of tender or offer under consideration; and

Pmin = Price of lowest acceptable tender or offer.

F.3.11.3(5)(a) *Amend the number of points for status level 3 as follows:*

B-BBEE status level of contributor	Number of points
3	6

F.3.11.7 *Delete the text in the final row of the table and replace with the following:*

a	<i>P_m is the offer of the most favourable offer.</i>
	<i>P is the offer of the tender offer under consideration.</i>

F.3.11.7 Scoring Financial Offers

Add the following:

The financial offer will be scored using **Formula 2 (Option 1)**.

F.3.11.8 Scoring Preferences

Add the following:

Points will be awarded to tenderers who are eligible for preferences in terms of the **Preference Schedule** (where preferences are granted in respect of B-BBEE contribution) which is included in T2.2 Returnable Schedules.

The terms and conditions of the **Preference Schedule** shall apply in all respects to the tender evaluation process and any subsequent contract.

- Add the following after F.3.11.9:*
- F.3.11.10 **Risk Analysis**
Notwithstanding compliance with regard to CIDB registration or any other requirements of the tender, the employer will perform a risk analysis in respect of the following:
- reasonableness of the financial offer
 - reasonableness of unit rates and prices
- The conclusions drawn from this risk analysis will be used by the Employer in determining the acceptability of the tender offer in terms of F.3.13 b).
- F3.13 **Acceptance of tender offer**
Delete F.3.13 and replace with the following):
Accept the tender offer, if in the opinion of the employer, it does not present any material risk and only if the tenderer:
- Delete F.3.13 a) and replace with the following):*
- is not under restrictions, has any principals who are under restrictions, or is not currently a supplier to whom notice has been served for abuse of the supply chain management system, preventing participation in the employer's procurement,
- If an award cannot be made in terms of anything contained herein, the Employer reserves the right to consider the next ranked tenderer(s).
- F.3.16 **Notice to unsuccessful tenderers**
Replace the heading above with:
Notice to successful and unsuccessful tenderers
- F.3.16.1 *Delete the clause and replace with the following:*
Before accepting the tender of the successful tenderer, the Employer shall notify the successful tenderer in writing of the decision of the Employer's Bid Adjudication Committee to award the tender to the successful tenderer. No rights shall accrue to the successful tenderer in terms of this notice.
- F.3.16.2 *Delete clause F.3.16.2 and replace with the following:*
The Employer shall, at the same time as notifying the successful tenderer of the Bid Adjudication Committee's decision to award the tender to the successful tenderer, also give written notice to the other tenderers informing them that they have been unsuccessful.
- F.3.17 **Provide copies of the contract**
Add the following after the first sentence:
The number of paper copies of the signed contract to be provided by the Employer is one.
- F.3.19 *Add the following after F.3.19*
F.3.20 **Negotiations with preferred tenderers**
The Employer may negotiate the final terms of a contract with tenderers identified through a competitive tendering process as preferred tenderers provided that such negotiation:
- does not allow any preferred tenderer a second or unfair opportunity;
 - is not to the detriment of any other tenderer; and
 - does not lead to a higher price than the tender as submitted.
- If negotiations fail to result in acceptable contract terms, the Municipal Manager (or his delegated authority) may terminate the negotiations and cancel the tender or invite the next ranked tenderer for negotiations. The original preferred tenderer should be informed of the reasons for termination of the negotiations. If the decision is to invite the next highest ranked tenderer for negotiations, the failed earlier negotiations may not be reopened by the Kouga Municipality.
- Minutes of any such negotiations shall be kept for record purposes.
- The provisions of this clause will be equally applicable to any invitation to negotiate with any other tenderers.
- In terms of the PPPFA Regulations, 2017, tenders must be cancelled in the event that negotiations fail to achieve a market related price with any of the three highest scoring tenderers.

Annex F (normative) **Standard Conditions of Tender**

The conditions of tender are the Standard Conditions of Tender as contained in the CIDB Standard for Uniformity in Engineering and Construction Works Contracts as published in Board Notice 423 of 2019 of 08 August 2019 (see www.cidb.org.za).

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.

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

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

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 fulfil his or her duties impartially;
 - ii) an individual or organisation 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 organisation which employs that employee.
- b) **comparative offer** means the price after the factors of a non-firm price and all unconditional discounts it can be utilised to have been taken into consideration;

- c) **corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process;
- d) **fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels;
- e) **organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body;
- f) **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 Cancellation and Re-Invitation of Tenders

F1.5.1 An organ of state may, prior to the award of the tender, cancel a tender if-

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

F1.5.2 The decision to cancel a tender must be published in the CIDB website and in the government Tender Bulletin for the media in which the original tender invitation was advertised.

F1.5.3 An employer may only with the prior approval of the relevant treasury cancel a tender invitation for the second time.

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

F2.2.1 Accept that, unless otherwise stated in the tender data, the employer will not compensate the tenderer for any costs incurred in the preparation and submission of a tender offer, including the costs of any testing necessary to demonstrate that aspects of the offer complies with requirements.

F2.2.2 The cost of the tender documents charged by the employer shall be limited to the actual cost incurred by the employer for printing the documents. Employers must attempt to make available the tender documents on its website so as not to incur any costs pertaining to the printing of the tender documents.

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.

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.2.12.3 An alternative tender offer may only be considered in the event that the main tender offer is the winning tender.

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 with or without any conditions attached to such extension.

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 and policies

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

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

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 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.3.9.2 The employer must correct the arithmetical errors in the following manner:

- a) Where there is a discrepancy between the amounts in words and amounts in figures, the amount in words shall govern.
- b) 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.
- c) 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.

Consider the rejection of a tender offer if the tenderer does not correct or accept the correction of the arithmetical error in the manner described above.

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: Price and Preference

In the case of a price and preference:

- 1) Score tender evaluation points for price
- 2) Score points for BBBEE contribution
- 3) Add the points scored for price and BBBEE.

F.3.11.3 Method 2: Functionality, Price and Preference

In the case of a functionality, price and preference:

- 1) Score functionality, rejecting all tender offers that fail to achieve the minimum number of points for functionality as stated in the Tender Data.
- 2) No tender must be regarded as an acceptable tender if it fails to achieve the minimum qualifying score for functionality as indicated in the tender invitation.
- 3) Tenders that have achieved the minimum qualification score for functionality must be evaluated further in terms of the preference points system prescribed in paragraphs 4 and 4 and 5 below.

The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R1 million

- 4) (a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price tender) with a rand value equal to, or above R 30 000 and up to Rand value of R 1 000 000 (all applicable taxes included):

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

Where

P_s = Points scored for comparative price of tender or offer under consideration;

P_t = Comparative price of tender or offer under consideration; and

P_{min} = Comparative price of lowest acceptable tender or offer.

- (4) (a)(ii) An employer of state may apply the formula in paragraph (i) for price tenders with a value less than R30 000, if and when appropriate:
- (4) (b) Subject to subparagraph(4)(c), points must be awarded to a tender for attaining the B-BBEE status level of contributor in accordance with the table below:

B-BBEE status level of	Number of points
1	20
2	18
3	16
4	12
5	8
6	6
7	4
8	2
Non-compliant contributor	0

- (4) (c) A maximum of 20 points may be allocated in accordance with subparagraph (4)(b)
- (4) (d) The points scored by tender in respect of B-BBEE contribution contemplated in contemplated in subparagraph (4) (b) must be added to the points scored for price as calculated in accordance with subparagraph (4)(a).
- (4) (e) Subject to paragraph 4.3.8 the contract must be awarded to the tender who scores the highest total number of points.

The 90/ 10 preference points system for acquisition of services, works or goods with a Rand value above R 1 million

(5)(a) The following formula must be used to calculate the points for price in respect of tenders with a Rand value above R1 000 000 (all applicable taxes included):

90/10

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

Where

P_s = Points scored for comparative price of tender or offer under consideration;

P_t = Comparative price of tender or offer under consideration; and

P_{min} = Comparative price of lowest acceptable tender or offer.

(5)(b) Subject to subparagraph(5)(c), points must be awarded to a tender for attaining the B- BBEE status level of contributor in accordance with the table below:

B-BBEE status level of contributor	Number of points
1	10
2	9
3	8
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

(5)(c) A maximum of 10 points may be allocated in accordance with subparagraph (5)(b).

(5)(d) The points scored by tender in respect of B-BBEE contribution contemplated in subparagraph (5) (b) must be added to the points scored for price as calculated in accordance with subparagraph (5)(a).

(5)(e) Subject to paragraph 4.3.8 the contract must be awarded to the tender who scores the highest total number of points.

F.3.11.6 Decimal places

Score price, preference and functionality, as relevant, to two decimal places.

F.3.11.7 Scoring Price

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

$$NFO = W_1 \times A$$

where: NFO is the number of tender evaluation points awarded for price.

W₁ is the maximum possible number of tender evaluation points awarded for price 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: Formulae 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 functionality

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:

$$N_Q = W_2 \times S_O / M_S$$

where: S_O is the score for quality allocated to the submission under consideration; M_S is the maximum possible score for quality in respect of a submission; and W_2 is the maximum possible number of tender evaluation points awarded for the quality as stated in the tender data

F.3.12 Insurance provided by the employer

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

F.3.13 Acceptance of tender offer

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

- is not under restrictions, or has principals who are under restrictions, preventing participating in the employer's procurement,
- 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,
- has the legal capacity to enter into the contract,
- is not insolvent, in receivership, under Business Rescue as provided for in chapter 6 of the Companies Act, 2008, 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,
- complies with the legal requirements, if any, stated in the tender data, and
- is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

F.3.14 Prepare contract documents

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

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

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

F.3.15 Complete adjudicator's contract

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

F.3.16 Notice to unsuccessful tenderers

F.3.16.1 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.3.16.2 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.3.17 Provide copies of the contracts

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

F.3.18 Provide written reasons for actions taken

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

F3.19 Transparency in the procurement process

F3.19.1 The CIBD prescripts require that tenders must be advertised and be registered on the CIDB Tender system.

F3.19.2 The employer must adopt a transparency model that incorporates the disclosure and accountability as transparency requirements in the procurement process.

F3.19.3 The transparency model must identify the criteria for selection of projects, project information template and the threshold value of the projects to be disclosed in the public domain at various intervals of delivery of infrastructure projects.

F3.19.4 The client must publish the information on a quarterly basis which contains the following information:

- Procurement planning process
- Procurement method and evaluation process
- Contract type
- Contract status
- Number of firms tendering
- Cost estimate
- Contract title
- Contract firm(s)
- Contract price
- Contract scope of work

- Contract start date and duration
- Contract evaluation reports.

F3.19.5 The employer must establish a Consultative Forum which will conduct a random audit in the implementation of the transparency requirements in the procurement process.

F3.19.6 Consultative Forum must be an independent structure from the bid committees.

F3.19.7 The information must be published on the employer's website.

F 3.19.8 Records of such disclosed information must be retained for audit purposes.

Annex G

(normative)

Alpha-numerics associated with the Contractor Grading Designations

Table G1: Contractor grading designations and associated parameters, as per Government Notice 357 of 2019 [Notice No.42561], dated 23 May 2019.

Contractor Grading Designation	Tender Value Range designation	Maximum value of contract that a contractor is considered capable of performing (R)
1 (class of construction works)	1	500 000
2 (class of construction works)	2	1 000 000
3 (class of construction works)	3	3 000 000
4 (class of construction works)	4	6 000 000
5 (class of construction works)	5	10 500 000
6 (class of construction works)	6	20 000 000
7 (class of construction works)	7	60 000 000
8 (class of construction works)	8	200 000 000
9 (class of construction works)	9	No Limit

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T2.1 List of Returnable Documents

The tenderer must complete the following Returnable Documents:

1. RETURNABLE SCHEDULES THAT WILL BE INCORPORATED INTO THE CONTRACT

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2. OTHER DOCUMENTS REQUIRED FOR TENDER EVALUATION PURPOSES

- An original valid Tax Clearance Certificate
- A Certificate of Contractor Registration issued by the CIDB
- Joint Venture or Sub-Contractor Agreement (if applicable)
- B-BBEE Certificate
- Copies of latest Municipal Accounts for accounts listed in Schedule 4
- Functionality Criteria, append to Schedule 11, 12,13 and 14

3. C1.1 FORM OF OFFER AND ACCEPTANCE
4. C1.2 CONTRACT DATA (PART 2)
5. C2.2 BILLS OF QUANTITIES

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T2.2 Returnable Schedules

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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 2a: National Treasury Central Supplier Database registration number :

Section 2b: SARS Tax Compliance Status PIN :

Section 3: C I D B registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

** Complete only if sole proprietor or partnership and attach separate page if more than 3 partners*

Section 5: Particulars of companies and close corporations

Company registration number

Close corporation number

Tax reference number

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

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

SIGNED ON BEHALF OF TENDERER:

General Tender Information

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SCHEDULE 2: TAX CLEARANCE CERTIFICATE (MBD 2)

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 form TCC 001 "Application for a Tax Clearance Certificate" (see item 5 below) 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 Tax Clearance Certificate that will be valid for a period of 1 (one) year from the date of approval.
- 3 The original Tax Clearance Certificate must be submitted together with the bid. Failure to submit the original and valid Tax Clearance Certificate will result in the invalidation of the bid. Certified copies of the Tax Clearance Certificate will not be acceptable.
- 4 In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate Tax Clearance Certificate.
- 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 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.
- 7 If bidder is registered on Kouga Local Municipality supplier's database; that contains a tax clearance certificate which is valid on closing date of tender, it must be indicated as such to this page, whereby the attaching of a new tax clearance certificate on this page will not be needed.

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SCHEDULE 3: DECLARATION OF INTEREST

MBD 4

1. No bid will be accepted from persons in the service of the state*.
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 and/or take an oath declaring his/her interest.
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, shareholder* etc.)
 - 3.4 Company Registration Number:
 - 3.5 Tax Reference Number:
 - 3.6 VAT Registration Number:
 - 3.7 Are you presently in the service of the state* **YES / NO**
 - 3.7.1 If so, furnish particulars:
.....
.....
.....
 - 3.8 Have you been in the service of the state* for the past twelve months? **YES / NO**
 - 3.8.1 If so, furnish particulars.
.....
.....
.....

*MSCM Regulation: "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 entity; or
- (f) An employee of Parliament or a provincial legislature.
- (g) "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 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**

3.9.1 If so, furnish particulars.

.....

.....

.....

3.10 Are you, aware of any relationship (family, friend, other) between a 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**

3.10.1 If so, furnish particulars

.....

.....

.....

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

3.11.1 If so, furnish particulars.

.....

.....

.....

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

3.12.1 If so, furnish particulars.

.....

.....

.....

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

3.13.1 If so, furnish particulars.

.....

.....

.....

3.14 Please provide the following information on ALL directors/shareholders/trustees/members below:

Full Name and Surname	Identity Number	Personal Income Tax Number	Provide State* Employee Number

NB:

- a) PLEASE ATTACH CERTIFIED COPY(IES) OF ID DOCUMENT(S)
- b) PLEASE PROVIDE PERSONAL INCOME TAX NUMBERS FOR ALL DIRECTORS / SHAREHOLDERS/ TRUSTEES/ MEMBERS, ETC.

DECLARATION

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY**BID NO. 76/2021****HANKEY SANITATION UPGRADE (PHASE 3)
CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON****(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)****SCHEDULE 4: CERTIFICATE FOR PAYMENT OF MUNICIPAL SERVICES (MBD 10)****DECLARATION IN TERMS OF CLAUSE 112(1) OF THE MUNICIPAL FINANCE MANAGEMENT ACT (NO.56 OF 2003)**

I, _____, _____ (full name and ID no.), hereby acknowledge that according to SCM Regulation 38(1)(d)(i), the Municipality may reject the tender of the tenderer if any municipal rates and taxes or municipal service charges owed by the Tenderer or any of its directors/members/partners to the Kouga Local Municipality, or to any other municipality or municipal entity, are in arrears for more than 3 (three) months.

I declare that I am duly authorised to act on behalf of _____ (name of the firm) and hereby declare, that to the best of my personal knowledge, neither the firm nor any director/member/partner of said firm is in arrears on any of its municipal accounts with any municipality in the Republic of South Africa, for a period longer than 3 (three) months.

I further hereby certify that the information set out in this schedule and/or attachment(s) hereto is true and correct. The Tenderer acknowledges that failure to properly and truthfully complete this schedule may result in the tender being disqualified, and/or in the event that the tenderer is successful, the cancellation of the contract.

PHYSICAL BUSINESS ADDRESS(ES) OF THE TENDERER	MUNICIPAL ACCOUNT NUMBER

FURTHER DETAILS OF THE BIDDER'S Director / Shareholder / Partners, etc.:

Director / Shareholder / partner	Physical address of the Business	Municipal Account number(s)	Physical residential address of the Director / shareholder / partner	Municipal Account number(s)

NB: Please attach certified copy (ies) of ID document(s) and Municipal Accounts

If the entity or any of its Directors/Shareholders/Partners, etc. rents/leases premises, a copy of the rental/lease agreement must be submitted with this tender.

Signature	Position	Date

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SCHEDULE 5: DECLARATION OF BIDDER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

MBD 8

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:
 - 3.1. abused the municipality's / municipal entity's supply chain management system or committed any improper conduct in relation to such system;
 - 3.2. been convicted for fraud or corruption during the past five years;
 - 3.3. willfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - 3.4. 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 as a company or person 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 National Treasury after the audi alteram partem rule was applied).	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)? (To access this Register enter the National Treasury's website, www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012) 3265445).	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 ☐
4.5.1	If so, furnish particulars:		

CERTIFICATION

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

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

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

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SCHEDULE 6: CERTIFICATE OF INDEPENDENT BID DETERMINATION

MBD 9

- A. This Municipal Bidding Document (MBD) must form part of all bids invited.
- B. 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).^{*} Collusive bidding is a *per se* prohibition meaning that it cannot be justified under any grounds.
- C. 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:
- C.1. take all reasonable steps to prevent such abuse;
 - C.2. 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.3. 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.
- D. 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.
- E. In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

CERTIFICATE OF INDEPENDENT BID DETERMINATION:

I, the undersigned, in submitting the accompanying BID : 76/2021

**HANKEY SANITATION UPGRADE (PHASE 3) : CONSTRUCTION OF NEW AND UPGRADING OF EXISTING
SEWER PUMP STATIONS IN HANKEY AND CENTERTON**

(Bid Number and Description)

in response to the invitation for the bid made by:

KOUGA LOCAL MUNICIPALITY

(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 consortium* 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.
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.

* 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.

* 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.

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY

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SCHEDULE 7: CONFIRMATION OF CIDB REGISTRATION

MBD 9

I/We confirm my/our registration with the Construction Industry Development Board (CIDB) details of which are as follows:

COMPANY NAME	CIDB REGISTRATION NO.	CONTRACTOR GRADING DESIGNATION

Where a tenderer satisfies CIDB Contractor grading designation requirements through the formation of a joint venture, details of each party to the joint venture shall be submitted

The information provided above shall be verified by the Employer.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY

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SCHEDULE 8: AUTHORITY OF SIGNATORY

MBD 9

1. SOLE PROPRIETOR (SINGLE OWNER BUSINESS) AND NATURAL PERSON

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

OR

1.2. I, _____, the undersigned, hereby confirm that I am
submitting this tender in my capacity as natural person.

SIGNATURE:		DATE:	
PRINT NAME:			
WITNESS 1:		WITNESS 2:	

2. COMPANIES AND CLOSE CORPORATIONS

- 2.1. If a Bidder is a **COMPANY**, a certified copy of the resolution by the board of directors, duly signed, authorising the person who signs this bid to do so, as well as to sign any contract resulting from this bid and any other documents and correspondence in connection with this bid and/or contract on behalf of the company **must be submitted with this bid**, that is, before the closing time and date of the bid
- 2.2. In the case of a **CLOSE CORPORATION (CC)** submitting a bid, a **resolution by its members**, authorizing a member or other official of the corporation to sign the documents on their behalf, **shall be included with the bid**.

PARTICULARS OF RESOLUTION BY BOARD OF DIRECTORS OF THE COMPANY/MEMBERS OF THE CC

Date Resolution was taken			
Resolution signed by (name and surname)			
Capacity			
Name and surname of delegated Authorised Signatory			
Capacity			
Specimen Signature			
Full name and surname of ALL Director(s) / Member (s)			
1.		2.	
3.		4.	
5.		6.	
7.		8.	
9.		10.	
Is a CERTIFIED COPY of the resolution attached?		YES	NO

SIGNED ON BEHALF OF COMPANY / CC:		DATE:	
PRINT NAME:			
WITNESS 1:		WITNESS 2:	

3. PARTNERSHIP

We, the undersigned partners in the business trading as _____ hereby authorize Mr/Ms _____ to sign this bid as well as any contract resulting from the bid and any other documents and correspondence in connection with this bid and /or contract for and on behalf of the abovementioned partnership.

The following particulars in respect of every partner must be furnished and signed by every partner:

Full name of partner		Signature	
SIGNED ON BEHALF OF PARTNERSHIP:		DATE:	
PRINT NAME:			
WITNESS 1:		WITNESS 2:	

4. CONSORTIUM

We, the undersigned consortium partners, hereby authorize _____
_____ (Name of entity) to act as lead consortium partner and further authorize Mr./Ms.
_____ To sign this, offer as well as any contract
resulting from this tender and any other documents and correspondence in connection with this tender and / or
contract for and on behalf of the consortium.

The following particulars in respect of each consortium member must be provided and signed by each member:

Full Name of Consortium Member	Role of Consortium Member	% Participation	Signature
SIGNED ON BEHALF OF PARTNERSHIP:		DATE:	
PRINT NAME:			
WITNESS 1:		WITNESS 2:	

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3)
CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON

(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)

SCHEDULE 9: SITE VISIT / CLARIFICATION MEETING CERTIFICATE

MBD 9

This is to certify that I/we

of (Tenderer)

on (date)

have examined the Site of the Works and its surroundings for which I/we am/are submitting this tender and have, so far as is practicable, familiarized myself/ourselves with all the information, risks, contingencies and other circumstances which may influence or affect my/our Tender.

NAME & SURNAME:

CAPACITY:

NAME OF FIRM:

ADDRESS:

TELEPHONE NO:

FAX NO:

EMAIL:

SIGNED ON BEHALF OF TENDERER:

NB: Please note that no latecomers will be allowed.

For all compulsory briefing sessions/site meetings/clarification meetings, bids received from interested bidders that did not attend the meeting or arrived later than predetermined date and time, will be **disqualified**

KOUGA LOCAL MUNICIPALITY**BID NO. 76/2021****HANKEY SANITATION UPGRADE (PHASE 3)
CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON****(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)****SCHEDULE 10: CERTIFICATE OF AUTHORITY FOR JOINT VENTURES****MBD 9****This returnable schedule is to be completed by JOINT VENTURES**

We, the undersigned, are submitting this tender offer in joint venture and hereby authorize Mr./Ms. _____

authorized signatory of the Company/Close Corporation/Partnership (name) _____
_____, acting in the capacity of lead partner, to sign all
documents in connection with the tender offer and any contract resulting from it on our behalf.

(i) Name of firm (Lead partner)			
Address			
		Tel. No.	
Signature		Designation	

(ii) Name of firm			
Address			
		Tel. No.	
Signature		Designation	

(iii) Name of firm			
Address:			
		Tel. No.	
Signature		Designation	

(iv) Name of firm			
Address			
		Tel. No.	
Signature		Designation	

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

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

**HANKEY SANITATION UPGRADE (PHASE 3)
CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON**

(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)

SCHEDULE 11: SCHEDULE OF WORK EXPERIENCE

The tenderer shall insert in the spaces provided below a list of similar completed contracts awarded to him/her and those that are currently completed to 80% of work scope or greater. Similar work scope required, shall ONLY be considered for Pump Station construction work, which involved both Civil, Structural, Electrical and Mechanical work components. If any of the work scope component will be Sub-Contracted, or be executed by a Joint Venture partner, a signed Sub-Contractor's Agreement or a signed JV-Agreement **MUST** be included in this Tender Document, to submit a valid and responsive tender.

The tenderer is reminded that the information provided with this Schedule shall be used in terms of Clauses F.2.1.4.3 in Part T1.2 Tender Data to confirm the tendering entity's eligibility to tender, and the responsiveness of the Tender Submitted. The tenderer is therefore required to supply detailed information relating to previous projects, and projects to date which are completed to 80% of work scope or greater, to clearly illustrate and prove that the tendering entity meets the work experience requirements stipulated in Clause F.2.1.4.3. Such proof may consist of, but not be limited to, photographic records, reports and completion certificates.

Specific space has been allocated in the schedules below in which the tenderer shall detail in short how the listed project satisfied the relevant requirement. A separate schedule has been created for each listed requirement as detailed in Clause F.2.1.4.3 in Part T1.2 – Tender Data. Should more than one page be required for a particular requirement, the tenderer shall append the additional pages (copies of the original page) to this schedule.

The tenderer's attention is also directed to the involvement and substitution of sub-contractors during the Contract, whose experience contribute to the fulfilment of the experience criteria requirements under Clause F.2.1.4.3 in Part T1.2 – Tender Data, being subject to the Employer's Approval.

Note: Only the information provided on this Schedule, or attached hereto, will be considered. Failure to complete this Schedule may result in the tender being non-responsive in terms of Clause F.2.1.4.3.

SCHEDULE 11A : LIST OF CIVIL AND STRUCTURAL PROJECTS SUCCESSFULLY COMPLETED FOR EVALUATION

Bidders must furnish hereunder details of successfully completed projects which work scope entailed **Sewer (or Water) Pump Station Construction Projects**, where the work scope was **primarily Civil & Structural work**. Refer also to Clause F.2.1.4.3 of the Tender Data for Functionality Compliance.

The table below must be completed by hand for relevant contracts completed. Proof to substantiate the information below may be requested.

EMPLOYER / INSTITUTION NAME	PROJECT NAME	CONTRACT AWARDED AMOUNT (VAT INCL.)	COMMENCEMENT DATE	COMPLETION DATE	CLIENT'S CONTACTABLE REFERENCES	
					NAME & SURNAME	TELEPHONE

EMPLOYER / INSTITUTION NAME	PROJECT NAME	AWARDED AMOUNT (VAT INCL.)	COMMENCEMENT DATE	COMPLETION DATE	CONTACTABLE REFERENCES	
					NAME & SURNAME	TELEPHONE

I herewith declare the above information is accurate and correct.

.....

1. DATE

.....

SIGNATURE OF BIDDER

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SCHEDULE 11B : LIST OF ELECTRICAL AND MECHANICAL PROJECTS SUCCESSFULLY COMPLETED FOR EVALUATION

Bidders must furnish hereunder details of similar projects successfully completed which work scope entailed **Sewer (or Water) Pump Station Construction Projects or similar**, where the work scope was **primarily Electrical & Mechanical work**. Refer also to Clause F.2.1.4.3 of the Tender Data for Functionality Compliance.

The table below must be completed by hand for relevant contracts completed. Proof to substantiate the information below may be requested.

EMPLOYER / INSTITUTION NAME	PROJECT NAME	CONTRACT AWARDED AMOUNT (VAT INCL.)	COMMENCEMENT DATE	COMPLETION DATE	CLIENT'S CONTACTABLE REFERENCES	
					NAME & SURNAME	TELEPHONE / E-MAIL
						TEL: E-MAIL:
						TEL: E-MAIL:

EMPLOYER / INSTITUTION NAME	PROJECT NAME	AWARDED AMOUNT (VAT INCL.)	COMMENCEMENT DATE	COMPLETION DATE	CONTACTABLE REFERENCES	
					NAME & SURNAME	TELEPHONE
						TEL: E-MAIL:
						TEL: E-MAIL:
						TEL: E-MAIL:

I herewith declare the above information is accurate and correct.

.....

DATE

.....

SIGNATURE OF BIDDER

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL)

KOUGA LOCAL MUNICIPALITY
BID NO. 76/2021
HANKEY SANITATION UPGRADE (PHASE 3)
INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS
IN HANKEY AND CENTERTON

SCHEDULE 12: AVAILABLE PERSONNEL FOR THIS CONTRACT

**DETAILS OF EXPERIENCE AND QUALIFICATIONS FOR CONTRACTS MANAGER,
CONSTRUCTION MANAGER (SITE AGENT), PART TIME ELECTRICAL SITE AGENT AND OHS
SAFETY OFFICER**

Tenderers shall set out in the Schedules hereunder details of the Experience and Qualifications for the Contract Manager, the FULL TIME Construction Manager, The FULL TIME Site Agent and the OHS Safety Officer Experience in work of a similar nature to that for which their Tender is submitted.

The tenderer is reminded that the information provided with this Schedule shall be used in terms of Clauses F.2.1.4.3 in Part T.1.2 Tender Data to confirm the tendering entity's eligibility to tender, and the responsiveness of the Tender submitted. The tenderer is therefore required to supply detailed information relating to previous projects, and projects to date, to clearly illustrate that the tendering entity meets key staff experience requirements stipulated in Clause F.2.1.4.3.

Note: Only the information provided on this Schedule, or attached hereto, will be considered. Failure to complete this Schedule may result in the tender being non-responsive in terms of Clause F.2.1.4.3.

RETURNABLE SCHEDULE 12A CONTRACTS MANAGER	NAME & SURNAME :				
	YEARS ACCRUED EXPERIENCE AS CONTRACTS MANAGER :				
	QUALIFICATIONS :				
CONTRACT & CLIENT	NATURE OF WORK	POSITION HELD	VALUE OF WORK R(m)	DATE COMPLETED	EMPLOYER AND CONSULTING ENGINEER (NAME, TEL No. AND E-MAIL)

NOTE : Attached CV and Proof of Qualifications as per Tender's Obligations clause F2.1.4.3, in order to score ANY Functionality Points.

Also add this person to the Company's Organogram structure.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

RETURNABLE SCHEDULE 12B FULL-TIME CONSTRUCTION MANAGER (SITE AGENT) – STRUCTURAL AND CIVIL	NAME & SURNAME :				
	YEARS ACCRUED EXPERIENCE AS CONSTRUCTION MANAGER (SITE AGENT) :				
	QUALIFICATIONS :				
CONTRACT & CLIENT	NATURE OF WORK	POSITION HELD	VALUE OF WORK R(m)	DATE COMPLETED	EMPLOYER AND CONSULTING ENGINEER (NAME, TEL No. AND E-MAIL)

NOTE : Attached CV and Proof of Qualifications as per Tender's Obligations clause F2.1.4.3, in order to score ANY Functionality Points.

Also add this person to the Company's Organogram structure.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

RETURNABLE SCHEDULE 12C <u>PART-TIME ELECTRICAL SITE AGENT</u>	NAME & SURNAME : YEARS ACCRUED EXPERIENCE AS PART TIME ELECTRICAL SITE AGENT QUALIFICATIONS :				
CONTRACT & CLIENT	NATURE OF WORK	POSITION HELD	VALUE OF WORK R(m)	DATE COMPLETED	EMPLOYER AND CONSULTING ENGINEER (NAME, TEL No. AND E-MAIL)

NOTE : Attached CV and Proof of Qualifications as per Tender's Obligations clause F2.1.4.3, in order to score ANY Functionality Points.

Also add this person to the Company's Organogram structure.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

RETURNABLE SCHEDULE 12D FULL-TIME OH&S OFFICER	NAME & SURNAME : YEARS ACCRUED EXPERIENCE AS OH&S OFFICER (SACMP REGISTERED) : QUALIFICATIONS :				
CONTRACT & CLIENT	NATURE OF WORK	POSITION HELD	VALUE OF WORK R(m)	DATE COMPLETED	EMPLOYER AND CONSULTING ENGINEER (NAME, TEL No. AND E-MAIL)

NOTE : Attached CV and Proof of Qualifications as per Tender's Obligations clause F2.1.4.3, in order to score ANY Functionality Points.

Also add this person to the Company's Organogram structure.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

KOUGA LOCAL MUNICIPALITY
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SCHEDULE 13: SCHEDULE OF CONSTRUCTION PLANT

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

13.1 DETAILS OF MAJOR EQUIPMENT THAT IS OWNED BY AND IMMEDIATELY AVAILABLE FOR THIS CONTRACT.			
QUANTITY	DESCRIPTION (Incl. Type of plant; make & model; Year of Manufacture)	SIZE	CAPACITY

Attach additional pages if more space is required.

13.2 DETAIL OF MAJOR EQUIPMENT THAT WILL BE HIRED OR ACQUIRED FOR THIS CONTRACT IF MY / OUR TENDER IS ACCEPTED.			
QUANTITY	DESCRIPTION (Incl. Type of plant; make & model; Year of Manufacture)	SIZE	CAPACITY

Attach additional pages if more space is required.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY
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SCHEDULE 14: PRELIMINARY WORK PLAN AND PROGRAMME

It is estimated that this Construction Duration shall be 8 months (35 weeks) maximum.

The tenderer shall append their PRELIMINARY proposed work plan and programme to this Schedule, based on this Construction duration.

It should be noted that while a programme may form part of the required work plan, more than a programme is expected in response to this requirement. The work plan must indicate the approach and methodology that the tenderer intends following in order to reach the required outcomes. The work plan must show that the tenderer has appreciated the Scope of Work, and has good insight as to what actions or activities are required in order to comply with the Employer's objectives and be in line with the requirements set out in F.2.1.4.3 (Methodology) of the Standard Conditions of Tender in Part T1.2.

The programme shall be in the form of a bar chart (Gantt chart) or similar acceptable time/activity form reflecting the proposed sequence and tempo of the various activities and the quantities that will be carried out every week under each of the elements, comprising the work for this contract. The programme shall also indicate the point where the tenderer intends to commence work operations and the direction in which the work will proceed. The working hours shall be indicated.

The tenderer shall also take into account the additional requirements stated in the Project Specifications when drawing up the programme.

DETAILS OF THE PRELIMINARY WORK PLAN AND PROGRAMME SHALL BE APPENDED TO THIS SCHEDULE.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY**BID NO. 76/2021****HANKEY SANITATION UPGRADE (PHASE 3)****INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS****IN HANKEY AND CENTERTON FOR HANKEY AREAS****SCHEDULE 15: SCHEDULE OF ESTIMATED MONTHLY EXPENDITURE**

The tenderer shall state his estimated expenditure indicating the value of work done and materials not yet built into the Permanent Works for each month of the Contract period which he estimates will arise based on his preliminary programme and tendered rates, as set out in the table below. The total of the monthly amounts shall be equal to the tender sum.

MONTH	VALUE
1.	R
2.	R
3.	R
4.	R
5.	R
6.	R
7.	R
8.	R
SUB-TOTAL	R
VAT (15%)	R
TOTAL TENDER AMOUNT	R (INCLUDING VAT @ 15%)

SIGNED ON BEHALF OF TENDERER:.....
Signature.....
Date.....
Position.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY
BID NO. 76/2021
HANKEY SANITATION UPGRADE (PHASE 3)
INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS
IN HANKEY AND CENTERTON FOR HANKEY AREAS

SCHEDULE 16: SCHEDULE OF SUBCONTRACTORS

Tenderers shall set out below the details of **all sub-contractors**, other than plant hire firms, they propose to use on the Works for this Contract.

Acceptance of this tender shall not be construed as approval of all or any of the listed subcontractors. Should any of the subcontractors not be approved subsequent to acceptance of the tender, this shall in no way invalidate this tender, and the tendered unit rates for the various items of work shall remain final and binding, even in the event of a subcontractor not listed below being approved by the Employer's Agent.

NAME OF PROPOSED SUB-CONTRACTORS (Incl. Contact Person & Details)	REGISTERED ADDRESS	NATURE OF WORK TO BE UNDERTAKEN	APPROXIMATE VALUE OF WORK (excluding VAT)	B-BBEE STATUS (1)

(1) Indicate whether the sub-contractor is an EME or QSE

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3)

INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS

IN HANKEY AND CENTERTON

SCHEDULE 17: HEALTH AND SAFETY PLAN

Tenderers are to note the requirements of the following documentation :

- a) **Occupational Health and Safety Act**, issue in terms of Act No. 85 of 1993;
- b) **Construction Regulations 2014**, issued in terms of Section 43 of the Act.
- c) **Project Specific OHS Specifications** (bound in as Annexure 5 of this document).

The tenderer shall be deemed to have read and fully understood the requirements of the above Act and Regulations and to have allowed for all costs in compliance therewith. Tenders are to note that the above regulations form part of the contract and with reference to the requirements of Clause F.2.18.4 in Part T1.2 Tender Data.

In this regard the tenderer undertook to prepare and submit a Health and Safety Plan in respect of the Works, within 14 days of the Award of the Contract, in order to demonstrate the necessary competencies and resources to perform the construction work all in accordance with the Act and Regulations. Such Health and Safety Plan shall cover inter-alia the following details:

- (1) Management Structure, Site Supervision and Responsible Persons including a succession plan.
- (2) Contractor's induction training programme for employees, sub-contractors and visitors to the Site.
- (3) Health and safety precautions and procedures to be adhered to in order to ensure compliance with the Act, Regulations and Safety Specifications.
- (4) Regular monitoring procedures to be performed.
- (5) Regular liaison, consultation and review meetings with all parties.
- (6) Site security, welfare facilities and first aid.
- (7) Site rules and fire and emergency procedures.

Tenderers are to note that the Contractor is required to ensure that all sub-contractors or others engaged in the performance of the contract also comply with the above requirements.

The tenderer shall also take into account the additional requirements stated in the Scope of Work when drawing up the Health and Safety Plan for the contract – **Refer to Annexure 5 of Section 3.9 of the Contract, Part 2.**

I HEREWITH CONFIRM THAT I HAVE READ AND FAMILIARISE MYSELF WITH THE ABOVE LISTED OHS DOCUMENTATION, AND THAT THE TENDER PRICES FULLY COVER FOR COMPLIANCE WITH THESE DOCUMENTATION.

SIGNED ON BEHALF OF TENDERER:

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY
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SCHEDULE 18: ALTERATIONS/AMENDMENTS BY TENDERER

The Tenderer should record any **proposed** deviations or qualifications he may wish to make to the tender documents in this Returnable Schedule. Alternatively, a tenderer may state such proposed deviations and qualifications in a covering letter attached to his tender and reference such letter in this schedule. Any proposed deviations or qualifications contained in a covering letter which is not referenced in this schedule will not be considered.

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

If no deviations or qualifications are proposed, the schedule hereunder is to be marked NIL and signed by the Tenderer.

PAGE	CLAUSE OR ITEM	PROPOSED DEVIATION OR QUALIFICATION

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY
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IN HANKEY AND CENTERTON

SCHEDULE 19: RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been considered in this tender offer:		
	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

.....

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY
BID NO. 76/2021
HANKEY SANITATION UPGRADE (PHASE 3)
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**SCHEDULE 20: PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL
PROCUREMENT REGULATIONS 2017-PURCHASES/SERVICES 90/10 (MBD 6.1)**

NB:
Before completing this form, bidders must study the general conditions, definitions and directives applicable in respect of B-BBEE, as prescribed in the Preferential Procurement Regulations, 2017.

1. GENERAL CONDITIONS

- 1.1 The following preference point systems are applicable to all bids:
- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
 - the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

Either the 80/20 or 90/10 preference point system will be applicable to this tender.

- 1.2 Points for this bid shall be awarded for:

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

- 1.3 The maximum points for this bid are allocated as follows:

	POINTS
1.1.1. Price	90 or 80
1.1.2. B-BBEE status level of contribution	10 or 20
Total points for Price and B-BBEE must not exceed	100

- 1.4 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 1.5 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

2. DEFINITIONS

- 2.1 **"B-BBEE"** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- 2.2 **"B-BBEE status level of contributor"** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- 2.3 **"bid"** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- 2.4 **"Broad-Based Black Economic Empowerment Act"** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003); as amended by Act No. 46 of 2013; (this was added by us)

- 2.5 “**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;
- 2.6 “**functionality**” means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- 2.7 “**prices**” includes all applicable taxes less all unconditional discounts;
- 2.8 “**proof of B-BBEE status level of contributor**” means:
- 2.8.1 B-BBEE Status level certificate issued by an authorized body or person;
- 2.8.2 A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
- 2.8.3 Any other requirement prescribed in terms of the B-BBEE Act;
- 2.9 “**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;
- 2.10 “**rand value**” means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

3. POINTS AWARDED FOR PRICE

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

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

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

Where:

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

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

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

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

5. BID DECLARATION

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

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

- 6.1 B-BBEE Status Level of Contributor: = (maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by means of a B-BBEE certificate issued by a Verification Agency accredited by SANAS or a Registered Auditor approved by IRBA or an affidavit.

7. SUB-CONTRACTING

7.1 <i>box</i>)	Will any portion of the contract be sub-contracted? (<i>Tick applicable</i>	YES		NO	
7.1.1	If yes, indicate:				
7.1.1.1	what percentage of the contract will be subcontracted?				
7.1.1.2	the name of the sub-contractor?				
7.1.1.3	the B-BBEE status level of the sub-contractor?				
7.1.1.4	whether the sub-contractor is an EME or QSE? (<i>Tick applicable</i> <i>box</i>)	YES		NO	

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

Designated Group: An EME or QSE which is at 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		
Cooperative owned by black people		
Black people who are military veterans		
OR		
Any EME		
Any QSE		

8. DECLARATION WITH REGARD TO COMPANY/FIRM

8.1	Name of Company/firm:		
8.2	VAT registration number		
8.3	Company registration number		
8.4	Type of Company/Firm: (Tick applicable box)	Partnership / Joint Venture / Consortium	
		One-person business / sole proprietor	
		Close Corporation	
		Company	
		(Pty) Limited	
8.5	Describe Principal Business Activities		
8.6	Company Classification (Tick applicable box)	Manufacturer	
		Supplier	
		Professional service provider	
		Other service providers, e.g. transporter, etc.	
8.7 Municipal Information			
Municipality where business is situated:			
Registered Account Number:			
Stand Number:			
8.8	Total Number of years the Company/Firm has been in business:		

9. I / we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contribution indicated in paragraph 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:
- 9.1 The information furnished is true and correct;
- 9.2 The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form.
- 9.3 In the event of a contract being awarded as a result of points claimed as shown in paragraph 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- 9.4 If the B-BBEE status level of contribution has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
- 9.4.1 disqualify the person from the bidding process;
- 9.4.2 recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
- 9.4.3 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;
- 9.4.4 restrict the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, 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
- 9.4.5 forward the matter for criminal prosecution

SIGNATURE OF BIDDER(S):			
WITNESS 1:		WITNESS 2:	
DATE:			
ADDRESS:			

TO BE FILLED IN AND SIGNED BY A COMMISSIONER OF OATH IF NO B-BBEE CERTIFICATE IS AVAILABLE

SWORN AFFIDAVIT –B-BBEE EXEMPTED MICRO ENTERPRISE

I, the undersigned,

Full name & Surname	
Identity number	

Hereby declare under oath as follows:

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

Enterprise Name	
Trading Name	
Registration Number	
Enterprise Address	

3. I hereby declare under oath that:
 - The enterprise is _____% black owned;
 - The enterprise is _____% black woman owned;
 - Based on the management accounts and other information available on the _____ financial year, the income did not exceed R10,000,000.00 (ten million rands);
 - Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% black owned	Level One (135% B-BBEE procurement recognition)	
More than 51% black owned	Level Two (125% B-BBEE procurement recognition)	
Less than 51% black owned	Level Four (100% B-BBEE procurement recognition)	

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

Deponent Signature: _____

Date:

Commissioner of Oaths
Signature & stamp

KOUGA LOCAL MUNICIPALITY
BID NO. 76/2021
HANKEY SANITATION UPGRADE (PHASE 3)
INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS
IN HANKEY AND CENTERTON

SCHEDULE 21: BCCEI CERTIFICATE

The Contractor shall attached to this page proof that the tendering entity has been registered with the Bargaining Council for Civil Engineering Industry (BCCEI) of South Africa (refer to Tender Conditions clause F2.14.6), and that he / she will comply with the prescribed Section 31 of the Labour Relations Act, 1995, as published in the government Gazette Notice 42637, dated 16 Aug 2019.

The Contractor herewith accept that he / she will comply with the labour wages per Task Grade as published in above Government Gazette Notice, and shall fully familiarise him / her with the latest current wages accordingly.

Attach additional pages if more space is required.

Number of sheets appended by the tenderer to this Schedule (If nil, enter NIL).

SIGNED ON BEHALF OF TENDERER:

.....

.....
Signature

.....
Date

.....
Position

.....
Name of Bidder

KOUGA LOCAL MUNICIPALITY
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SCHEDULE 22: COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT, 1993
(ACT 130 OF 1993)

COMPENSATION FOR OCCUPATIONAL INJURIES AND DISEASES ACT, 1993 (ACT 130 OF 1993)	
Kouga Local Municipality has legal duty in terms of Section 89 of the said Act to ensure that all contractors with whom agreements are entered into for the execution of work are registered as employers in accordance with the provisions of this Act and that all the necessary assessments have been paid by the Contractor. In order to enter into this agreement, the following information is needed regarding the above-mentioned:	
Contractor's registration number with the office of the Compensation Commissioner:	
NOTE: A copy of the latest receipt together with a copy of the relevant assessment OR a copy of a valid Letter of Good Standing must be handed in, in this regard.	

PRINT NAME:			
CAPACITY:		NAME OF FIRM	
SIGNATURE:		DATE:	

KOUGA LOCAL MUNICIPALITY
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SCHEDULE 23: DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT
FOR DESIGNATED SECTORS (MBD 6.2)

DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT FOR DESIGNATED SECTORS

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

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

1. General Conditions

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

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

Where

x is the imported content in Rand

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

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by South African Reserve Bank (SARB) at 12:00 on the date of advertisement of the bid as indicated in paragraph 4.1 below.

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

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

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

Description of services, works or goods	Stipulated minimum threshold
Cement and Concrete	100%
Steel Reinforcing	100%
Pumps & Motors	70%
Electrical Components & Cables	70%
Mechanical Components	70%

Please submit also letters of exemption from DTi if local content is not 100%.
Please ensure that you put all the items on Annexure A on which you make an offer.

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

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

- 3.1 If yes, the rate(s) of exchange to be used in this bid to calculate the local content as prescribed in paragraph 1.5 of the general conditions must be the rate(s) published by SARB for the specific currency at 12:00 on the date of advertisement of the bid.

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

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

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

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

SIGNATURE OF BIDDER(S):			
WITNESS 1:		WITNESS 2:	
DATE:			
ADDRESS:			

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

LOCAL CONTENT DECLARATION BY CHIEF FINANCIAL OFFICER OR OTHER LEGALLY RESPONSIBLE PERSON NOMINATED IN WRITING BY THE CHIEF EXECUTIVE OR SENIOR MEMBER/PERSON WITH MANAGEMENT RESPONSIBILITY (CLOSE CORPORATION, PARTNERSHIP OR INDIVIDUAL)

IN RESPECT OF BID NO. 76/2021, ISSUED BY KOUGA LOCAL MUNICIPALITY.

NB

- 1 The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the bidder.
- 2 Guidance on the Calculation of Local Content together with Local Content Declaration Templates (Annex C, D and E) is accessible on http://www.thdti.gov.za/industrial_development/ip.jsp. Bidders should first complete Declaration D. After completing Declaration D, bidders should complete Declaration E and then consolidate the information on Declaration C. **Declaration C should be submitted with the bid documentation at the closing date and time of the bid in order to substantiate the declaration made in paragraph (c) below.** Declarations D and E should be kept by the bidders for verification purposes for a period of at least 5 years. The successful bidder is required to continuously update Declarations C, D and E with the actual values for the duration of the contract.

I, the undersigned, (full names),

do hereby declare, in my capacity as

of(name of bidder entity), the following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that:
 - (i) the goods/services/works to be delivered in terms of the above-specified bid comply with the minimum local content requirements as specified in the bid, and as measured in terms of SATS 1286:2011; and
- (c) The local content percentage (%) indicated below has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E which has been consolidated in Declaration C:

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

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

The local content percentages for each product has been calculated using the formula given in clause 3 of SATS 1286:2011, the rates of exchange indicated in paragraph 4.1 above and the information contained in Declaration D and E.

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

	SIGNATURE	DATE
TENDERER:		
WITNESS No. 1:		
WITNESS No. 2:		

Local Content Declaration - Summary Schedule

Tender No.
Tender description:
Designated product(s)
Tender Authority:
Tendering Entity name:
Tender Exchange Rate:
Specified local content %

Note: VAT to be excluded from all calculations

USD EU GBP YEN etc.

[illegible][illegible]

(C20) Total tender value

(C21) Total Exempt imported content

(C22) Total Tender value net of exempt imported content

(C23) Total Imported content

(C24) Total local content

(C25) Average local content % of tender

Signature of tenderer from Annex B

Date: _____

Annex D

Imported Content Declaration - Supporting Schedule to Annex C

(D1) Tender No.

(D2) Tender description:

(D3) Designated Products:

(D4) Tender Authority:

(D5) Tendering Entity name:

(D6) Tender Exchange Rate:

USD

EU

GBP

YEN

etc.

Note: VAT to be excluded from all calculations

A. Exempted imported content

Calculation of imported content										Summary	
Tender item no's	Description of imported content	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Exchange Rate	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Exempted imported value
(D7)	(D8)	(D9)	(D10)	(D11)	(D12)	(D13)	(D14)	(D15)	(D16)	(D17)	(D18)
(D19) Total exempt imported value										This total must correspond with Annex C - C 21	

B. Imported directly by the Tenderer

Calculation of imported content										Summary	
Tender item no's	Description of imported content	Unit of measure	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Tender Qty	Total imported value
(D20)	(D21)	(D22)	(D23)	(D24)	(D25)	(D26)	(D27)	(D28)	(D29)	(D30)	(D31)
(D32) Total imported value by tenderer											

C. Imported by a 3rd party and supplied to the Tenderer

Calculation of imported content										Summary	
Description of imported content	Unit of measure	Local supplier	Overseas Supplier	Foreign currency value as per Commercial Invoice	Tender Rate of Exchange	Local value of imports	Freight costs to port of entry	All locally incurred landing costs & duties	Total landed cost excl VAT	Quantity imported	Total imported value
(D33)	(D34)	(D35)	(D36)	(D37)	(D38)	(D39)	(D40)	(D41)	(D42)	(D43)	(D44)
(D45) Total imported value by 3rd party											

D. Other foreign currency payments

Calculation of foreign currency payments					Summary of payments	
Type of payment	Local supplier making the payment	Overseas beneficiary	Foreign currency value paid	Tender Rate of Exchange	Local value of payments	
(D46)	(D47)	(D48)	(D49)	(D50)	(D51)	
(D52) Total of foreign currency payments declared by tenderer and/or 3rd party						
(D53) Total of imported content & foreign currency payments - (D32), (D45) & (D52) above					This total must correspond with Annex C - C 23	

Signature of tenderer from Annex B

Date:

Annex C

Local Content Declaration - Summary Schedule

(C1) Tender No.
 (C2) Tender description:
 (C3) Designated product(s)
 (C4) Tender Authority:
 (C5) Tendering Entity name:
 (C6) Tender Exchange Rate:
 (C7) Specified local content %

Note: VAT to be excluded from all calculations

USD

EU

GBP

YEN

etc.

Calculation of local content

Tender item no's	List of items	Tender price - each (excl VAT)	Exempted imported value	Tender value net of exempted imported content	Imported value	Local value	Local content % (per item)
(C8)	(C9)	(C10)	(C11)	(C12)	(C13)	(C14)	(C15)

Tender summary

Tender Qty	Total tender value	Total exempted imported content	Total Imported content
(C16)	(C17)	(C18)	(C19)

(C20) Total tender value

(C21) Total Exempt imported content

(C22) Total Tender value net of exempt imported content

(C23) Total Imported content

(C24) Total local content

(C25) Average local content % of tender

Signature of tenderer from Annex B

Date:

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3)

**INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS IN
HANKEY AND CENTERTON**

SCHEDULE 24: FORM OF INDEMNITY

INDEMNITY

Given by (Name of Company) _____ of
(registered address of Company) _____ a company
incorporated with limited liability according to the Company Laws of the Republic of South Africa (hereinafter called the
Contractor), represented herein by (Name of Representative) _____ in his
capacity as (Designation) _____ of the
Contractor, is duly authorised hereto by a resolution dated _____ /20____, to sign on
behalf of the Contractor.

WHEREAS the Contractor has entered into a Contract dated _____ / 20____,
with the Municipality who require this indemnity from the Contractor.

NOW THEREFORE THIS DEED WITNESSES that the Contractor does hereby indemnify and hold harmless the
Municipality in respect of all loss or damage that may be incurred or sustained by the Municipality by reason of or in any
way arising out of or caused by operations that may be carried out by the Contractor in connection with the aforementioned
contract; and also in respect of all claims that may be made against the Municipality in consequence of such operations, by
reason of or in any way arising out of any accidents or damage to life or property or any other cause whatsoever; and also
in respect of all legal or other expenses that may be incurred by the Municipality in examining, resisting or settling any
such claims; for the due performance of which the Contractor binds itself according to law.

SIGNATURE OF CONTRACTOR:	
DATE:	
SIGNATURE OF WITNESS 1:	
DATE:	
SIGNATURE OF WITNESS 2:	
DATE:	

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3)

**INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS
IN HANKEY AND CENTERTON**

SCHEDULE 25: DECLARATION BY TENDERER

I / We acknowledge that I / we am / are fully acquainted with the contents of the conditions of tender of this tender document and that I / we accept the conditions in all respects.

I / We agree that the laws of the Republic of South Africa shall be applicable to the contract resulting from the acceptance of *my / our tender and that I / we elect *domicilium citandi et executandi* (physical address at which legal proceedings may be instituted) in the Republic at:

I / We accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving in me / us under this agreement as the principal liable for the due fulfilment of this contract.

I / We furthermore confirm I / we satisfied myself / ourselves as to the corrections and validity of my / our tender; that the price quoted cover all the work / items specified in the tender documents and that the price(s) cover all my / our obligations under a resulting contract and that I / we accept that any mistake(s) regarding price and calculations will be at my / our risk.

I / We furthermore confirm that my / our offer remains binding upon me / us and open for acceptance by the Purchases / Employer during the validity period indicated and calculated from the closing date of the bid, and that I / we can not withdraw this Bid offer submitted, before the termination of the original tender validity period

I / we specifically take note of Clause 9.2.1.3.1 of the GCC 2015 related to financial implications to me / the Tendering Entity for failure to commence with the Works, or to proceed with the Works, or to complete the Works in accordance with the Scope and Contract, and agree to adhere to these Contractual obligations.

Failure to sign this page may lead to Disqualification at Tender Evaluation stage.

SIGNATURE		NAME (PRINT)	
CAPACITY		DATE	
NAME OF FIRM			
WITNESS 1		WITNESS 2	

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3) CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON

(CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL WORKS)

SCHEDULE 26: DECLARATION FOR PROCUREMENT ABOVE R10 MILLION (VAT INCL.) – (MBD 5)

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

1. Are you by law required to prepare annual financial statements for auditing?	YES		NO	
1.1. If yes, AUDITED ANNUAL FINANCIAL STATEMENTS FOR THE PAST THREE YEARS MUST BE SUBMITTED WITH THE TENDER , 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 a municipality 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 a municipality or other service provider in respect of which payment is overdue for more than 30 days.				
2.2. If yes, provide.				
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	
NAME (PRINT)				
CAPACITY				
NAME OF FIRM				

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Part C1: Agreements and Contract Data

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KOUGA LOCAL MUNICIPALITY

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**HANKEY SANITATION UPGRADE (PHASE 3)
INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS
IN HANKEY AND CENTERTON**

C1.1 Form of Offer and Acceptance

Offer

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

BID NO. 76/2021: HANKEY SANITATION UPGRADE (PHASE 3) : CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON

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

By the representative of the Tenderer, deemed to be duly authorised, signing this part of this Form of Offer and Acceptance, the Tenderer offers to perform all of the obligations and liabilities of the Contractor under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

THE OFFERED TOTAL OF THE PRICES INCLUSIVE OF VAT IS:	
In figures:	R
In words:	

- 1.1. 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		
Name of tenderer:		
Name of witness:	<i>(Insert name and address of organisation)</i>	Date
Signature of witness:		

Acceptance

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

The terms of the contract are contained in:

- Part C1: Agreements and Contract Data (which includes this Agreement)
- Part C2: Pricing Data
- Part C3: Scope of Work
- Part C4: Site Information

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

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

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

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

Signature(s):			
Name(s):			
Capacity:			
For the Employer:	Kouga Local Municipality		
Name of witness:		Date:	
Signature of witness:			

Schedule of Deviations

Notes:

1. The extent of deviations from the tender documents issued by the Employer prior to the tender closing date is limited to those permitted in terms of the Conditions of Tender,
2. A Tenderer's covering letter shall not be included in the final contract document. Should any matter in such letter, which constitutes a deviation as aforesaid, become the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here,
3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the Parties becomes an obligation of the contract shall also be recorded here,
4. Any change or addition to the tender documents arising from the above agreements and recorded here, shall also be incorporated into the final draft of the Contract,

1	Subject
	Details
	
	
	
2	Subject
	Details
	
	
	
3	Subject
	Details
	
	
	
4	Subject
	Details
	
	
	

By the duly authorised representatives signing this Schedule of Deviations, the Employer and the Tenderer agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or change to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the Tenderer of a completed signed copy of this Agreement shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the Tenderer:

Signature(s)

Name(s)

Capacity

(Name and address of organization)

Name and signature of witness

Date

For the Employer:

Signature(s)

Name(s)

Capacity

(Name and address of organization)

Kouga Local Municipality
PO Box 21
Jeffreys Bay

Name and signature of witness

Date

Confirmation of Receipt

The Tenderer, (now Contractor), identified in the Offer part of this Agreement hereby confirms receipt from the Employer, identified in the Acceptance part of this Agreement, of one fully completed original copy of this Agreement, including the Schedule of Deviations (if any) today:

the.....(day)

of(month)

20.....(year)

at(place)

For the Contractor:

.....
Signature

.....
Name

.....
Capacity

Signature and name of witness:

.....
Signature

.....
Name

ONLY TO BE COMPLETED AT
ACCEPTANCE STAGE

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C1.2 Contract Data

Part 1: Data Provided by the Employer

GENERAL CONDITIONS OF CONTRACT

The following standardised General Conditions of Contract:

General Conditions of Contract for Construction Works, Third Edition, 2015

prepared by the South African Institution of Civil Engineering (SAICE) shall apply to and form the General Conditions of Contract for this contract. Copies of these conditions of contract are obtainable from the South African Institution of Civil Engineering (SAICE), Private Bag X200, Halfway House 1685, Tel: (011) 805 5947, Fax: (011) 805 5971, e-mail: civilinfo@saice.org.za.

Copies of the General Conditions of Contract are available for inspection and scrutiny at the offices of the Employer.

The Pro-formas bound with the General Conditions of Contract 2015, on pages 96 to 113 shall not apply to this Contract and shall be replaced with the documents bound into this Contract Document.

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

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

The documents forming the Contract are to be taken as mutually explanatory of one another. For the purposes of interpretation, the priority of the documents shall be in accordance with the following sequence:

- a) the Form of Offer and Acceptance,
- b) the Contract Specific Data within the Contract Data,
- c) the General Conditions of Contract for Construction Works, Third Edition, 2015,
- d) the Drawings,
- e) the Scope of Work,
- f) the Pricing Data, and
- g) the conditions of tender, the tender data and tender schedules

If an ambiguity or discrepancy is found in the documents, the Employer's Agent shall issue any necessary clarification or instruction.

CONTRACT SPECIFIC DATA

The following contract specific data are applicable to this Contract:

Clause 1.1.1.5:

The Contractual Commencement Date shall be the date when the Form of Offer, signed by the Kouga Local Municipality, has been issued to the Contractor, for which written proof of the delivery date will be required.

Clause 1.1.1.13:

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

Clause 1.1.1.14:

The time for achieving Practical Completion, inclusive of the 14 day period referred to in Clause 5.3.2 below, inclusive of non-working days referred to in Clause 5.8.1 below and inclusive of the construction permit application period referred to in Clause 5.3.4, but exclusive of special non-working days (Clause 5.8.1) are as follows:

The times for achieving Practical Completion for the portions as set out in the Scope of Works is: **Within 8 months / (40 weeks) from the Commencement Date.**

The time for achieving Practical Completion of the Whole of the Works is also 40 weeks, exclusive of special non-working days referred to in Clause 5.8.1.

Clause 1.1.1.15:

The **Employer** is the **Kouga Local Municipality**, represented by the **Director: Infrastructure & Engineering** and/or such other person or persons duly authorised thereto by the Employer in writing.

The name of the Employer is: KOUGA LOCAL MUNICIPALITY

and is referred to in this Contract Document by the terms "Employer", "Municipality" or "Council" as the context provides.

The **Employer's Agent**, referred to in the Contract documents:

Name	:	JG AFRIKA (Pty) Ltd
Represented By	:	Mr Viahn Parazee
		or any director or shareholder of the company
Address	:	Southern Life Gardens Block D Ground Floor, 2 nd Avenue Newton Park, Port Elizabeth, 6057
Telephone	:	(041) 390 8700
Fax	:	(041) 363 1922
E-mail	:	ParazeeV@jgafrika.com

Clause 1.1.1.26:

The Pricing Strategy is a Re-measurement Contract.

Add the following clauses after Clause 1.1.1.34:

- 1.1.1.35 **"Drawings"** means all drawings, calculations and technical information forming part of the Contract Documents and any modifications thereof or additions thereto from time to time approved in writing by the Employer's Agent or delivered to the Contractor by the Employer's Agent.
- 1.1.1.36 **"Letter of Notification"** means the letter of formal notification, signed by the Employer, of the decision of the Supply Chain Management Bid Adjudication Committee sent to all tenderers. The notification of the decision does not form part of the Employer's Acceptance of the successful tenderer's Form of Offer and no rights shall accrue

Clause 1.2.1.2:

The address of the Employer is:

Physical address: Directorate: Infrastructure and Engineering
Kouga Local Municipality
16 Woltemade Street
Jeffreys Bay
6330

Clause 1.1.1.16:

The **Employer's Agent**, referred to in the documents, is the firm of JG AFRIKA (Pty) Ltd acting through a director, executive associate, associate or an official authorised thereto in writing.

Clause 1.2.1.2:

The address of the Employer's Agent is:

Physical address: Southern Life Gardens
Block D Ground Floor, 70 - 2nd Avenue
Newton Park, Port Elizabeth

Postal address: P O Box 27308
Greenacres, 6057

Clause 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 General Conditions of Contract:

1. Clause 3.3.1 Nomination of Employer's Agent's Representative;
2. Clause 3.3.4 Employer's Agent's authority to delegate;
3. Clause 4.7 The issuing of instructions for dealing with fossils and the like;
4. Clause 5.11.2 Suspension of the Works;
5. Clause 5.12.4 Acceleration instead of extension of time;
6. Clause 6.3.1 Ordering of any variation that causes the contract price to exceed the contract sum;
7. Clause 6.10.10 Advance payment, for items not listed in the Advance Payment Schedule;
8. Clause 8.2.2.2 Authorizing the Contractor to repair and make good excepted risks.

Add:

5.7.2 - Work at night as well as by day
5.8 - Non-working times
5.13 - Reduction of penalty for delay.
5.14.2 - The issue of a Certificate of Practical Completion.
5.14.4 - The issue of a Certificate of Completion.
5.16.1 - The issue of a Final Approval Certificate.
6.3 - Variation Orders which may exceed R 20 000
6.6 - Instruction to expend on Provisional and Prime Cost Sums
6.11 - Adjustment of General Items & Approval of Claims

Clause 4.1:

Add the following Clause after Clause 4.1.2:

- 4.1.3 Where the Contract is based on an alternative tender offer submitted by the Tenderer/Contractor, he shall, notwithstanding acceptance of the offer by the Employer, be liable for any deficiency in the alternatives proposed, for any costs in ensuring that the alternatives meet the Employer's standards and requirements, and for any loss or damage arising out of such error or deficiency.

Clause 4.3:

Add the following clause after Clause 4.3.2.:

- 4.3.3 The Employer and the Contractor shall enter into an agreement to complete the work required for the construction of the works in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act 85 of 1993) and the Construction Regulations promulgated thereunder.

An agreement is included in the Contract Document (C1.4 of Contract Data) and shall be completed and submitted to the Employer together with a letter of good standing from the Compensation Commissioner (if not insured with a Licenced Compensation Insurer) within fourteen (14) days after the Commencement Date. The Contractor shall ensure that any letter of good standing shall be timeously renewed in order that it remains in full force for the duration of the Contract.

Clause 5.3.1:

The documentation required before commencement with Works execution is:

- (1) Approved Health and Safety Plan (Refer to Clause 4.3).
- (2) Initial programme (Refer to Clause 5.6).
- (3) Security (Refer to Clause 6.2).
- (4) Insurance (Refer to Clause 8.6).
- (5) Occupational Health and Safety Agreement (C1.5 of the Contract Document).
- (6) Letter of Good Standing from the Compensation Commissioner (if not insured with a Licensed Compensation Insurer).
- (7) Protection of the Environment Declaration (Part C1.6 in Agreements and Contract Data).
- (8) Proof of Registration / Letter of Good Standing with the Bargaining Council for the Civil Engineering Industry (BCCEI).
- (9) Insurance Broker's Warranty (C1.7 of the Contract Document)
- (10) Contract of Temporary Employment as Community Liaison Officer (C1.8 of the Contract Document)

Add the following to Clause 5.3.1:

Such instruction shall, where the Contract Sum exceeds one hundred and thirty million Rand (R130 000 000), also be subject to the issuing, by the Provincial Director of the Department of Labour, of a construction work permit to perform the intended construction work in terms of Clause 5.3.4 below. The application can only be completed once the Contractor is appointed and the approval process is estimated to take 4 weeks. The Contractor is to allow for this time in his programme.

Clause 5.3.2:

The time to submit the documentation required before commencement with Works execution is fourteen (14) days from the commencement of the contract.

Clause 5.3.3:

Add the following to Clause 5.3.3:

Notwithstanding the above, where the Contract Sum exceeds one hundred and thirty million Rand (R130 000 000), and a construction work permit from the Provincial Director of the Department of Labour is required, commencement of the Works shall not be deemed to take place until such construction work permit has been issued by the Provincial Director.

Add the following Clause after Clause 5.3.3:

5.3.4 Application for Construction Work Permit

Where the Contract Sum exceeds one hundred and thirty million Rand (R130 000 000), the Employer shall, in compliance with Regulation 3 of the Construction Regulations, read together with the exemptions published in Government Notice dated 26 July 2018, apply to the Provincial Director of the Department of Labour for a construction work permit to perform the intended construction work. The employer will apply for the construction work permit as soon as possible after its Bid Adjudication Committee has awarded the contract, and the period that the Department of labour requires to issue the permit will run concurrently with the appeal period.

Should the issuing of a construction work permit delay the Employer's Agent's instruction to commence executing the Works and this in turn causes a delay to Practical Completion, then the Contractor shall be entitled to make a claim in accordance with Clause 10.1. Should, however, the issuing of a construction work permit be delayed by the submission of an unacceptable draft Health and Safety Plan, in the opinion of either the Employer's Health and Safety Agent, or the Provincial Director of the Department of Labour, no claim for an extension of time will be entertained.

Clause 5.4.2:

Access to and possession of the site shall not be exclusive to the Contractor, but as set out in the Scope of Work and Site Information.

Add the following clause after Clause 5.4.3:

5.4.4 The Contractor shall bear all costs and charges for special and temporary rights of way required by him in connection with access to the Site.

Clause 5.6.2.3:

Insert the following after "...approvals,":
... permits,

Clause 5.8.1:

The non-working days are Saturdays and Sundays.

The special non-working days are:

- (1) All gazetted public holidays falling outside the year end break.
- (2) The year end break shall be as confirmed by the South African Federation of Civil Engineering Contractor's on their website safcec.org.za yearly.

Clause 5.12.2.2:

No extension of time will be granted in respect of any delays attributed to normal climatic conditions. Normal climatic conditions shall be deemed to include normal rainfall and associated wet conditions and materials, strong winds and extremes of temperature. However, in the event that delays to critical activities exceed the number of working days listed below for each month, then abnormal climatic conditions shall be deemed to exist, and an extension of time may be claimed in accordance with the provisions of Clause 5.12.

The number of days quoted below shall be regarded as a fair estimate of the delays to be anticipated and allowed for under normal climatic conditions where inclement weather prevents or disrupts critical work.

January	2 days
February	2 days
March	2 days
April	2 days
May	2 days
June	4 days
July	4 days
August	4 days
September	4 days
October	2 days
November	2 days
December	2 days

Claims for delays for abnormal climatic conditions shall be accompanied by substantiating facts and evidence, which shall be submitted timeously as each day or half-day delay is experienced.

It shall be further noted that where the critical path is not affected, no extension of time for abnormal climatic conditions or for any other reason will be entertained.

Clause 5.12.5:

Add the following to Clause 5.12 :

A delay in so far as extension of time is concerned, will be regarded as a delay ONLY if, on a claim submitted by the Contractor is in accordance with the General Conditions of Contract, and it can be proved that progress on an item or items of work **on the critical path of the approved programme** for the execution of the Works by the Contractor, has been delayed or brought to a halt. Delays on normal working days only, based on a working week of five normal working days, will be taken in account for the extension of time.

Clause 5.13.1:

The penalty for failing to complete the Works is **R5000** per calendar day.

Clause 5.16.3:

The latent defects period is **10** years

Clause 6.2.1:

The security to be provided by the Contractor shall be a performance guarantee. The Guaranteed Sum shall be calculated as follows:

CONTRACT SUM	PERCENTAGE OF CONTRACT VALUE
Up to R300 000	Nil
R300 001-R1 000 000	2.5%
R1 000 001-R3 000 000	5%
R3 000 001-R5 000 000	7.5%
R5 000 001- and above	10% - APPLICABLE TO THIS CONTRACT

The performance guarantee shall contain the wording of the document included in C1.3.

Clause 6.2.2:

Delete Clause 6.2.2 in its entirety.

Clause 6.2.3:

Delete Clause 6.2.3 in its entirety and replace with the following:

The Contractor shall ensure that the performance guarantee remains valid and enforceable until the Certificate of Completion of the Works is issued.

Clause 6.4.1.5

In respect of additional work carried out by any subcontractor, the work shall be valued in accordance with the provision of Clause 6.6.

Clause 6.5.1.2.3:

The percentage allowance to cover profit and overhead charges shall be the percentage tendered under the specific tender Items of the Schedules of Quantities.

Clause 6.6.1.2.1

The percentage commission on the sums paid to Subcontractors shall be the percentage tendered under the specific tender Items of the Schedules of Quantities.

Clause 6.8.2:

Add the following to Clause 6.8.2:

The Contract Price shall be subject to Contract Price Adjustment in accordance with Clause 6.8 of the General Conditions of Contract.

If special materials are specified in Part 2 of the Contract Data, then the provisions of Clause 6.8.3 of the General Conditions of Contract shall apply to such special materials.

The base month is one month prior to the month in which the tender closed.

Furthermore, the Contract Price Adjustment Schedule shall be amended as follows:

"L" is the "Labour Index" and shall be the Consumer Price Index (CPI) for "All items (CPI Headline)", as published in the Statistical News Release, P0141: Table A – Consumer Price Index: Main Indices of Statistics South Africa.

"P" is the "Plant Index" and shall be the Construction Materials Price Index for "Plant and Equipment" as published in the Statistical News Release P0151.1, Table 4 – Mining and construction plant and equipment price index of Statistics South Africa.

"M" is the "Materials Index" and shall be the Construction Materials Price Index for selected materials, Materials for "Civil Engineering material – structures (**excluding bitumen**)", as published in the Statistical News Release P0151.1, Table 6 – Civil Engineering material price indices of Statistics South Africa

"F" is the "Fuel Index" and shall be the Producer Price Index (PPI) for "Coal and Petroleum Products - Diesel", as published in the Statistical News Release P0142.1: Table 1 –PPI for final manufactured goods of Statistics South Africa.

Where applicable, in terms of the foregoing, the value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule with the following values for "Water and Sewer Reticulation":

The value of "x" is 0,10.

The values of the coefficients for "Water and Sewer Reticulation" are:

a = 0,15 b = 0,20 c = 0,55 d = 0,10

The urban area nearest to the site is the Nelson Mandela Bay Metropolitan area.

The base month is the month prior to closing of the tender.

Clause 6.8.3: Variation in the cost of special materials

Price adjustment for variations in the cost of special materials is provided for in the Special Materials Schedule at the end of this Part 1: Contract Data provided by the Employer.

Clause 4.2 of the Contract Price Adjustment Schedule

Delete the words "by the Contractor" that appear after ".... entered in the Contract Data"

Clause 6.8.4:

Add the following to Clause 6.8.4:

Notwithstanding the above, in the event that a public holiday is proclaimed after 28 days before the closing date for tenders, no costs other than those that can be claimed under Clause 5.12.3 shall be added to the contract price.

Add the following after Clause 6.8.4:

6.8.5. If price adjustment for variations in the cost of plant and materials imported from outside of South Africa is provided for in the contract data, such adjustment shall be based on the information contained on the schedule titled "**Price Basis for Imported Resources**" and as below. For the purposes of this clause the Rand value of imported Plant and Materials inserted on the schedule titled "**Price Basis for Imported Resources**" (column (F)) shall be the value in foreign currency (column (A)) converted to South African Rand (column (C)) by using the closing spot selling rate quoted by **Employer's** main banker on the Base Date (seven calendar days before tender closing date) rounded to the second decimal place (column(B)), to which shall be added any Customs Surcharge and Customs Duty applicable at that date (columns (D) and (E)).

6.8.5.1 Adjustment for variations in rates of exchange:

- (a) The value in foreign currency inserted in column (A) shall be subject to clause (h) below when recalculating the Rand value.
- (b) The rate of exchange inserted in column (B) shall be the closing spot selling rate quoted by **Employer's** main banker, on the Base Date, rounded to the second decimal place, subject to sub-paragraph (c) below.
- (c) If the rate of exchange inserted by the Tenderer differs from the Employer's Bank rate referred to above, then the Employer's Bank rate shall apply and the Rand value in columns (C) and (F) shall be recalculated accordingly, without altering the price in the Schedules of Quantities for the relevant items.
- (d) If a tender from a supplier or sub-contractor provides for variations in rates of exchange, the Contractor may **only** claim for variations in rates of exchange if he binds the supplier or sub-contractor to the same provision to take out forward cover as described in sub-paragraph (e) below.
- (e) The Contractor (or supplier or sub-contractor) shall within five working days from the date of placing a firm order on an overseas supplier, cover or recover forward by way of a contract with a bank which is an authorised foreign exchange dealer, the foreign exchange component of the cost of any imported Plant and Materials inserted by the Tenderer on the schedule titled "**Price Basis for Imported Resources**".

- (f) When the Contractor (or supplier or sub-contractor) so obtains forward cover, the Contractor shall immediately notify the Employer of the rate obtained and furnish the Employer with a copy of the foreign exchange contract note.
- (g) Based on the evidence provided in sub-paragraph (f) above, the value in Rand inserted in column (C) on the schedule titled **"Price Basis for Imported Resources"** shall be recalculated using the forward cover rate obtained, and any increase or decrease in the Rand value defined in this clause shall be adjusted accordingly, subject to sub-paragraph (h) below. Failure to provide such evidence shall result in no such recalculation shall be considered by the Employer.
- (h) The adjustments shall be calculated upon the value in foreign currency in the Contractor's (or supplier's or sub-contractor's) **forward cover contract**, provided that, should this value exceed the value in foreign currency inserted in column (A) of the schedule titled **"Price Basis for Imported Resources"**, then the value in column (A) shall be used.

6.8.5.2 Adjustment for variations in customs surcharge and customs duty

- (a) Any increase or decrease in the Rand value between the amounts of Customs Surcharge and Customs Duty inserted on the schedule titled **"Price Basis for Imported Resources"** and those amounts actually paid to the Customs and Excise Authorities, which are due to changes in the percentage rates applicable or to the foreign exchange rate used by the authorities, shall be adjusted accordingly.
- (b) The Tenderer shall state the Customs Duty Tariff Reference applicable to each item and the Contractor shall advise the Employer's Agent of any changes which occur.

6.8.5.3 Adjustment for variation in labour and material Costs

If the prices for imported Plant and Materials are not fixed, the Contractor shall in his Tender specify the formula for calculating Contract Price Adjustments normally used in the country of manufacture and the indices and relative proportions of labour and material on which his Tender prices are based. Evidence of the indices applicable shall be provided with each claim. The indices applicable 42 days before contractual dispatch date from the factory will be used for the purposes of Contract Price Adjustment.

Failure to specify a formula in the Tender shall mean that the prices are fixed or shall be deemed to be fixed.

Clause 6.10.1.5:

Delete Clause 6.10.1.5 in its entirety and replace with the following:

6.10.1.5 The value of Plant and materials:

- 6.10.1.5.1 up to a percentage limit of **80%** for materials referred to in Clause 6.9.1.1 brought on to the Site but not yet built into the Permanent Works;

Provided that the Contractor has produced documentary evidence in the form of a Tax Invoice, issued to the Contractor for this Contract, of ownership of materials and has delivered to the Employer an indemnity, approved in writing by the Employer, against any claim to or in respect of such materials by reason of the Contractor's sequestration or liquidation, or of any defect in the Contractor's title to such materials;

- 6.10.1.5.2 which have been manufactured and are stored at places other than the Site, in respect of which the Employer has indicated, on the Advance Payment Schedule, that advance payment will be permitted;

- 6.10.1.5.3 for which a deposit with order is required from the Contractor by a manufacturer/supplier, only in respect of which the Employer has indicated, on the Advance Payment Schedule, that advance payment will be permitted;

The terms and conditions for advance payment are set out in Clause 6.10.10 and in the Advance Payment Schedule at the end of this Part 1: Contract Data provided by the Employer.

- 6.10.1.5.4 No advance payments shall be allowed for any Plant or equipment supplied to site or rented.

Clause 6.10.1.7:

Add the following after the words “Clause 5.13”:

or any other fines or penalties that become due under the Contract.

Clause 6.10.3:

Add the following to Clause 6.10.3:

Notwithstanding the provision of a performance guarantee in terms of Clause 6.2.1, interim payments to the Contractor shall be subject to a retention by the Employer of an amount of **10%** of the said amounts due to the Contractor, up to a limit of 5% of the Contract Sum. No Retention Guarantee will be accepted in lieu of the Retention Money held during the Construction Stage, or held during the Defects Liability Period.

Clause 6.10.4:

Add the following to the last sentence of Clause 6.10.4:

..., dated as at the date of delivery of the Contractor’s statement to the Employer’s Agent.

Add the following to Clause 6.10.4:

Notwithstanding the above, the Employer’s Agent shall be empowered to withhold the delivery of the payment certificate until the Contractor has complied with his obligations to report in terms of Clause 4.10.2 and as described in the Scope of Work.

The Contractor may submit a fully motivated application regarding more frequent payment to the Employer’s Agent to be submitted to the Employer for consideration. Requests for more frequent payments will be considered at the sole discretion of the Employer and is not a right in terms of this contract.

Clause 6.10.10:

Add the following Clause after Clause 6.10.9:

6.10.10 Advance payment

Subject to Clauses 6.10.1.5.2 and 6.10.1.5.3, and the Advance Payment Schedule, the Employer shall make an advance payment for Plant and materials stored at places other than the Site, or in respect of which a deposit with order is required, only once the Contractor has submitted an advance payment guarantee in accordance with this Clause.

Unless and until the Employer receives this guarantee, the following paragraphs shall not apply.

The Employer’s Agent shall issue an Interim Payment Certificate for, or including, advance payment after receiving a statement under Clause 6.10.1 and after the Employer has received a guarantee in an amount equal to the advance payment requested. This guarantee shall be issued by a financial institution approved by the Employer, as listed in the Annexure in Part C1.3 of the Contract Data, and shall be in the form of and shall contain the precise wording of the document included in Part C1.4: **Form of Advance Payment Guarantee** and shall come into force, be administered and expire in terms thereof.

The Employer shall return the guarantee to the Contractor within 14 days after the expiry date.

The provision of the Advanced Payment Guarantee shall be at the Contractor’s cost.

The term “deposit” or “deposit with order” used in the context of this Clause and elsewhere by reference to this Clause, means a sum payable by the Contractor to a manufacturer/supplier prior to the manufacture of an item of Plant or material, required at the time of placing an order, the balance of the value of the item being payable later.

Clause 8.6.1.1.2:

The value of Plant and materials supplied by the Employer to be included in the insurance sum is **R 0.00 (Nil)**.

Clause 8.6.1.1.3:

The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is **R0.00 (Nil)**.

Clause 8.6.1.3:

The limit of indemnity for liability insurance is **R20 000 000.00** for any single claim – the number of claims to be unlimited during the construction and defects liability periods, as per the Kouga Local Municipality's SIPDM Policy for Infrastructure Procurement and Development Management, Clause 7.9.3 (Table 4).

Clause 8.6.1.5:

In addition to the insurances required in terms of General Conditions of Contract Clauses 8.6.1.1 to 8.6.1.4 the following insurance is also required:

- (a) Insurance of Construction Plant and Equipment (including tools, offices and other temporary structures and contents) and other things (except those intended for incorporation into the Works) brought onto the site for a sum sufficient to provide for their replacement.
- (b) Insurance in terms of the provisions of the Compensation for Occupational Injuries and Diseases Act No. 130 of 1993.
- (c) Motor Vehicle Liability Insurance comprising (as a minimum) "Balance of Third Party" Risks including Passenger Liability Indemnity.
- (d) Where the contract involves manufacturing and/or fabrication of the works or part thereof at premises other than the Site, the Contractor shall satisfy the Employer that all materials and equipment for incorporation in the works are adequately insured during manufacture and/or fabrication. In the event of the Employer having an insurable interest in such works during manufacture or fabrication then such interest shall be noted by endorsement to the Contractor's Policies of Insurance.

Clause 8.6.5:

Delete the following from Clause 8.6.5:

"and the terms thereof shall be subject to the approval of the Employer's Agent, which approval shall not be unreasonably withheld."

Clause 8.6.6:

Replace clause 8.6.6 with the following:

The Contractor shall provide evidence in the form stated in the contract data to the Employer's Agent that the required insurances are affected and that all premiums thereunder have been paid.

Clause 9.1:

In Clause 9.1.6 replace "and 9.1.3" with:

, 9.1.3 and 9.1.7

Add the following Clause after Clause 9.1.6:

9.1.7 Death of Sole Proprietor/Member

Upon the death of the Contractor who was a Sole Proprietor, or a sole member of a Close Corporation, the Contract will terminate forthwith. The Employer shall pay to the Contractor's estate any money which it considers due under the Contract in terms of Clause 9.1.5, in full and final settlement thereof.

Clause 9.2.1:

Add the following to Clauses after Clause 9.2.1.3.8:

9.2.1.3.9 The Contractor committed a corrupt or fraudulent act during the procurement process or the execution of the contract.

9.2.1.3.10 An official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited the Contractor.

Clause 10.5.3:

The number of ad-hoc Adjudication Board Members to be appointed is 1(one).

ADDITIONAL CONDITIONS OF CONTRACT

Add the following clause after clause 10

Clause 11: Details to be confidential

The Contractor shall treat the details of the Works comprised in this Contract as private and confidential (save in so far as may be necessary for the purposes hereof) and shall not publish or disclose the same or any particulars thereof in any trade or technical paper elsewhere without the prior written consent of the Employer's Agent.

Part 2: Data Provided by the Contractor

Clause 1.1.1.9:

The name of the Contractor is

Clause 1.2.1.2:

The address of the Contractor is

Physical: Address		Postal: Address	
			
			
			
Telephone:		Fax:	
E-mail:			

SIGNED ON BEHALF OF TENDERER:

KOUGA LOCAL MUNICIPALITY
BID NO. 76/2021
HANKEY SANITATION UPGRADE (PHASE 3)
INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS
IN HANKEY AND CENTERTON

C1.3 Form of Guarantee

PERFORMANCE GUARANTEE

For use with the General Conditions of Contract for Construction Works, Third Edition, 2015.

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

"Physical address:

"Employer" means: Kouga Local Municipality

"Contractor" means:

" Employer's Agent " means JG AFRIKA (Pty) Ltd

"Works" means: **BID No. 76/2021: HANKEY SANITATION UPGRADE (PHASE 3) : CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON**

"Site" means: The site as defined in Clause 1.1.1.29 of the General Conditions of Contract

"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 of 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)

ANNEXURE

LIST OF APPROVED FINANCIAL INSTITUTIONS

The following financial institutions are currently approved for issue of contract guarantees to the Municipality:

National Banks:

ABSA Bank Ltd.
FirstRand Bank Ltd.
Investec Bank Ltd.
Nedbank Ltd.
Standard Bank of SA Ltd.

International Banks (with branches in SA):

Barclays Bank plc.
Citibank n.a.
Credit Agricole Corporate and Investment Bank
HSBC Bank plc.
JP Morgan Chase Bank
Societe Generale
Standard Chartered Bank

Insurance companies:

ABSA Insurance
Coface s.a.
Compass Insurance Co.
Constantia Insurance Co.
Credit Guarantee Insurance Co.
Guardrisk Insurance Co.
Hollard Insurance Company Ltd.
Home Loan Guarantee Co.
Infiniti Insurance Limited
Lombard Insurance
Mutual & Federal Insurance Co.
New National Assurance Co.
Regent Insurance Co.
Renasa Insurance Company Ltd.
Santam Limited
Zurich Insurance Co.

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C1.4 Form of Advance Payment Guarantee

ADVANCE PAYMENT GUARANTEE

For use with the General Conditions of Contract for Construction Works, Third Edition, 2015.

GUARANTOR DETAILS AND DEFINITIONS

"Guarantor" means:

"Physical address:

"Employer" means: Kouga Local Municipality.

"Contractor" means:

"Employer's Agent" means: JG AFRIKA (Pty) Ltd

"Works" means: BID No. **76/2021 : HANKEY SANITATION UPGRADE (PHASE 3) : CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON**

"Site" means: The site as defined in Clause 1.1.1.29 of the General Conditions of Contract.

"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.

"Plant and materials" means: The Plant and materials stored at places other than the Site, or in respect of which an advance payment prior to manufacture is required, which the Employer has agreed may be subject to advance payment, such Plant and materials being listed in the Schedule of Plant and materials.

"Schedule of Plant and materials" means: A list of Plant and materials which shows the value thereof to be included in the Guaranteed Advance Payment Sum.

"Guaranteed Advance Payment Sum" means: The maximum aggregate amount of R.....

Amount in words:

"Expiry Date" means: The date of the payment certificate wherein the Plant and materials have been certified by the Employer's Agent as having been built into the Permanent Works.

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates and Final Payment Certificate.

ADVANCE PAYMENT GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Advance Payment Sum.
2. The Guarantor's period of liability shall be from and including the date of issue of this Advance Payment Guarantee and up to and including the Expiry Date or the date of payment in full of the Guaranteed Advanced Payment Sum, whichever occurs first.

3. The Guarantor hereby acknowledges that:
 - 3.1 any reference in this Advance Payment 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 Advance Payment 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) calendar 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 Advance Payment 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 Advance Payment Guarantee, such demand stating that:
 - 5.1 the Contract has been terminated due to the Contractor's default and that this Advance Payment 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 Advance Payment 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. 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. 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 Advance Payment Guarantee on account of any conduct alleged to be prejudicial to the Guarantor.
10. The Guarantor chooses the physical address as stated above for the service of all notices for all purposes in connection herewith.
11. This Advance Payment 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.
12. This Advance Payment 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.

13. 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)

KOUGA LOCAL MUNICIPALITY
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C1.5 Occupational Health and Safety Agreement

AGREEMENT MADE AND ENTERED INTO BETWEEN KOUGA LOCAL MUNICIPALITY (HEREINAFTER CALLED THE "EMPLOYER") AND

..... ,
(Contractor/Mandatar/Company/CC Name)

IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL HEALTH AND SAFETY ACT, ACT No. 85 OF 1993 AS AMENDED.

I,, representing

..... , as an employer
in its own right, do hereby undertake to ensure, as far as is reasonably practicable, that all work will be performed, and all equipment, machinery or plant used in such a manner as to comply with the provisions of the Occupational Health and Safety Act (OHSA) and the Regulations promulgated thereunder.

I furthermore confirm that I am/we are registered with the Compensation Commissioner and that all registration and assessment monies due to the Compensation Commissioner have been fully paid or that I/We are insured with an approved licensed compensation insurer.

COID ACT Registration Number:

OR Compensation Insurer:

Policy No.:

I undertake to appoint, where required, suitable competent persons, in writing, in terms of the requirements of OHSA and the Regulations and to charge him/them with the duty of ensuring that the provisions of OHSA and Regulations as well as the Employer's Special Conditions of Contract, Way Leave, Lock-Out and Work Permit Procedures are adhered to as far as reasonably practicable.

I further undertake to ensure that any subcontractors employed by me will enter into an occupational health and safety agreement separately, and that such subcontractors comply with the conditions set.

I hereby declare that I have read and understand the appended Occupational Health and Safety Conditions and undertake to comply therewith at all times.

I hereby also undertake to comply with the Occupational Health and Safety Specification and Plan.

Signed aton the.....day of.....20....

Witness

Mandatar

Signed at on the.....day of.....20

Witness

for and on behalf of
Kouga Local Municipality

OCCUPATIONAL HEALTH AND SAFETY CONDITIONS

1. The Chief Executive Officer of the Contractor shall assume the responsibility in terms of Section 16(1) of the Occupational Health and Safety Act (as amended). Should the Contractor assign any duty in terms of Section 16(2), a copy of such assignment shall immediately be provided to the representative of the Employer as defined in the Contract.
2. All work performed on the Employer's premises shall be performed under the supervision of the construction supervisor who understand the hazards associated with any work that the Contractor performs on the site in terms of Construction Regulations 2014.
3. The Contractor shall appoint a Competent Person who shall be trained on any occupational health and safety aspect pertaining to them or to the work that is to be performed.
4. The Contractor shall ensure that he familiarises himself with the requirements of the Occupational Health and Safety Act and that he, his employees, and any sub-contractors, comply with them.
5. Discipline in the interests of occupational health and safety shall be strictly enforced.
6. Personal protective equipment shall be issued by the Contractor as required and shall be worn at all times where necessary and shall be appropriate to the work being undertaken.
7. Written safe work procedures and appropriate precautionary measures shall be available and enforced, and all employees shall be made conversant with the contents of these practices.
8. No substandard equipment/machinery/articles or substances shall be used on the site.
9. All incidents referred to in terms of Section 24 of the Occupational Health and Safety Act shall be reported by the Contractor to the Department of Labour and the Employer.
10. The Employer hereby obtains an interest in the issue of any formal inquiry conducted in terms of Section 32 of the Occupational Health and Safety Act and into any incident involving a Contractor and/or his employees and/or his sub-contractor/s.
11. No use shall be made of any of the Employer's machinery/plant/equipment/substance/personal protective equipment or any other article without prior arrangement and written approval.
12. No alcohol or any other intoxicating substance shall be allowed on the site. Any person suspected of being under the influence of alcohol or any other intoxicating substance shall not be permitted access to, or allowed to remain on the site.
13. Prior to commencement of any work, verified copies of all documents mentioned in the agreement, must be presented to the Employer.

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3)

**INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS
IN HANKEY AND CENTERTON**

C1.6 Protection of the Environment Declaration

The Contractor will not be given right of access to the Site until this form has been signed

BID NO.: 76/2021

**CONTRACT TITLE: HANKEY SANITATION UPGRADE (PHASE 3) : CONSTRUCTION OF NEW AND
UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON**

I/ we,.....{Contractor} record as follows:

1. I/ we, the undersigned, do hereby declare that I/ we am/ are aware of the increasing requirement by society that construction activities shall be carried out with due regard to their impact on the environment.
2. In view of this requirement of society and a corresponding requirement by the Employer with regard to this Contract, I/ we will, in addition to complying with the letter of the terms of the Contract dealing with protection of the environment, also take into consideration the spirit of such requirements and will, in selecting appropriate employees, plant, materials and methods of construction, in-so-far as I/ we have the choice, include in the analysis not only the technical and economic (both financial and with regard to time) aspects but also the impact on the environment of the options. In this regard, I/ we recognise and accept the need to abide by the "precautionary principle" which aims to ensure the protection of the environment by the adoption of the most environmentally sensitive construction approach in the face of uncertainty with regard to the environmental implications of construction.
3. I/ we declare that I/ we have read and understood the contents of the Environmental Management Programme (which is comprised of the Environmental Management Specification and its Annexures) for this Contract, and that I/ we understand my/our responsibilities in terms of enforcing and implementing the Environmental Management Programme. I/ we also declare that I/ we have made appropriate provision in my/ our pricing of the Bills of Quantities items for the Environmental Management Programme.
4. I/ we acknowledge and accept the right of the Employer to deduct, should he so wish, from any amounts due to me/ us, such amounts (hereinafter referred to as fines) as the Employer's Agent shall certify as being warranted in view of my/ our failure to comply with the terms of the Contract dealing with protection of the environment, subject to the following:
 - 4.1 The Employer's Agent, in determining the amount of such fine, shall take into account, *inter alia*, the nature of the offence, the seriousness of its impact on the environment, the degree of prior compliance/non-compliance, the extent of the Contractor's overall compliance with environmental protection requirements and, in particular, the extent to which he considers it necessary to impose a sanction in order to eliminate/reduce future occurrences
 - 4.2 The Employer's Agent shall, with respect to any fine imposed, provide me/ us with a written statement giving details of the offence, the facts on which the Employer's Agent has based his assessment and the terms of the Contract (by reference to the specific clause) which has been contravened.

Signed Date.....
CONTRACTOR

KOUGA LOCAL MUNICIPALITY
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Part C2: Pricing Data

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C2.1 Pricing Assumptions

Pricing Assumptions mean the criteria as set out below, read together with all Parts of this contract document, which it will be assumed in the contract, that the tenderer has taken into account when developing his prices.

1. Measurement and payment shall be in accordance with the relevant provisions of Clause 8 of each of the SABS 1200 Standardised Specifications for Civil Engineering Construction referred to in the Scope of Work. The Preliminary and General items shall be measured in accordance with the provision of SABS 1200-A, General.
2. Descriptions in the Bills of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. The short descriptions of the items of payment given in these Bills of Quantities are only for the purposes of identifying the items. More details regarding the extent of the work entailed under each item appear in the Scope of Work.

Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bills of Quantities, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.

3. The clauses in a specification in which further information regarding the bill item appears, are given under "Reference clause" in the Bills of Quantities. The reference clauses indicated are not necessarily the only sources of information in respect of billed items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications are identified by the letter or letters which follow SANS in the SANS 1200 series of specifications, eg. G for SANS 1200 G.
4. Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for waste.
5. The quantities set out in the Bills of Quantities are the estimated quantities of the Contract Works, but the Contractor will be required to undertake whatever quantities may be directed by the Employer's Agent from time to time. The Contract Price for the completed contract shall be computed from the actual quantities of work done, valued at the relevant unit rates and prices.
6. The prices and rates to be inserted in the Bills of Quantities are to be the full inclusive prices for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the documents on which the tender is based, as well as overhead charges and profit. Reasonable prices shall be inserted, as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
7. A price or rate is to be entered against each item in the Bills of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
8. Except where rates only are required, insert all amounts to be included in the total tendered price in the "Amount" column and show the corresponding total tendered price.
9. It will be assumed that prices included in these Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tender. (Refer to www.stanza.org.za or www.iso.org for information on standards)
10. Where the Scope of Work requires detailed drawings and designs or other information to be provided, all costs associated therewith are deemed to have been provided for and included in the unit rates and sum amount tendered such items.

11. Reasonable compensation will be received where no pay items appears in respect of work required in the Bills of Quantities in terms of the Contract and which is not covered in any other pay item.
12. The units of measurement described in the Bills of Quantities are metric units. Abbreviations which may be used in these Bills of Quantities are as follows:

mm	=	millimetre	h	=	hour
m	=	metre	kg	=	kilogram
km	=	kilometre	t	=	tonne (1000 kg)
m ²	=	square metre	No.	=	number
m ² .pass	=	square metre-pass	sum	=	lump sum
ha	=	hectare	MN	=	meganewton
m ³	=	cubic metre	MN.m	=	meganewton-metre
m ³ .km	=	cubic metre-kilometre	P C sum	=	Prime Cost sum
l	=	litre	Prov sum	=	Provisional sum
kl	=	kilolitre	%	=	percent
MPa	=	megapascal	kW	=	kilowatt
Km-pass	=	kilometre-pass	R/only	=	Rate only
KPa	=	kilopascal	W/day	=	Work day

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C2.2 Bills of Quantities

DESCRIPTION OF WORK SCOPE SECTIONS
SECTION 1: PRELIMINARY & GENERAL
<u>WORK PACKAGE 1 :</u> <u>HANKEY SEWER PUMP STATION (CIVIL & STRUCTURAL)</u>
SECTION 2 : SITE CLEARANCE
SECTION 3 : EARTHWORKS
SECTION 4 : CONCRETE WORKS
SECTION 5 : STRUCTURAL STEEL WORK
SECTION 6 : BUILDING WORK
SECTION 7 : DETENTION POND
SECTION 8 : CONCRETE BLOCK PAVING
SECTION 9 : PIPE WORK AND SPECIAL FITTINGS
SECTION 10 : VALVES AND METERS
SECTION 11 : WASTEWATER GRINDER (MACERATOR)
SECTION 12 : SEWAGE CONSERVANCY TANK
SUB-TOTAL - WORK PACKAGE 1 : HANKEY SEWER PUMP STATION (CIVIL & STRUCTURAL)
<u>WORK PACKAGE 2 :</u> <u>CENTERTON SEWER PUMP STATION (CIVIL & STRUCTURAL)</u>
SECTION 13 : SITE CLEARANCE
SECTION 14 : EARTHWORKS
SECTION 15 : CONCRETE WORKS
SECTION 16 : STRUCTURAL STEEL WORK
SECTION 17 : BUILDING WORK
SECTION 18 : DETENTION POND
SECTION 19 : CONCRETE BLOCK PAVING
SECTION 20 : PIPE WORK AND SPECIAL FITTINGS
SECTION 21 : VALVES AND METERS
SECTION 22 : WASTEWATER GRINDER (MACERATOR)
SECTION 23 : IN-SITU UPGRADE OF EXISTING ("LIVE") SEWER RISING MAIN IN CENTERTON
SUB-TOTAL - WORK PACKAGE 2 : CENTERTON SEWER PUMP STATION (CIVIL & STRUCTURAL)

WORK PACKAGE 3 : HANKEY SEWER PUMP STATION (MECH & ELECTRICAL)	
SECTION A	PRELIMINARY AND GENERAL
SECTION B	DISTRIBUTION BOARDS
SECTION C	CABLES, WIRING & ACCESSORIES
SECTION D	CONDUIT, WIREWAYS & ACC.
SECTION E	SWITCHES AND SOCKET OUTLETS
SECTION F	LUMINAIRES
SECTION G	MISCELLANEOUS
SECTION H	EXCAVATION AND SLEEVES
SECTION I	MECHANICAL EQUIPMENT
SECTION J	PROVISIONAL SUM ALLOWANCES
SUB-TOTAL - WORK PACKAGE 3 : HANKEY SEWER PUMP STATION (MECH & ELECTRICAL)	
WORK PACKAGE 4 : CENTERTON SEWER PUMP STATION (MECH & ELECTRICAL)	
SECTION A	PRELIMINARY AND GENERAL
SECTION B	DISTRIBUTION BOARDS
SECTION C	CABLES, WIRING & ACCESSORIES
SECTION D	CONDUIT, WIREWAYS & ACC.
SECTION E	SWITCHES AND SOCKET OUTLETS
SECTION F	LUMINAIRES
SECTION G	MISCELLANEOUS
SECTION H	EXCAVATION AND SLEEVES
SECTION I	MECHANICAL EQUIPMENT
SECTION J	PROVISIONAL SUM ALLOWANCES
SUB-TOTAL - WORK PACKAGE 4 : CENTERTON SEWER PUMP STATION (MECH & ELECTRICAL)	
SUB-TOTAL TENDER AMOUNT (A) - excl VAT	
ESCALATION (5% of Sub-Total A)	5.0%
SUB-TOTAL (B)	
VALUE ADDED TAX (15% of Sub-total B)	15.0%
TOTAL TENDER AMOUNT (incl VAT)	CARRIED TO FORM OF OFFER

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C3 Scope of Works

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Status

Should any requirement or provision in the parts of the Scope of Work conflict with any requirement of any Standardised Specification, or any drawings, the order of precedence, unless otherwise specified, is:

- Drawings
- Scope of Work
- SANS Standardised Specifications

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CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON

C3.1 Description of the Works

1. EMPLOYER'S OBJECTIVES

The Kouga Local Municipality Sewer Masterplan identified the need for waterborne sanitation and bulk sewer infrastructure to be installed for the town of Hankey and surrounding areas, which include Phillipsville, Old Hankey, Hankey and Hankey Town areas. This will eradicate the existing septic tanks in the identified residential areas, inclusive of selected larger Commercial and School properties.

Water borne gravity sewerage networks will be installed for the Hankey Residential areas under Phase 1 of this project. Phase 2 of this project will cover the new sewer rising mains for the Hankey and Centerton residential areas, to pump the sewage effluent from these residential areas, (pumped from the new Sewage Pump Stations to be constructed at Hankey), to the existing Hankey Waste Water Treatment Works. Both these Contracts do not form part of this Phase 3 Contract.

The Employer's objective with Phase 3 is to construct the complete civil, structural, electrical and mechanical works for both the Hankey and the Centerton new Sewage Pump Stations, inclusive of the Emergency Overflow Ponds, with minor inter-connection pipelines inside the pump-station yards complete, as well as the in-situ upgrade of the Centerton sewage rising main, by means of "Pipe Cracking".

2. OVERVIEW OF THE WORKS

This PHASE 3 of the "Hankey Sanitation" project, will cover the complete construction of two new Sewage Pump Stations in Hankey and in Centerton respectively.

The Hankey Sewage pump station will be constructed on a current "Greenfields" area on the northern bank of the Klein River, just north of the Steel Rail bridge crossing the same river. The Centerton Pump Station will be constructed in a build-up residential area, next to a sport field and an existing Stormwater retention pond. The old inferior pump station in Centerton will be disconnected and will be taken out of operation, but will not be destroyed. The pump station construction Works will consist of the following construction activities at each sewage pump station :

Civil & Structural Works

- Clearance of the routes and sites and removal and preservation of topsoil and gravel in roadways;
- Hand excavation where instructed, to expose all existing services expected to be crossed or that may be affected;
- Bulk excavation for the sewage pump station and emergency over-flow ponds, and minor excavation of trenches, including support and protection of existing services, especially in deep trenches;
- The construction of a reinforced concrete wet-sump (approx. 6,6 x 2,6m footprint and 4m below NGL);
- The construction of a brick-build pump house, with concrete columns and concrete roof to support the gantry beam (approx. 8,6 x 6,0m footprint and 3,2m high), with Transformer doors, etc as detailed;
- Minor Structural Steel works : Stairs and Handrailing, Gantry beam and Hoist, and MH covers;
- All related internal suction and delivery pipework, with bends and specials as detailed;
- All valves, meters and sewage macerators with chambers, as specified and detailed;
- Laying, bedding, jointing, testing of short-sections of inter-connection new sewer rising main pipelines;
- Backfilling, top soiling and restoration of work areas;
- Construction or upgrading of access roads;
- Earthworks and block-paving at the pump station yards around the pump station buildings;
- Construction of concrete lined Emergency Over-flow Sewage Ponds (a new EOP will be constructed at Hankey and a portion of an existing Stormwater Retention Pond at Centerton, will be converted into a new Sewage Emergency Over-flow Pond);
- Construction of a small reinforced concrete Sewage Conservancy Tank in Hankey, with related submersible pumps and rising main, to discharge into a Sewage Manhole;

- Fencing around the Pump Station yards, with vehicle gates;
- Rehabilitate all areas where concrete, paving, fences etc. were disturbed, to original condition.

Electrical & Mechanical Works

- Supply and install Self-priming electrical sewage pumps and motors, with all cabling and connections;
- Supply and install back-up diesel pumps;
- Supply and install back-up diesel generators;
- Supply and install the Main Control Centres / electrical DB-boxes, together with all switchgear, isolators, circuit breakers, cabling and ducting;
- Supply and install Electrical fans, with internal inter-connected ventilation;
- Supply and install General Building Lighting (internal and flood-lights);
- Supply and install Intruder as well as Emergency Alarm systems;
- Supply and install Lightning Protection;
- Supply and install Telemetry, inclusive of all control sensors;
- All Connections to existing / new Eskom transformers and cables;

In addition to the above Work Scope, an existing “live” sewer rising main in Centerton (one of the residential suburbs in Hankey), will be in-situ upgraded to a new 200mmø pipeline, to accommodate additional sewage effluent, expected from the new Hankey Housing Development (to be developed on Erven 17, 245 and 250) situated to the north east of Hankey. The exact pipeline route and pipe condition will be inspected and confirmed by CCTV camera inspections, and the existing pipeline will be upgraded by means of “Pipe Cracking”.

All other work which, although not specifically mentioned, but shown on the drawings and incorporated in the pricing Schedules, as may be necessary for the proper performance and completion of the work in this Contract, shall also form part of the Works.

The Works are described in detail on the drawings and the relevant sections of the Scope of Work.

3. PHASING OF THE WORKS (FOR THIS PHASE 3 OF THE PROJECT)

In order to accommodate possible restrictions in the Municipality’s budget, the above-mentioned scope of works maybe phased over a number of financial years.

Items have been allowed for in the bill of quantities for de-establishment and re-establishment at a later date should it be required and for time-related costs during the inactive period between phases. Contract Price Adjustment will be applicable as detailed in the Contract Data. Thus, no further claims will be entertained, in the event that the Employer chooses to delay the phasing of the works.

4. LOCATION OF THE WORKS

The works are to be executed in the town of Hankey and Centerton suburb (see Annexure 1: Site Locality Plan in Section C3.10).

The proposed new sewer Pump Station will be located on the northern bank of the Klein River, and adjacent residential area of Hankey town. The Centerton Pump Station is approximately 2,5km northwards of the proposed Hankey Sewage Pump Station site.

Site conditions are described in detail in Section C4: Site Information.

5. TEMPORARY WORKS

5.1. Access Roads

Existing gravel roads provide access to the proposed pump station positions. The Contractor will be required to adequately clear the routes to allow access for deliveries and construction vehicles to all points of the construction works.

5.2. River Crossings

The Contractor’s work method shall be so planned that no access to, near, or to provide access across the Klein River, will be required. No river vegetation inside the floodlines may be disturbed, and no water for construction activities, including dust suppression, may be abstracted from the Klein River.

5.3. Temporary Pipework

The Contractor will be required to construct temporary pipework, end caps and restraints for pressure testing.

5.4. Diversion of Sewage Flows

The Contractor will be required to design, install, operate, maintain and remove any temporary diversions, pumps and pipework required to divert sewage flow when tying into existing sumps and manholes.

5.5. River Diversions and Dewatering

No river diversion, impedance or excavation within the floodlines of the Klein River will be allowed.

The Contractor will be required to design, install, operate, maintain and remove dewatering facilities for deep excavations, which may require for temporary pump sumps.

5.6. Shoring of Excavations

The Contractor will be required to design and install adequate shoring for excavations, especially in soft sandy soil conditions, or in water logged conditions or when trenches are close to boundary walls, or when trenches are close to any existing infrastructure or services which may be in danger of collapse due to the open sewer trenches, or where trenches are deeper than 2,0m, or when instructed by the Client's OHS Agent or the Resident Engineer. The pricing of shoring is to be included under the relevant items for earthworks as specified.

5.7. Existing Services

The Contractor will be required to protect, and main existing services crossed, or where work takes place adjacent to existing services. Special precaution to be taken where existing services cross or are adjacent to deep trench conditions.

5.8. Formwork for concrete work

The Contractor will be required provide formwork for the concrete work. The pricing is to be included under the relevant items in the Schedule of Quantities.

6. CONSTRUCTION PROGRAMME

As soon as practicable after the acceptance of the Contractors Tender, prior to commencement of construction work but in any event within a period of fourteen (14) days after the Contractor has received the Letter of Acceptance, the Contractor shall submit his programme, as required in terms of Clause 5.6 of the GCC 2015, to the Employer's Agent for approval.

The programme shall further be explained clearly and in detail by methods statements and any other necessary information.

If the programme is to be revised by reason of the Contractor falling behind his programme, he shall produce a revised programme 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.

Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by providing more labour and plant to site, or by using the available labour and plant in a more efficient manner.

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 necessary steps as provided for in the Conditions of Contract.

The approval of any programme by the Employer's Agent 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.

7. METHOD STATEMENT

A Method Statement clearly stating how the work will be executed including the resource to be employed shall be submitted together with the Final Programme of Works, before commencement of the Construction Works.

The construction methods to be followed shall be environmentally friendly as far as possible. No construction methods that will result in long term or permanent damage to the surrounding natural environment shall be allowed.

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C3.2 Engineering

1. DESIGN BY THE EMPLOYER'S AGENT

The Employer's Agent (on behalf of the Employer) has designed the permanent civil and structural works to be executed under this Contract.

The Employer's Agent's design is documented on the drawings and in the Works Specifications which form part of this Procurement Document.

2. DESIGN BY THE CONTRACTOR

2.1. Temporary Works

The Contractor shall be responsible for the design of all incidental temporary works such as shoring, scaffolding and formwork.

The Contractor shall be responsible for the design of all temporary works listed in Clause 5 of C3.1.

The Contractor shall also design all temporary arrangements for capping, and anchoring of unrestrained bends and temporary caps during the field pressure testing. The Employer's Agent will, on request, provide the magnitude of the forces to be resisted.

3. DRAWINGS PREPARED BY THE EMPLOYER'S AGENT

The Works shall be carried out in accordance with the following drawings, as well as any further drawings and instructions which may be issued by the Employer's Agent.

VOLUME 4 : BOOK OF DRAWINGS

Refer to Annexure f(Section 3.9) for List of all Tender drawings.

Tender Drawings will be issued by e-mail, to all tenderers who have booked tenders in advance from the Kouga Local Municipality before the tender clarification meeting.

Three full-sized paper plots of each drawing will be issued to the appointed Contractor at Site Hand-over. The Contractor shall make any additional copies he may require at his own cost.

4. DRAWINGS PREPARED BY THE CONTRACTOR

4.1. Temporary Works

On the Employer's Agent's request, the Contractor shall provide drawings and sketches showing the temporary works for approval.

4.2. 'As-Built' Drawings

The Contractor shall record all amendments and deviations from the drawings issued at the start of the Contract. This shall be done on a set of drawings specially issued for this purpose. These shall be handed to the Employer's Agent on completion of the Works. The Certificate of Completion will not be issued without this information having been submitted to the Employer's Agent.

4.3. Employer's Agent's Approval

All drawings, schedules and technical data sheets pertaining to plant and equipment forming part of the permanent works shall be submitted to the Employer's Agent for approval, prior to placing firm orders or commencing manufacture.

Drawings issued to the Employer's Agent for approval shall be full size paper copies.

The Contractor shall allow for a period of 14 days, in his programme, for review of each submission by the Employer's Agent. The Contractor shall supply the Employer's Agent with supporting calculations or data if so requested.

The Employer's Agent's approval or acceptance of any drawings, method statement, design or document will not relieve the Contractor of his responsibilities in terms of the Contract and the Specification, neither will it relieve the Contractor of any liability in terms of Health and Safety, Environmental or any other legislation.

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C3.3 Procurement

1. PREFERENTIAL PROCUREMENT PROCEDURES

The Contract will be awarded on the basis of price and preferences, preferences being awarded for the Contractors B-BBEE contributor level. The Contractor shall comply with the conditions associated with the granting of preferences given in the Preferencing Schedule.

2. SUBCONTRACTING

The selection of all subcontractors shall be subject to the approval of the Employer or the Employer's Agent.

The Contractors attention is drawn to the diverse array of specialist work required under this contract. The Contractor shall form a Joint Venture with or engage suitably qualified and experienced sub-contractors to carry out all such specialist work.

Subcontractors shall have a CIDB grading appropriate to the class and value of the work to be undertaken by them.

If any of the work scope components will be Sub-Contracted, or be executed by a Joint Venture partner, a signed Sub-Contractor's Agreement or a signed JV-Agreement **MUST** be included in this Tender Document, to submit a valid and responsive tender.

3. MANDATORY SUB-CONTRACTING

In terms of Regulation 9 of the Preferential Procurement Regulations, 2017 issued in terms of the Preferential Procurement Policy Framework Act (PPPFA) (Act No 5 of 2000), At least **20%** of the value of the Works shall be subcontracted to Exempt Micro-Enterprises (EMEs) or Qualifying Small Enterprises (QSEs) as defined in the PPPFA, which have a permanent residential or operating business address within the Kouga Local Municipality's jurisdiction area. Proof of registered address by means of a Municipal Billing Certificate will be required, as compulsory documentation of each SMME Sub-Contractor.

The Contractor shall identify suitable EMEs or QSEs from the National Treasury's Central supplier Database and/or the CIDB register of contractors.

The Primary Contractor shall employ a Full-Time SMME Manager to manager the following functions:

Schedule various Work Packages for the SMME Sub-Contractors – all work packages must be CIDB Level 1 and 2, and shall primarily be work scope aspects which can be done by hand and small plant, and shall not include more than 50% material supply components.

a) Manage the SMME Tender Procurement processes:

- ix. compile the Tender Documentation for the SMME Tender process;
- x. advertise for the SMME Work Scope packages, in co-ordination with the Employer;
- xi. conduct a Site Meeting inspection with all prospective SMME Sub-Contractors;
- xii. explain in detail the Work Scope Packages & the Pricing Structure;
- xiii. explain the expected Time Frames to Commence each Work Package and the expected Construction Duration, and Completion Date;
- xiv. manage the Final Price negotiations with each SMME Sub-Contractor;
- xv. evaluate the SMME Sub-Contractor's tenders;
- xvi. appoint and arrange to sign the Sub-Contract with each SMME Sub-Contractor.

- b) Train and assist each SMME Sub-Contractor to be able to execute the allocated work Packages
- c) Monitor the quality and performance of each SMME Sub-Contractor on a daily basis;

- d) Monitor the material purchases of each SMME Sub-Contractor on a daily basis
- e) Monitor the labour force with the CLO, of each SMME Sub-Contractor on a daily basis
- f) Monitor the allocated budgets of each SMME Sub-Contractor on a daily basis;
- g) Report monthly on all above aspects of each SMME Sub-Contractor to the Contract Manager and the Engineer.

The Primary Contractor must note that a 5% Financial Penalty shall be deducted from the Contractor's Payment Certificate if the SMME Target of 20% has not been reached at Practical Completion Stage. The 20% shall be calculated on the total Final Contract Value, with No deductions made for any P&G or P.Sum costs.

4. EMPLOYMENT OF LOCAL COMMUNITY LABOUR

The maximum possible number of workers is to be employed from the labour lists provided by the Employer of the currently unemployed persons in the local community. To this end the Contractor is required to give preference to the use of local community labour within the Hankey community and limit the use of non-local labour to key personnel only.

100% of all unskilled labour shall be sourced from the local community in Hankey.

At least 50% of semi-skilled labour shall be sourced from the local communities in the Kouga Local Municipal area.

It is envisaged that a **minimum of 30 local labourers** can be employed on this Contract. Based on a 35-week Construction Duration and a utilization rate of 70%, the target Person-days of employment generation is a minimum of 5145 days. **The SMME Manager shall report monthly on the progress to achieve this target.**

Local community labour is defined as people who reside in the local Hankey community and who have been identified and names placed on the labour list by the Employer.

Key personnel are defined as supervisors and skilled labourers without whom a specific task cannot be executed. As far as possible these people should impart their management and other skills to individuals within the local workforce who show a keen interest and display a willingness to learn.

A monthly report on employment of local labour in relation to other employees must be submitted for the information of the Employer. Each local labourer to be employed specifically on this Contract either through an Agreement with the Primary Contractor, or through an Agreement with any SMME Sub-Contractor, shall provide a certified copy of his / her ID document on employment to the SMME Manager.

The SMME Manager shall keep daily records of each Local Labourer employer and shall compile a list for the Primary Contractor's work force as well as for each SMME Sub-Contractor's work force for the monthly EPWP Labour Dater Sheets reporting.

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C3.4 Construction

1. WORKS SPECIFICATIONS

The applicable standardised specifications, variations and additions thereto and particular specifications are given in Section C3.6: Works Specifications.

2. SITE ESTABLISHMENT

2.1. Services and Facilities Provided by the Employer

2.1.1. Disclaimer

The Employer does not guarantee the adequacy or continuous availability of any service or facility. The Contractor is deemed to have assessed the availability, adequacy and risks associated with services and to have allowed for any additional services required to meet his contractual requirements.

2.1.2. Contractor's Camp

The Contractor shall make his own arrangements to lease the land from the registered owner, for the property on which the Contractor's stores and offices will be located. Only one Construction Camp Site is required for both the Hankey and Centerton construction activities, from where the construction team shall operate. All inter-traveling shall be included in the applicable Time-Related tender rates.

The Contractor shall make his own arrangements for the accommodation of all labour, the provision of toilet facilities for all his employees and for the supply of electrical power and lighting if required. In doing so, the Contractor shall comply with the requirements of the respective authorities. Housing may furthermore not be erected at any areas along the site (*except for an approved number of night watchmen, see Clause 2.2.6*). Temporary shelters or canopies may be erected where labourers may rest, eg during tea and lunch breaks, to enjoy a meal. However, no open fires will be allowed on site to prepare food at the temporary site areas.

2.1.3. Source of Water

Existing water supply reticulation is available at the following locations:

- Hankey central business district.

At these locations, water can be supplied for construction and drinking purposes from the existing watermains, via a metered connection. The Contractor shall apply to the Municipality for a temporary water connection. At other locations the Contractor shall make his own arrangements for the supply of water.

The provision of the metered connection and the supply of water used by the Contractor will be charged for and the costs thereof must be included in the tendered rates. Water will be charged for at the standard municipal rates.

Water for pressure testing of pipelines may be drawn off the existing reticulation by prior arrangement with the Municipality. The Contractor shall supply all necessary tee-pieces, valves and pipe work. An isolating valve shall be installed immediately downstream of the connection tee. All pipework connected to the rising main shall have a 12-bar rating.

The Contractor shall make use of water from non-potable sources for construction wherever possible.

Furthermore, the Contractor will be held responsible for any wastage of water due to his negligence.

No access to the Klein River shall be allowed for the abstraction of raw water for any construction activities.

2.1.4. Disposal Site

All material cleared on the site, rubble, spoil and refuse shall be disposed of at a designated area.

2.2. Facilities Provided by Contractor

2.2.1. Water

The Contractor shall make his own arrangements for the supply of water at locations where there is no existing potable water reticulation.

2.2.2. Electricity

There is no readily available source of electricity on site. The Contractor shall make his own arrangements for the provision of electricity and may make use of generators or apply to the relevant supply authority for an electrical connection.

2.2.3. Telephone

The Contractor shall make his own arrangements for the supply of telephone facilities for his own use.

2.2.4. Office and Storage Facilities

All offices, storerooms, etc. required by the Contractor are to be supplied by the Contractor. No storage facilities, shelters or eating facilities are available on Site and the Contractor shall make his own arrangements and pay all costs associated with such facilities if required.

2.2.5. Security

The security and safety of the Contractor's equipment, the storage, safekeeping and prevention of deterioration of all material, goods, plant and equipment delivered to Site shall be the responsibility of the Contractor until the Certificate of Completion has been issued, notwithstanding that the Employer may have previously paid for such items.

The Contractor shall make his own arrangements for a security fence enclosing the camp.

2.2.6. Housing and Transport

The Contractor's employees, except for an approved number of night watchmen, shall not be housed on Site and the Contractor shall make his own arrangements and pay all costs associated with housing his employees and/or transporting them to Site.

The Contractor will have to make his own arrangements for accommodating night watchmen.

2.2.7. Sanitary Facilities

The Contractor shall provide portable toilet facilities at his depot and within reasonable distances of work fronts along the pipeline routes. These shall be regularly serviced and maintained in a sanitary condition.

2.2.8. Laboratory Facilities

No on-site laboratory facilities will be required. The Contractor is to make his own arrangements for the testing of materials where specified. All specified tests shall be done at an approved laboratory.

The laboratory shall be SANAS approved for the testing being undertaken.

2.2.9. Medical Attendance

The Contractor shall always maintain adequate medical attendance on Site. A person holding a current first aid certificate shall be immediately available on Site at all times when work is in progress. Arrangements, with the nearest suitable hospital, shall also be made by the Contractor for the acceptance of urgent cases of injury.

2.2.10. Facilities Provided by the Contractor for the Employer's Agent

The Contractor shall provide facilities for the Employer's Agent as specified in standardised specification SANS 1200 AB and the Works Specifications. The Contractor shall provide a suitable venue for the purposes of monthly site meetings, with adequate space and seating for at least eight people.

2.2.11. Removal of Facilities on Completion

The Contractor shall remove all temporary offices and storage facilities, toilets, temporary water connections and the like on completion of the contract and leave the areas used in a neat and tidy condition free of any rubble, debris, oils spillage, concrete and the like.

3. SITE USAGE

The Contractor shall not use the site for any purposes other than the execution of the Works. The Contractor shall confine her/his activities to the site of the works and to the area allocated to her/him for her/his site offices and materials storage. The Contractor may not use or damage in any way any area that falls outside the boundaries of the site. Any area damaged by the Contractor outside the site boundaries shall be rehabilitated to the satisfaction of the Employer's Agent at the Contractor's expense.

4. ALTERATIONS, ADDITIONS, EXTENSIONS AND MODIFICATION TO EXISTING WORKS

The contractor shall satisfy himself within fourteen (14) days of moving onto site that the dimensional accuracy, alignment, levels and setting out of existing structures or components thereof are compatible with the proposed works and procedures. Any discrepancies shall be brought to the attention of the Employer's Agent in writing where this is not the case.

Failure by the Contractor to timeously give written notice to the Employer's Agent in this regard shall result in any claim for additional time and / or costs being rejected.

5. WAYLEAVES AND PERMITS

The Contractor will be required to apply for wayleaves and pay all sureties, bank guarantees or deposits required by the service authority issuing the wayleave, as detailed in the Scope of Work.

Known services are indicated on the drawings and include:

- Eskom overhead and underground power lines;
- Telkom overhead telephone lines
- Vodacom/MTN underground cables and optic fibres
- Private irrigation pipework
- Gamtoos Irrigation Board
- EC Department of Roads and Transport for all Provincial Roads.

6. TREATMENT OF EXISTING SERVICES

The positions of existing services, insofar as they are known, are shown on the Site Development Drawings. Items have been allowed in the Bill of Quantities for dealing with and protecting such services. Refer to Site Development Drawings for the positions of the existing services.

The exact location and depth of all existing services, such as sewers, stormwater pipes, culverts, water mains, manholes, valve boxes, conduits, cables for electricity and telephone lines, electricity, lightning and telephone poles and any other services or features on the ground which may infer the existence of services, must be verified prior to the commencement of any excavations – either for trench excavations or for the relocation or adjustment of existing services.

The Contractor shall take whatever precautions as deemed necessary to protect these services from damage during the period of the Contract.

7. DAMAGE TO SERVICES

Any known services damaged by the Contractor shall immediately be reported to the relevant service authority. The cost of repair of these services will be for the Contractor's account. Known services include those services shown on the drawings as well as services not shown on the drawings but the presence of which can be reasonably expected or determined on site.

Any unmarked or unknown services that may be damaged shall immediately be reported to the relevant service authority. The repair cost for such services will not be the Contractors' responsibility. In the event

that the Contractor is requested to repair the damaged service, she/he shall submit the actual cost of repair with his next claim for payment and shall be paid the actual cost plus 10%.

8. REINSTATEMENT OF SERVICES AND STRUCTURE DAMAGED DURING CONSTRUCTION

The Contractor shall liaise directly with the responsible Municipal Services Silos, Telkom, etc with regards to the reinstatement of existing services. The Contractor shall take whatever actions are required to have damaged services repaired by Municipal Services Silos, Telkom or any other relevant service provider as soon as possible.

9. CERTIFICATION BY RECOGNISED BODIES

Where materials to be used in the works are required to comply with a SABS/SANS specification, they will be accepted as complying with the SABS/SANS specification if one of the following is satisfied:

- The display of a SABS/SANS mark on the product with a copy of the SABS/SANS certificate that allows the manufacturer to use the mark, or
- All the criteria in the relevant SABS/SANS specification is measured and confirmed on site or in an approved laboratory.

The same will apply to materials specified to comply with ISO, BS, ASTM or other international specifications.

Only SANAS accredited laboratories or other institutions may be used for certification purposes. For concrete durability testing, the laboratory shall be approved by the Employer's Agent.

10. AGRÉMENT CERTIFICATES

The use of alternative materials, which may be fit for purpose and are subject to an Agrément certificate, may be considered providing the following are adhered to:

- A full copy of the Agrément certificate must be provided,
- The certificate must be currently active,
- All work must be done in accordance with the terms of a specific certificate for the product,
- Details of any and all variations approved by Agrément South Africa must be provided,
- Details of who will erect or install the product must be provided.

11. PLANT AND MATERIALS SUPPLIED BY THE EMPLOYER

The Employer will not supply any materials or plant to the Contractor. The Contractor shall be responsible for procuring all plant and materials required for construction of the works.

12. MATERIALS SAMPLES AND SHOP DRAWINGS

The Contractor shall timeously provide the Employer's Agent with samples and/or test results of all materials he intends to use in the works. All materials are to be approved by the Employer's Agent in writing before being used in the Works. Such approval shall not relieve the Contractor of his obligation to ensure that materials supplied comply with the Specifications.

The Contractor shall ensure that all materials are ordered timeously so as not to result in delays to the programme. Delays in delivery of materials necessary for completion of the works shall not be considered grounds for compensation. The Contractor shall make allowance in her/his programme for any anticipated lead times or delays in procuring specific materials.

Where material to be used in this contract is specified to comply with the requirements of a South African National Standard Specification and such material is available with the official SANS (SABS) mark, the material shall bear the official mark.

The Contractor shall supply samples of sufficient size of proposed bedding, imported material and concrete materials, as applicable, to a SANS accredited laboratory for testing prior to any such materials being used. Only materials that comply with the specifications may be used. No separate payment shall be made for the testing of materials, the cost of which shall be deemed to be covered by the rate for the relevant items.

Copies of all test results shall be given to the Employer's Agent for his approval.

13. CONSTRUCTION PLANT

All construction plant and equipment used on this contract shall be in good working order, well maintained, of adequate size and fit for purpose. No machinery that leaks oil, fuel or hydraulic fluids may be used on site. Any plant or equipment that, in the opinion of the Employer's Agent, is not of adequate size or fit for use shall be removed from site and replaced with acceptable plant or equipment, all at the Contractor's cost.

14. CONNECTION TO EXISTING SERVICES

Seven (7) days written notice shall be given to the Employer's Agent and to the Employer of intention to connect to any existing service or structure. Such connection may only be undertaken once written approval is granted. The work to connect to existing services may have to be done outside of normal working hours to accommodate the requirements of the Employer. Allowance for this must be made in the tendered rates as no additional payments shall be made in this regard.

15. SURVEY CONTROL AND SETTING OUT OF THE WORKS

Survey pegs and reference marks shall be pointed out to the Contractor. The Contractor is solely responsible for the setting out of the works from the pegs and reference marks. The Contractor is also solely responsible for the protection of the pegs and reference marks. The Contractor's attention is specifically drawn to the requirements of SANS 1200 A: General, Clause 5.1 Survey, in this regard.

The Contractor shall be responsible for the preservation of all land survey, erf or other pegs, benchmarks and beacons. If damage or disturbance of any such pegs or beacons is caused by the operations of the Contractor or his subcontractors, the pegs are to be replaced by a Registered Land Surveyor at the cost of the Contractor. Benchmarks will be replaced by the Employer's Agent at the Contractor's expense.

Information regarding the position of all such pegs will be made available to the Contractor by the Employer's Agent on request.

The Contractor is to ensure that no spoil is placed over any erf peg or benchmarks and that these are adequately protected for the full duration of the Contract.

Where disturbances of boundary pegs are unavoidable due to excavation or other operations adjacent to the pegs, the Contractor shall advise the Employer's Agent or his Representative immediately, and agreement is to be reached that the disturbance of the peg is unavoidable and a strict record of such disturbed pegs is to be kept. Such pegs are to be replaced by a Registered Land Surveyor as described above and the Contractor is to submit proof of the cost of replacement of pegs. The Contractor will be reimbursed on a basis pro-rata to the total cost of peg replacement determined on completion of the Works.

16. PROTECTION OF EXISTING WORKS

The Contractor shall take all necessary steps to protect any existing works whatsoever against damage which may arise as a result of his operations on Site. The Contractor shall bear the cost of the repair of damage to any service, the possible existence of which could reasonably have been ascertained by him in good time.

Where the Contractor is responsible for damage for which repairs have to be carried out by the Employer or an outside Authority, the costs of these repairs will be recovered by means of a deduction from the Contractor's monthly Payment Certificate. The Employer will attend to the payment of monies due to outside authorities, should the Contractor not make direct payment, to the outside authorities, timeously.

17. TIDYING UP OF THE WORKS

The Contractor shall take note that progressive and systematic finishing and tidying will form an essential part of this contract. On no account shall spoil, rubble, materials, equipment or unfinished operations be allowed to accumulate in such a manner as to unnecessarily be a hindrance to or impede the activities of other Contractors or service providers. 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.

Upon completion of the Works or any portion thereof, the ground, fences, gates and any structures that have been interfered with are to be carefully restored to their original condition and all rubbish, tools, tackle, plant and material must be removed so as to leave the Site in a clean and orderly condition. No additional payment shall be made for work set out above.

18. RECORD DRAWINGS

As the work progresses, the Contractor shall keep full sets of records of all the true levels, sizes and positions of structures as well as all amendments to and deviations from the drawings issued by the Employer's Agent from time to time. This information must be submitted monthly at the Site Meetings. A separate set of drawings will be issued to the Contractor for this purpose.

The completion certificate shall only be issued after the Employer's Agent has received a properly completed set of "record" drawings from the Contractor. No separate payment shall be made for this service as all costs related thereto shall be deemed to be included in the rates for the relevant items.

19. CONSTRUCTION WORK IN THE VICINITY OF BULK WATER MAINS

The Contractor will be required to expose existing bulk water mains for the purposes of tying in or for crossings. The Contractor shall proceed in accordance with all conditions of the relevant wayleaves and the following specific requirements:

Excavation to locate water mains shall be carried out only with the permission and in accordance with the requirements of relevant authority and with their personnel in attendance.

Where at any stage during excavation or construction, cover over the water mains and services will be less than 0,6 m, or in special cases where the Employer's Agent deems it necessary, excavation shall be carried out by hand over a width extending to 1,0 m clear on each side of these services. No excavation shall be carried out behind any bend, cap, valve, or tee before the service authority has undertaken any necessary precautionary measures.

Only the service authority's staff shall operate valves on existing water mains.

Where alterations or connections to water mains are required, at least 72 hours' notice of the commencement of work is to be given to the service authority and at least 48 hours' notice to affected consumers.

The Contractor shall programme the activities required to connect into the supply lines to ensure that all work is complete within one day (per connection) with disruption to the supply being limited to 12 hours maximum. Should there be more than one connection on the same supply line, the time period between each successive supply interruption shall be subject to the approval of the Employer's Agent and the supply authority.

The cost of any damages and consequential losses incurred as a result of these operations shall be borne by the party causing the damage.

The Contractor must take the above into account when drawing up the works programme and calculating rates. Unless specifically itemised in the bills of quantities, no additional payment shall be made for any expense or delays incurred as a direct consequence of adhering to these procedures.

At the start of the Contract, The Contractor shall obtain from the relevant service authority, the contact details of the emergency control room or other personnel to be contacted in the event of burst mains or damaged services. These emergency numbers shall be kept readily available on site.

20. FEATURES REQUIRING SPECIAL ATTENTION

20.1. High Standard of Work Required

The Contractor's attention is drawn to the fact that a high standard of materials, testing and performance is applicable. Compliance to specifications and tolerances will be strictly enforced.

Throughout the duration of the Contract, the work shall be supervised by an approved representative of the Contractor with proven experience and competence in civil engineering projects of a similar size and nature.

All materials supplied by the Contractor shall be unused and of the highest quality.

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3)

CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON

C3.5 Management

1. MANAGEMENT OF THE WORKS

1.1. Planning and Programming

1.1.1. Format of Programme

The programme shall be in the form of a bar chart (Gantt chart) or any other time-activity form acceptable to the Employer's Agent, and shall clearly show:

- (i) The proposed rate of progress in order to complete the Works within the required period as specified, showing the various activities, their durations and proposed resourcing levels (major plant and labour) for each element of the Works. Sufficient detail shall be provided to enable the Employer's Agent to be able to gauge construction progress. All activities, including establishment on site, trimming and finishing and the completion of all minor ancillary works are to be included in the programme.
- (ii) A Work breakdown structure that identifies all major work activities, including connections to existing infrastructure,
- (iii) Scheduled start and end dates for each activity,
- (iv) The linkage of activities and any dependencies (time or resource related) between them.
- (v) The sequence of activities clearly identifying floats and critical path activities.
- (vi) Key dates in respect of work to be carried out, information required or due delivery,
- (vii) The anticipated value of work to be done during each month.
- (viii) Other information specifically required by the Employer's Agent.

The Contractor shall base his initial programme of work on the scope of the work as described in the Scope of Work and the Bill of Quantities. This programme shall be reviewed on a regular basis by the Contractor in accordance with changing circumstances, delays and variations to the work ordered by the Employer's Agent.

The Contractor shall submit to the Employer's Agent, at least one working day before each monthly site meeting copies of the following:

- (i) The contract programme with progress charts and programme graphs updated to reflect the actual progress to date and a summary of progress on site over the month preceding the site meeting.
- (ii) Details of activities running late, indicating what steps have been or will be taken to ensure that the work is completed within the specified time.
- (iii) A report on all labour, plant and materials on site.

If any change to the critical path occurs, the Contractor shall as soon as is practicable notify the Employer's Agent in writing.

When drawing up the programme the Contractor shall, among other issues, take into consideration and make allowance for:

- (i) the sequencing of the Works (if applicable) as described in section C3: Scope of Work and taking all pertinent information contained in the documents into account;
- (ii) expected weather conditions and their effects;
- (iii) known physical conditions or artificial obstructions;
- (iv) searching for, dealing with and carrying out alterations to the existing services;
- (v) the provision and implementation of the Environmental Management Plan (EMP) in terms of the Environmental Management Specification and Environmental Impact Assessment (EIA) conditions;
- (vi) the restrictions on the length of trench open at any one time as specified;

- (vii) the requirements and effects of employing Labour intensive Construction (LIC) methods (if applicable);
- (viii) the accommodation and safeguarding of public access and traffic;
- (ix) the lead time required for compliance with the Site-Specific Health and Safety Specification and Site-Specific Baseline Risk Assessment (Section C3.7);
- (x) provision and implementation of the Health and Safety Plan in terms of the 2014 Construction Regulations and the Occupational Health and Safety Act (1993)
- (xi) election day;
- (xii) official builders break;
- (xiii) special non-working days; and
- (xiv) non-working days.

It should be noted that it is in the Contractor's best interest to provide a comprehensive programme giving as much information as possible about the times allowed for the various activities as well as resource or other limitations affecting the programme, since the approved programme may be used to evaluate any claims in terms of the General Conditions of Contract for extensions of time.

1.1.2. Employer's Agent Inspection and Approval of the Works

The Contractor shall allow reasonable time in his programme for the Employer's Agent to carry out examination of the work before covering up. Requests for inspections should be made in writing to the Employer's Agent or his representative at least 24 hours before such inspections are required. Requests for inspections should be planned in such a way to coincide with the Employer's Agent or his representative daily site visit.

If the Employer's Agent or his representative attends with the purpose of examining any part or materials of the works at the date and time agreed on with the Contractor and it is found that the works or materials are not ready for inspection, the Contractor shall be responsible for the cost of that visit by the Employer's Agent or his representative.

The Employer's Agent or his representative will visit the site approximately daily for the purpose of supervision of the Contract and inspection and approval of completed work. The Contractor shall therefore arrange his working programme in such a way that all work is inspected and approved at the required time. Under no circumstances shall he proceed with any activity that covers up previous work before the previous work has been approved in writing (e.g. no trench shall be backfilled until the laid pipes and bedding have been inspected and approved).

1.1.3. Review of Progress

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

The Contractor is required together with his monthly updated programme to submit a cash flow indicating the anticipated total and monthly expenditure value for the contract at the monthly site/progress meetings.

With reference to paragraph 56 of the Contract Data the programme and cash flow will be reviewed at the monthly site meetings at which time the Contractor shall provide sufficient detail that will allow a comparison of completed work per activity against the original approved programme. The Contractor shall indicate what resources and programme changes he intends to implement in order to remedy any activity that has fallen behind. The Employer's Agent may demand from the Contractor a major revision of the programme. Such a revision shall be submitted for approval within fourteen (14) days of the demand.

1.1.4. Interim Asset Expenditure Reporting

If construction is still in progress over the year-end period of the Kouga Local Municipality, being 30 June of each year, the Municipality shall be furnished with a report / certificate at year-end (30 June), which details (a) The cumulative expenditure incurred up to 30 June for the project. (b) any details if the project is taking a significant longer period of time to complete than expected, including reasons for any delays. (c) details where construction or development has been halted either during the current or previous reporting period(s), including reasons for halting the construction or development of the asset/project.

1.2. **Health and Safety**

The Contractor shall take particular note of the health and safety requirements contained Section C3.7 of the Scope of Work.

1.3. Environmental Requirements

The Contractor shall take particular note of the environmental requirements contained in Section C3.8 of the Scope of Work.

1.4. Recording of Weather

The Contractor shall supply and install a rain gauge on site and record weather conditions, on a daily basis in a book which will be available on site at all times.

Any weather conditions affecting the progress of the work shall be recorded.

1.5. Format of Communications

Throughout the construction period the Employer's Agent shall supply a carbon triplicate Site Request and Memorandum/ Site Instruction book. These books shall be kept on Site at all times.

The Site Request book shall be issued to and used by the Contractor for:

- (i) providing the Employer's Agent 's Representative with any information regarding the construction of the Works which may be requested,
- (ii) requesting information from the Employer's Agent's Representative regarding the works that is not obtainable by any other means, and
- (iii) giving notification in writing as required by any of the relevant clauses of the General Conditions of Contract.

The Site Memorandum/ Instruction book shall be used by the Employer's Agent 's Representative for the purpose of writing day to day instructions and confirming any verbal information or instructions given to the Contractor, as well as requesting variations to the works that may be required.

One copy of each Site Memorandum/ Instruction or request issued by either party shall remain in the book.

Further to the abovementioned Site Memorandum/ Instruction book, the Contractor shall, throughout the construction period, supply and maintain the following documentation that shall be kept on site, accessible to both the Contractor and the Employer's Agent or representative at all times:

a) Site Request/ Instruction book

For the Contractor to provide the Employer's Agent or Representative with information required, for giving notification in writing of inspections, drawings, etc., required by the Contractor, and for use by the Employer's Agent or Representative for the purpose of writing day-to-day instructions or confirming verbal information or instructions given to the Contractor.

b) Health and Safety File

Containing the site and safety hierarchy, contact details, safety plan, audits, safety equipment, safety training, injuries log, inspections and all other relevant safety data.

c) Quality Control File

Containing Quality Assurance and Quality Control Forms to be operated and maintained by the Contractor.

d) Measurement File

Containing records of work measurement and calculations for each payment claim submitted by the Contractor to the Employer's Agent.

e) Daily Register

Listing labour and plant status. A complete record of staff employed on the Contract is to be kept on site for use by the Employer's Agent.

f) Daily Contract Diary

For recording the work carried out on site each day – shall reference the specific area of work and shall be signed by the Construction Manager and the Employers Agents Representative.

g) Monthly Labour Return Schedule

h) One full set of contract drawings and contract documents

i) Approved Construction Programme

1.6. Site Meetings

Site meetings will be held at regular intervals (at least monthly), with representatives of the Contractor, the Employer and the Employer's Agent.

The Contractor shall attend all progress/site meetings and ensure that all persons under his jurisdiction are notified timeously of all progress/site meetings should their attendance be required. All persons attending progress/site meetings are to have the necessary delegated authority in respect of aspects such as planning, change managements, health and safety and environmental.

1.7. Methods and Procedures

1.7.1. Safeguarding & protection of excavations

Portions of the work will be carried out within the Hankey CBD and residential area. Excavations will be barricaded off, at all times, with clearly visible protection measures. Where deep excavations exist, the barricading shall be adequate to prevent accidental entry.

1.7.2. Disposal of excess material

Where material is surplus or unsuitable for use in embankments or spreading on site, the Engineer may order such material to be carted away and disposed of off-site at a location determined by the Contractor. The rate shall cover loading and transport and all disposal charges. The volume shall be computed on the basis of the volume of hauling vehicles. Disposal slips as proof of disposal will be provided to the Employer's Agent as part of Environmental Management, monitoring and compliance.

1.7.3. Giving notice of work to be covered up

The Contractor shall give the Employer's Agent reasonable time to accommodate examinations in his programme, in which case times for inspection can be agreed on. Requests for examination of work shall be made in the site request book at least 24 hours before the examination is required.

1.7.4. Cost of test specimens and tests

The Contractor must make allowance in his Tender for all such services and tests required from him. It is the duty of the Contractor to, at his own cost and by means of the necessary tests, prove to the Employers Agent or his representative that the works and compaction where prescribed, comply with the specification.

1.7.5. Progress Photographs

The Contractor shall set up a system of taking digital photographs on site on a weekly basis to monitor the progress of works. This digital photography shall be labelled with the date, location and description of the photograph and a copy handed to the Employer's Agent on a CD or other storage medium on a weekly basis for safe storage. The format shall be JPG, BMP or any other common format as shall be agreed with the Employer's Agent.

1.7.6. Materials handling, use and storage

All materials shall be stored in the designated Contractor's camp area or as indicated by the Employer's Agent. Any material to be stored and handled must be done in such a way as not to endanger any person on site or cause damage to the environment. The Contractor shall also ensure that all suppliers or delivery vehicles abide by all restrictions and procedures (speed limits, dust control, "no-go areas" etc.).

1.8. Quality Plans and Control

Quality Control Plans, methods and testing shall be as specified in the contract.

1.8.1. Control Testing of Earthworks, Sewers, manholes and Bedding

The Contractor is required to carry out his own control testing.

Any additional tests requested by the Contractor or any retests required, due to failure of the initial tests, will be charged to the Contractor at the rates ruling at the time.

The Contractor is required to carry out his own control testing, but if he so wishes, and agrees to abide by the results of the Employer's Agent check test, he may dispense with his own tests. However, if the Contractor should wish to use the Employer's Agent testing facilities, he will be charged for the various tests at the rates ruling at the time.

The Contractor shall engage the services of an approved independent laboratory or other institution – as applicable for quality testing – to ensure that his work complies with the Specifications.

No separate payment will be made for such testing, the cost of which will be deemed to be included in the Contractors rates tendered for the items of work that require testing in accordance with the Specifications.

The onus to produce work that conforms in quality and accuracy of details 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 experienced engineers, foreman, surveyors, material technicians, other technicians and technical staff together with all transport, instruments and equipment to ensure adequate supervision and positive control of the Works at all times.

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

The Contractors attention is drawn to the provisions of the various 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, the Contractor shall furnish the Employer's Agent with the results of the relevant tests to indicate compliance with the specifications.

1.8.2. Valves – Test Certificates

All valves supplied for installation under this contract shall be provided with test certificates. Batch test certificates are acceptable provided that the actual valves delivered to site are covered under these certificates.

1.9. Accommodation of Traffic on Public Roads Occupied by the Contractor

The operation of construction vehicles on existing roads shall be limited to traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof.

If the Contractor use existing roads for the hauling of materials to or from site, he shall be held responsible to clear any spillage caused by his activities on or near the roads by whatever means necessary and immediately. No additional payment will be made for the clearance of spillage and all other relevant costs.

Where work is to be executed close to existing residential properties, the Contractor shall ensure that at all times pedestrian and vehicle access are provided for house owners to their properties. Where crossing of existing driveways are to be done, the Contractor must liaise with the relevant property owners regarding the time and period when such access will not be available. However, access shall be made available between 17:00 and 07:00 on weekdays and on Saturdays and Sundays.

1.10. Testing, Completion, Commissioning, and Correction of Defects

Practical completion of the works will only be considered once the connections to the existing mains are completed, all pipelines and structures are completed, tested and approved.

1.11. Key Personnel and Supervision

A schedule of key personnel to be used on site, including contact particulars, is to be provided to the Employer's Agent before commencement of works.

The Key Personnel as presented as part of the tender submission in Returnable Schedule 12 : KEY PERSONNEL, must be employed on this Contract. If the personnel indicated are no longer available,

personnel with similar or better qualifications and experience shall be presented to the Employer's Agent for approval, before they may be employed in the Contract.

1.12. Normal Working Hours

Normal working hours shall be those as stated in the Government Gazette for Civil Engineering and Roadmaking Industries as applicable to a 5 (five) day week, Monday's to Friday's.

1.13. Electronic Payments

The Contractor will be responsible for supplying correct bank details to the Employer for electronic payments and the Employer will not be held responsible for any incorrect bank details supplied by the Contractor.

The Contractor's tax invoice shall contain the following information as a minimum:

- contract number and description;
- date of invoice;
- invoice number;
- clearly stipulate the words "Tax Invoice";
- be addressed to the Kouga Local Municipality;
- contain the details of the Kouga Local Municipality;
- contain the banking details, Vat number; and
- contain the logo of the contractor or contractors in the case of a joint venture.

The banking shall be presented to the Employer's in a formal letter with the logo of the Contractor signed by the Director(s) of the Contractor and counter signed by its financial manager.

1.14. Guarantees

The Contractor shall deliver to the Employer the original fixed performance guarantee before commencement of works. The guarantee shall be held by the Employer for safekeeping until completion of the work.

1.15. Payment Certificates

Payment certificates are to be agreed upon by the Construction Manager and Employer's Agent Representative and signed by them and submitted to the Employer's Agent by the 20th day of each month.

Payment certificates shall be submitted in the form of the Bill of Quantities. Columns shall be provided showing the previous quantity, current quantity and total quantity claimed under each item. Calculations to substantiate the quantities claimed must be submitted with each monthly claim.

Payment certificates are to be agreed upon by the Construction Manager and Employer's Agent Representative. Once agreed, the Contractor is to submit a signed payment certificate to the Employer's Agent for certification including a signed tax invoice addressed to the Kouga Local Municipality.

1.16. Neatness of the Site

Progressive and systematic finishing and tidying will form part of this contract. Spoil, rubble, materials, equipment or unfinished operations shall not be allowed to accumulate unnecessarily and in the event of this happening, the Employer's Agent shall have the right to withhold payment for as long as the condition prevails in respect of the relevant works in the area(s) concerned.

The general neatness and tidiness of the site is of particular concern. The Contractor shall therefore, on a day-to-day basis, keep the Works in a condition acceptable to the Employer's Agent.

1.17. Maintenance of access and streets

The operation of construction vehicles on existing roads or streets shall be limited to traffic with an axle load not exceeding that allowed by the Road Traffic Ordinance of the authority concerned, or any amendment thereof.

All access roads used by the Contractor shall be maintained for the duration of the contract and shall be rehabilitated to their original condition on completion of the contract. The Contractor must note that no additional payment will be made for construction, maintenance and rehabilitation of any access roads to the site.

1.18. Protecting the Site

The Contractor shall be solely responsible for the protection of the Site against all damage to property, services, terrain, trees etc. If in the normal execution of this Contract, disturbance to the Site of the Works is necessary, the Contractor shall obtain the prior permission of the Employer's Agent. After completion of this work, the Contractor shall reinstate the area concerned to its original condition at his own cost or as covered under the rates in the Bill of Quantities. The Employer's Agent ruling of what was the original condition of the Site or part thereof shall be final.

If the Contractor fails to reinstate the Site, the Employer shall do the reinstatement and the Employer's Agent shall establish the extent of the work as well as its costs. The Employer's Agent ruling shall be final and payment for the work will be deducted from the Contractor's monthly certificate.

The Contractor shall ensure that his actions do not cause any nuisance to the public. Should spillages occur, the Contractor must adequately disinfect the work site, including the container area.

1.19. Protecting the Works against flooding

The Contractor shall provide sumps, pumps, furrows, berms and/or coffer dams to divert water flow away from construction activities; and any other temporary measure/works as may be necessary to minimise damage, inconvenience or interference, for 24 hours a day 7 days a week throughout the period of construction, to adequately protect the works from flooding and damage.

The Contractors programme must include and item and information regarding the dealing with water.

1.20. Landowners

The Contractor is to ensure that all landowners are notified 1 month prior to construction commencing in their properties. The Contractor shall submit copies of the notification to the Employers Agent.

The Contractor is to minimise disruption and ensure access and security for the landowners are maintained at all times. The following measures are to be adhered to for the duration of the contract:

- The construction of activities should proceed as discussed with the landowner and Employers Representative
- Landowner to have access to his property at all times
- Temporary fences to be installed as required by the Contractor without limiting access to the landowner
- Tidying up, removing temporary fencing, reinstating existing fencing and opening the existing access to be performed before completion of the contract

1.21. Other Contractors

During this contract, there might be other Contractors operating within the boundaries of the site. The Contractor is to allow for the attendance and dealing with other Contractors in the construction programme and priced rates.

1.22. Protecting the Works against flooding

Pro forma approval forms to be used on this contract shall be provided by the Employers Agent at the inaugural meeting.

Forms for reporting on employment of local labour (EPWP) are required. These reports shall be submitted monthly to the Employers Agent in accordance with the stipulated requirements.

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C3.6 Works Specifications

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PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

PORTION 3: GENERAL SPECIFICATION FOR CIVIL AND STRUCTURAL

PORTION 1: STANDARDISED SPECIFICATIONS

The following SANS 1200 Standardised Specifications for Civil Engineering Construction prepared by the South African Bureau of Standards are applicable:

SANS 1200 A	General
SANS 1200 AB	Engineer's Office
SANS 1200 C	Site Clearance
SANS 1200 D	Earthworks
SANS 1200 DB	Earthworks (Pipe Trenches)
SANS 1200 DM	Earthworks (Roads, Subgrade)
SANS 1200 G	Concrete (Structural Works)
SANS 1200 L	Medium Pressure Pipelines
SANS 1200 LB	Bedding (Pipes)
SANS 1200 LD	Sewers
SANS 1200 M	Roads (General)
SANS 1200 ME	Subbase
SANS 1200 MF	Base
SANS 1200 MK	Kerbing and Channeling

These standardised specifications are obtainable from the South African Bureau of Standards. The Contractor shall obtain copies of these documents at his own costs.

Interpretations of and variations to the Standardised Specifications are set out in Portion 2 of the Works Specifications.

The term "Engineer" appearing in any of the SANS 1200 Standardised Specifications must be replaced with the terms "Employer's Agent".

PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

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PORTION 2: VARIATIONS AND ADDITIONS TO STANDARDISED SPECIFICATIONS

The variations and additions to the SANS 1200 specifications listed above are as follows:

The term "Project Specification" must be replaced by the term "Scope of Work" wherever it appears in the standardized specifications.

The term "Schedule of Quantities" must be replaced by the term "Bill of Quantities" wherever it appears in the standardized specifications.

The term "Engineer" appearing in any of the SANS 1200 Standardised Specifications must be replaced with the terms "Employer's Agent".

The prefix "PSA" denotes an amendment to SANS 1200A. "PSAB" denotes an amendment to SABS 1200AB and so forth. The number following these prefixes refers to the relevant clause numbers of SABS 1200. For example: "PSA 8.1" refers to Clause 8.1 of SANS 1200A.

Further to the above, it should be noted that, where in a specific Standardised Specification reference is made to a subclause in another Standardised Specification, any amendment or addition to the subclause referred to, as provided in the Works Specification, shall apply.

PSA SANS 1200 A: GENERAL

PSA 2 INTERPRETATIONS

PSA 2.3 DEFINITIONS

Add the following definitions:

Commercial source: A source for the supply of materials or services chosen by the Contractor and for which he assumes full responsibility for the quality and supply thereof.

Construction Width: The strip of land along a pipeline route in which all construction activities are to be contained, as defined in PSA 5.8.

Landowner: The term Landowner shall be read to include any Lessee of the land concerned.

PSA 2.8 ITEMS IN SCHEDULE OF QUANTITIES

PSA 2.8.1 Principle

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

PSA 3 MATERIALS

PSA 3.1 QUALITY

Where there is a standardisation mark programme for any material, all such material supplied shall bear the official standardisation mark.

Alternative materials or equipment proposed by the Contractor shall be tested. The test, as well as the materials or equipment, shall be approved by the Engineer prior to any such materials or equipment being built into the works, and all costs involved in testing shall be deemed to be included in the rates tendered.

PSA 4 PLANT

PSA 4.2 CONTRACTOR'S OFFICES, STORES AND SERVICES

The Contractor's site establishment shall also comply with the requirements of the Environmental Management Plan herein (Section C3.8).

PSA 5 CONSTRUCTION

PSA 5.1 SURVEY

PSA 5.1.1 Setting Out of the Works

The Contractor shall engage an engineering surveyor to establish sufficient control points for the subsequent setting out and checking of the new pipeline alignments.

Any control point disturbed by the Contractor in the course of construction shall be reinstated at the Contractor's own expense.

The setting out of the Works shall be carried out by the Contractor, according to the setting out coordinates given on the drawings and the control points referred to above. All dimensions, levels and data necessary for the complete setting out of the Works will be provided on the Drawings. The Contractor shall not scale dimensions from the Drawings but shall request from the Engineer any information which is not clearly stated on the Drawings.

PSA 5.4 PROTECTION OF OVERHEAD AND UNDERGROUND SERVICES

Add the following to Sub-Clause 5.4: -

(i) Location and Protection

All available information relating to known existing services and structures has been included on the Drawings. Although this information is reflected as accurately as possible, all positions and levels must be taken as approximate only. At the commencement of the contract the Contractor shall verify the information on the plans.

The Contractor shall liaise with the landowners to determine the location of any privately-owned services.

At locations where there is a reasonable possibility of unknown underground services being present, the Contractor shall open trenches across such locations before commencing with excavations and, if services are found, these shall be plotted and thereafter be considered as 'known services'. Such work is to be carried out only on the instruction of and under the direct control of the Employers Agent.

All known services shall be adequately protected from damage during construction operations. The requirements of the relevant service departments relating to limits of heavy plant usage, departmental supervision etc., shall be ascertained and adhered to.

Any damage to known services shall be made good at the Contractor's expense.

No pegs or stakes are to be driven into the ground in the vicinity of the underground services, particularly Electricity or telecommunication services.

Any services or structures damaged during construction shall immediately be reported to the Employers Agent, and as soon as possible after such damage a written report stating the exact circumstances of the occurrence shall be submitted to the Employers Agent.

All practical measures shall be taken to effect immediate repairs, either by contacting the relevant authority, or where instructed by the Employers Agent, the Contractor shall perform temporary repairs himself.

(ii) Wayleaves

As soon as the Contract has been awarded, the Contractor shall apply for the applicable wayleaves or permits from Eskom, and the Kouga Local Municipality for working in the vicinity of electrical cables.

The Contractor shall also apply to Telkom, Neotel and any other services authorities in respect of any other services which may be present on site.

Copies of these wayleaves or permits shall be submitted to the Employer's Agent prior to any excavations being carried out.

The Contractor shall provide any sureties or bank guarantees (over and above any other contractual monies) required by Eskom, the Municipality or any other Service Authority, which will be fully refundable provided that the funds are not required to repair cables damaged by the Contractor. The Contractor shall make provision for excavating by hand when working within 3 m of existing electrical cables (underground or overhead). The Contractor shall liaise closely with Eskom in this regard.

PSA 5.6 POLLUTION

Add the following to Sub-Clause 5.6:

The Contractor is required to take all necessary precautions, watering where appropriate, to prevent dust blowing from construction material and spoil heaps and/or ground stripped of vegetation cover. Unless a specific item is included in the Bill of Quantities, the costs shall be deemed to be included in the tendered rates.

This item shall receive special attention due to the presence of vineyards in the vicinity of the site.

PSA 5.7 SAFETY

The Contractor shall comply with all further provisions pertaining to safety, contained in the Section C3.7: Health and Safety Specifications.

PSA 5.8 GROUND AND ACCESS TO THE WORKS

PSA 5.8.1 Construction Width

The Works are to be executed within privately owned residential properties and land, public roads and land owned by the Municipality, Transnet, Eskom or other parastatal enterprises. Narrower construction widths shall apply in many instances where physical constraints such as existing infrastructure, embankments, structures, boundary walls, trees etc exist.

The Contractor shall restrict his activities, including the pipe trench, top soil and excavated material heaps, temporary stringing out of pipes and stacking of materials, access and operation of plant and all other work, to within this Construction Width, or such narrower width as may be indicated in certain areas.

PSA 5.8.2 Site Demarcation

Prior to starting work on any section of the pipelines, the Contractor shall erect and maintain site demarcation along both edges of the Construction Width. The demarcation shall only be removed after completion of the backfill.

Site demarcation shall comprise orange, UV stabilised, HDPE construction safety netting, 1,2 m high, adequately supported on timber stakes, together with sufficient florescent painted "Construction Ahead" and "Deep excavations" safety signages, to be visible to all road users and pedestrians, in day-light and at night time.

PSA 5.8.5 Access Roads

Where there are no existing roads or tracks, the Contractor shall provide suitable access roads, for the purposes of construction and delivery of materials and for access by the Employers Agent to carry out inspections of the work

These shall be maintained in a satisfactory condition until they are no longer required, after which the areas affected shall be reinstated to their original condition.

Temporary gates shall be provided at points where access roads cross existing fences.

All existing access roads on the site, used by the Contractor for the works or affected by the works shall be maintained for the duration of the Contract and reinstated to their original condition after completion of the works.

The Contractor shall ensure that all existing access roads required by the general public, the Employer or the Landowners are kept open or that acceptable alternative routes are provided.

PSA 5.8.6 Fences

Before commencing work, the Contractor shall consult the affected landowners to determine which fences, if any, can be temporarily removed.

Fences that cross the Construction Width shall be suitably propped, protected and maintained during construction.

Fences which run parallel to and within the Construction Width, shall be replaced with a temporary fence erected along the edge of the Construction Width, and restored to their original lines after completion of the Works.

Where so agreed to by the landowners, the fences may be dismantled, the materials set aside until completion of the work, after which they shall be reinstated. All fences affected by the Works shall be reinstated to their original condition.

PSA 5.9 ACCOMMODATION OF TRAFFIC

(New Clause) Temporary traffic signs shall be erected at all diversions.

The **number and layout** of the traffic signs shall comply with the Site Manual entitled “**Safety at Roadwork’s in Urban Areas**”, as published by the Department of Transport.

Traffic signs shall have a yellow background with either a red or black border.

PSA 5.10 PROVIDING ACCESS TO ADJACENT ERVEN AND PROPERTIES

(New Clause) Access to adjacent erven and properties where affected must be provided by the Contractor at all times. To this end suitable road and trench crossings shall be constructed where required. Temporary trench crossings shall be in the form of portable bridges, temporary backfill or other approved means and shall be capable of permitting the safe passage of vehicles of mass not exceeding 2 tonnes. The Contractor shall also be responsible for maintaining crossings and for removing same when they are no longer required.

The Contractor may, with the approval of the Employer’s Agent, arrange with the occupiers of the affected erven and properties to temporarily close off a portion of a street, road, footpath or entrance, provided that the Contractor shall give due notice of the intended closure and its probable duration to the occupiers and shall as punctually as possible re-open the route at the prescribed time. Where possible the access route shall be made safe and re-opened to pedestrian/vehicular traffic overnight. Any such closure shall be an arrangement between the Contractor and the occupiers and shall not absolve the Contractor from his obligations under the contract to provide access at all times. Barricades, traffic signs and drums shall be provided by the Contractor to suit the specific conditions”.

PSA 5.11 MAINTAINING WATER SUPPLY

(New Clause) The Contractor shall take note that he shall not cut off the existing water supply without the prior approval of the Municipality and of the Employer’s Agent and the knowledge of the affected residents.

No water pipeline shall remain cut off for more than 5 hours or overnight.

Failure on the part of the Contractor to comply with any of the above provisions will constitute sufficient reason for the Employer’s Agent to stop the works until the situation has been remedied, or should he deem it necessary, arrange for the situation to be remedied at the Contractor’s cost.

No direct payment will be made for the cost of maintaining the existing water supply. Payment will be deemed to be covered by the rates and sums tendered and paid for the various items of work included under the contract.

PSA 8 MEASUREMENT AND PAYMENT

PSA 8.2 PAYMENT

PSA 8.2.2 Time Related Items

For the purposes of interim payment certificates and valuation of the adjustment to time-related costs for extensions of time in terms of Clause 5.12.3 of the General Conditions of Contract.

PSA 8.3 SCHEDULED FIXED-CHARGE ITEMS AND VALUE-RELATED SUMS

PSA 8.3.1 Contractual Requirements

Add the following to Subclause 8.3.1:

“In addition, the sum tendered shall cover all initial costs incurred in complying with the requirements of the Special Conditions of Contract”.

PSA 8.3.2 Fixed establishment costs

The Contractor shall tender a lump sum in the Bill of Quantities to cover his fixed establishment costs. The amount tendered and paid shall be full compensation to the Contractor for:

- (i) The establishment of his organisation and equipment on the site, the transfer of all personnel, equipment tools, office, ablution and storage facilities to the site, establishment of water, power and telephone facilities, and the removal of all the above- mentioned items on completion of the works.
- (ii) Compliance with all other general conditions and requirements that are not specifically measured elsewhere for payment in these Contract Documents.

Payment shall be effected as follows:

- (i) Seventy-five percent (75%) of the lump sum tendered shall be paid when the Contractor's stores, offices, etc. are substantially complete, provided that sufficient plant and labour to commence construction at the programmed rate has arrived at the site of the Contract and is in working order.
- (ii) Twenty-five percent (25%) of the lump sum tendered will be paid after the Contractor has reached a 50% Work Scope completion, measured by the value of work completed to date.

Only the tendered amount shall be paid under this item which in no way shall be affected by modifications of the Contract Amount.

<u>Item</u>	<u>Unit</u>
Contractor's Fixed establishment cost	Sum

PSA 8.3.2.2 *Rain gauge*

(New Clause) Add the following to Subclause 8.3.2.2 (k):

The costs for complying with this clause shall be deemed to be included in PSA 8.3.2. The tendered rate shall cover the cost of supplying and installing the rain gauge in a suitable spot, and away from any obstacles that can direct rainwater into or away from the opening of the gauge and cause inaccurate measurements. It is further deemed that the tendered rate covers the Contractor's time-related costs for the maintenance of the rain gauge for the duration of the contract".

PSA 8.3.5 Contractor's Obligations with Respect to Health and Safety

(New Clause) The Contractor shall tender a lump sum in the Bill of Quantities to cover his fixed costs for the proper compliance with the requirements of the Occupational Health and Safety Act, the Construction Regulations 2014 issued in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Site Specific Health and Safety Specifications in Section C3.7 herein. The amount tendered and paid shall be full compensation for:

- (i) The drawing up of a detailed Health and Safety Plan in respect of the Works for submission to the Engineer and Employer prior to the handing over of the Site to the Contractor.
- (ii) The execution of all training, precautions, monitoring, liaison, consultation and review as detailed in the Health and Safety Plan.
- (iii) Ensuring that all Sub-Contractors comply with the requirements of the Act and the Health and Safety Plan.
- (iv) The preparation and maintenance of a Health and Safety File, which is to be submitted to the Employer upon completion of the Works.
- (v) Compliance in all other respects with the relevant health and safety legislations

Payment shall only be effected once the Employers OHS Agent has approved the OHS File, inclusive of all Risk Assessments and Method Statement.

<u>Item</u>	<u>Unit</u>
Fixed costs with respect to Health and Safety	Sum

PSA 8.3.6 Compliance with Construction Environmental Management Programme

(New Clause) The Contractor shall tender a lump sum to cover all fixed costs (over and above the costs of site establishment and compliance with health and safety requirements) for complying with the Environmental Management Plan contained in Section C3.8 herein. The amount tendered shall be deemed to be full compensation for all administration, labour, plant, materials, services and risks associated with complying with the Environmental Management Plan in every respect.

A separate item will be scheduled for the Environmental Awareness Training. The amount tendered shall cover all costs associated with provision of the venue, arranging attendance by personnel and shall be deemed to be full compensation for wages of personnel and loss of production during the period that they are engaged in Environmental Training. Payment under this item will be made in the first certificate after completion of the training, provided that the Contractor has submitted a copy of the attendance register to the Engineer.

<u>Item</u>	<u>Unit</u>
a) Compliance with Environmental Management Plan.....	Sum
b) Environmental awareness training.....	Sum

PSA 8.3.7 Items Requiring Special Attention (Fixed Charge)

(New Clause) a) Wayleaves

The item shall cover all general costs associated with protection of services and compliance with wayleave requirements as detailed in PSA 5.4, including financing of any deposits required and/or costs of providing any sureties or guarantees required.

b) Survey

The item shall cover all costs of establishing control points and general costs associated with setting out the works, especially Manhole levels, as described in PSA 5.1.1 above.

<u>Item</u>	<u>Unit</u>
a) Wayleaves.....	P.Sum
b) Survey.....	Sum

PSA 8.3.9 Removal and re-establishment of Contractor's site establishment

(New Clause) Only if so instructed, the Contractor shall delay the execution of the Works and remove the site establishment and re-establish at a later date to be determined by the Employer. This item shall cover all fixed costs associated with the complete removal from site of the Contractor's establishment and the cost re-establishment. 50% of this item shall be paid upon removal of the site establishment and the balance shall be payable upon re-establishment.

The costs for removal and reinstatement of the Employer's Agent's office, vehicle and equipment as specified in Section AB shall also be included in the rate for this item.

PSA 8.3.10 Provision of Advance Payment Guarantee

(New Clause) The Employer may instruct the Contractor to obtain and advance payment certificate for the supply of materials, up to an amount of R 2 000 000, in accordance with clause 6.10.10 of the Contract Data. The certificate shall remain valid until such time as all materials covered by it have been built into the Works as certified by the Employer's Agent.

This item shall cover all costs, premiums and charges associated with providing an acceptable Advance Payment Guarantee.

PSA 8.4 SCHEDULED TIME-RELATED ITEMS

PSA 8.4.1 Contractual Requirements

Add the following to Subclause 8.4.1:

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

- the maintenance of his whole organisation as established for this Contract;
- the maintenance of all insurances, indemnities and guarantees required in terms of the Conditions of Contract or Tender where applicable; and
- compliance with all general conditions and requirements which are not specifically measured elsewhere for payment in these Contract Documents.

Payment shall be made monthly in compliance with the method laid down in Sub-clause 8.2.2 of SANS 1200: A, once Proof of all the above documentation has been received and approved by the Employer. The Contractor will not be paid Time-Related Preliminary and General charges for any Special Non-Working Days, as stipulated in the Appendix, which shall be deemed to have been allowed for in his rates."

PSA 8.4.2 Time Related Establishment Costs

The Contractor shall tender a Monthly rate in the Bill of Quantities to cover each lime item listed his time-related establishment costs. Other than the items which have been separately scheduled in PSA 8.4.5, the amount tendered and paid shall be full compensation to the Contractor for:

- (i) The maintenance of his whole organisation as established for this Contract;
- (ii) Compliance with all general conditions and requirements which are not specifically measured elsewhere for payment in these Contract Documents.

Payment shall be made monthly in compliance with the method laid down in Sub-Clause 8.2.2 of SANS 1200 A.

<u>Item</u>	<u>Unit</u>
Time related establishment	Monthly

PSA 8.4.5 Items Requiring Special Attention

The following items shall cover time-related costs associated with complying with specific items requiring special attention, as identified in the Scope of Work.

<u>Item</u>	<u>Unit</u>
a) Dealing with water	Monthly

The sum tendered shall cover all costs not included in the rates for earthworks or other billed items for complying with Clause 5.5 of SANS 1200 A in dealing with water on the works. This amount shall only be paid if proof of any water conditions on site, either caused by storm water or spillage from a broken pipe, has been experienced, which were to be dealt with by the Contractor.

Fixed costs (if any) shall be deemed to be included in PSA 8.3.2.

b) Search for, record and protect all survey bench marks	Monthly
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The sum tendered shall be deemed to be full compensation for complying with the requirements of Clause 5.1.2 of SANS 1200 A. This amount shall only be paid if proof of any survey pegs or additional setting out of levels were to be dealt with by the Contractor.

Fixed costs (if any) shall be deemed to be included in PSA 8.3.2.

c) Night watch and Security Monthly

The sum tendered shall cover all costs of providing watchmen and security for the duration of the Contract, for the Contractor's establishment and materials stored on site including after hours, on weekend and on public holidays.

The Contractor's attention is drawn to the fact there are informal housing settlements in the vicinity of the site. The Contractor is deemed to have assessed the risk associated therewith and made appropriate provision in his rates.

Fixed costs (if any) shall be deemed to be included in PSA 8.3.2.

d) Maintenance of Access Roads Monthly

The sum tendered shall cover all time related costs associated with operating and maintaining access roads for the duration of construction, and reinstating them to their original condition upon completion, as specified in PSA 5.8.5.

Fixed costs, if any, shall be deemed to be included under item PSA 8.8.2.

e) Dust Control Monthly

The item shall cover all time related costs associated with dust control and pollution prevention as detailed in PSA 5.6.

Fixed costs, if any, shall be deemed to be included under item PSA 8.3.2.

PSA 8.4.6 Contractor's Obligations with Respect to Health and Safety

The Contractor shall tender a monthly rate to cover his time related costs of with respect to health and safety. The amount shall cover all of the Contractor's obligations as described in PSA 8.3.5 above.

<u>Item</u>	<u>Unit</u>
Time related costs with respect to health and safety	Monthly

PSA 8.4.7 Compliance with Construction Environmental Management specifications

The Contractor shall tender a monthly rate to cover all time-related costs (over and above the costs of site establishment) for complying with the Environmental Management specifications contained in Section C3.8. The amount tendered shall be deemed to be full compensation for all administration, labour, plant, materials, services and risks associated with complying with the Environmental Management Specifications in every respect.

<u>Item</u>	<u>Unit</u>
Time related costs with respect to environmental management	Monthly

PSA 8.4.8 Time-related costs of Full Time Personnel

The Contractor shall make experienced and qualified personnel available for this Contract, who will comply with the names, qualifications and years experienced as per Returnable Schedules 12 A to E. Any deviation from the names provided on the returnable Schedules, must be presented to the Engineer for approval, prior to employment on this Contract.

The Contractor shall ensure that the following required Full Time personnel is available for this Contract, and shall have a permanent residential address within the Kouga Local Municipality, for the duration of the Contract.

<u>Item</u>	<u>Unit</u>
a) Time related costs of Full Time Construction Manager	Monthly
b) Time related costs of Full Time Site Agent – Civil or Structural	Monthly
c) Time related costs of Part Time Site Agent – Electrical	Monthly
d) Time related costs of Full Time SMME Manager	Monthly

PSA 8.5 **SUMS STATED PROVISIONALLY BY THE EMPLOYERS AGENT**

PSA 8.5.1 Testing of materials by Employers Agent

The provisional sum provided in the Schedule of Quantities is to cover the payment of the SANAS registered soils laboratory to conduct any additional tests as directed by the Employer's Agent.

The percentage tendered shall be paid to the Contractor on the actual amount paid to the soils laboratory and shall cover the following:

- All costs involved in arranging the tests with the laboratory.
- Setting out the positions for the tests to be taken by the laboratory as indicated by the Employer's Agent.
- Making good all test holes.
- The cost of all overheads, charges and profits, etc.

<u>Item</u>	<u>Unit</u>
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a) Testing of materials ordered by the Employers Agent	PC Sum
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b) Overheads, charges and profit on a) above	%
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PSA 8.5.2 Survey by Engineer

The item shall cover survey work (additional to any survey work specified herein) to be undertaken as directed by the Employers Agent and by a surveyor nominated by the Employers.

The Contractor's tendered mark-up shall allow for all necessary administrative costs in complying with the above.

<u>Item</u>	<u>Unit</u>
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a) Survey work by Employers Agent	PC Sum
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b) Overheads, charges and profit on a) above	%
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PSA 8.5.3 Relocation of Services

A sum has been allowed for the relocation of services affected by the works to be carried out by the service authority concerned, if necessary.

The Contractor's tendered mark-up shall allow for all necessary liaison and cooperation with the service authority concerned.

<u>Item</u>	<u>Unit</u>
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a) Relocation of services by service authority	PC Sum
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b) Overheads, charges and profit on a) above	%
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PSA 8.5.4 Employment of CLO

A sum has been allowed for the employment of a Community Liaison Officer (CLO). The Contractor shall pay the CLO all fees and costs due to him, which shall be recoverable under this item.

The Contractor's tendered mark- up shall allow for all necessary administrative costs in complying with the above.

<u>Item</u>	<u>Unit</u>
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a) Employment of CLO	PC Sum
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b) Overheads, charges and profit on a) above	%
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PSA 8.5.5 Geotechnical Services

A site investigation and/ or testing will be required during the excavations for the Pump Station.

The sum shall cover the costs of the investigation by a Geotechnical Specialist who will be verifying the conclusions of the geotechnical report including tests and any other work that may be required for proper execution of the task.

The Contractor's tendered mark-up shall allow for all necessary administrative costs in complying with the above.

	<u>Item</u>	<u>Unit</u>
	a) Geotechnical Services	PC Sum
	b) Overheads, charges and profit on a) above	%
PSA 8.5.6	<u>Variation Order carried out by Contractor or Sub-Contractors</u>	
	The percentage rate tendered shall cover the main contractor's overheads and profit on any work executed by a subcontractor in respect of any Variation Order issued in terms of the Contract, as provided for by clause 6.6.1.2.1 of the Contract Data.	
	Cost for variation order shall consist of a detailed cost breakdown for materials, plant, labour, transport and overhead costs etc. Proof of all material costs shall be submitted by a Tax Invoice only. No Variation Order work may commence prior to the approval of the estimated additional costs. Any work that was executed without prior approval of the Engineer or Employer in writing, shall be for the Contractor's own expense.	
	<u>Item</u>	<u>Unit</u>
	a) Additional works under any Variation Order carried out in accordance with clauses 6.6 of the General Conditions of Contract.....	Sum
	b) Contractor's Mark-up on (a) above (as per GCC clause 6.6.1.2.1).....	%
PSA 8.7	DAYWORK	
	Certain amounts have been allowed under Dayworks for items of work which were not measurable at the time of tender. Depending on the overall contract price and budget constraints, some or all of these items may be omitted during the construction stage. Work for these items will be by written instruction only and will be compensated for on a dayworks basis.	
	Daily Site Diary notes detailing staff, work executed and no. off hours, signed by the Site Agent and Resident Engineer, must accompany each daywork claim. No payment will be authorised without approved costs and supported by signed Site Diary sheets.	
PSA 8.8	TEMPORARY WORKS	
PSA 8.8.1	<u>Site Demarcation</u>	
	The sum tendered shall cover all costs associated with erecting, maintaining and removing Construction Width demarcation as specified in PSA 5.8.2.	
	Site Demarcation	Sum
PSA 8.8.2	<u>Access Roads</u>	
	The sum tendered shall cover the costs associated with establishing and reinstating access roads as specified in PSA 5.8.5.	
	25% of the sum tendered will be paid once the necessary access roads are substantially established and the balance will be paid after all areas have been reinstated to the satisfaction of the Engineer.	
	<u>Item</u>	<u>Unit</u>
	Access roads	Sum
PSA 8.8.3	<u>Traffic Accommodation</u>	
	Access through public roads, to residential and commercial properties shall be maintained at all times. Should temporary diversions become necessary, the Contractor shall give reasonable notice to the affected residents and take adequate measures to maintain the temporary deviation in good condition at all times.	
	This item shall cover all costs of complying with the above as well as all signage, labour, plant, material and all other costs involved with accommodating traffic in accordance with the latest edition of the South African Traffic Signs Manual.	
	<u>Item</u>	<u>Unit</u>
	Traffic accommodation	Sum/Month

PSAB SANS 1200 AB: ENGINEER'S OFFICE

PSAB 3 MATERIALS

PSAB 3.1 NAMEBOARDS

The size, painting, decorating and detail of the nameboards shall be as shown in Annexure 2. The text to appear on the nameboard (names, contract title etc.) shall be confirmed with the Employers Agent prior to fabrication.

PSAB 3.2 OFFICE BUILDINGS

Add the following to Sub-Clause 3.2:

The Contractor shall provide a office for the Employer's Agent and representatives, equipped with air conditioners for summer and heaters for winter periods. In addition, the Contractor shall provide shaded carports for 2 vehicles, roofed and enclosed on three sides and adequately designed and constructed to resist wind and other loads. The available area for each vehicle shall be 5,5m x 2.7m.

On completion of the works, ownership of the office buildings, carport, boardroom, toilet, fittings and furnishings will revert to the Contractor who shall remove them from Site.

PSAB 3.3 OFFICE FOR SITE MEETINGS

The Contractor shall make available a suitable office with tables and adequate seating for twelve people, for the purposes of holding monthly site meetings.

PSAB 4 PLANT

PSAB 4.1 TELEPHONE

A fixed line telephone is not required.

If so directed the Contractor shall provide one cellular phone, complete with carry case and charger for the exclusive use of the Engineer's Representative, for the duration of the Construction Phase. The phone shall be fully insured.

The Contractor shall make the necessary arrangements with a service provider for a suitable cell phone contract for the duration of the Contract. Furthermore, the contractor shall make provision for the reimbursement of cell phone calls made from the Employer's Agent's personal cell phone.

PSAB 4.2 COMPUTER

The Contractor shall provide one approved laptop computer for the exclusive use of the Employer's Agent's Representative. The computer shall be an E560, i5-6200U Processor, 4GB DDR3 (+1 slot free), 500GB/ 7200rpm, DVD+RW DL, Intel HD 520 Integrated Graphics, 15.6 HD Anti-Glare, Graphite Black, ThinkPad BGN 1x1 BT4.0, NO 3G, WIFI, BT, BT, CAM, Windows 10 Pro, 1 year Carry In Warranty. The computer shall also include Kasper Sky Anti-Virus 2016 Africa Edition SA-ENG. 2-Desktop 1-year DVD as well as 3YR Onsite Next Business Day (Top Seller Services) and Office 365 Home (Media less. 1 Year Subscription) – P2.

The computer shall include a colour monitor, A4 inkjet printer, mouse, keyboard, 1 Gig USB flash drive, USB 3G modem and internet subscription with unlimited data for the duration of the contract.

The computer shall be fully insured. The insurance shall include any excess, which may be imposed in the event of a claim.

PSAB 4.3 SURVEY EQUIPMENT

If so requested, the Contractor shall provide the following survey equipment for the use of the Employers Agent Representative on the site, until the completion of the Works:

- (a) One Employers Agent Representative level and level staff, including tripod.
- (b) One steel tape of 100 m and one of 30 m length.

The Contractor shall service and maintain all survey equipment in good order. He shall insure them, and he shall indemnify the Employer and the Employers Agent against all claims for loss,

damage, breakage or theft of the said equipment. By agreement, the survey equipment may be shared between the Contractor and the Employers Agent.

Upon completion of the Works the equipment shall revert to the Contractor who shall remove it from the site.

PSAB 5 CONSTRUCTION

PSAB 5.1 NAMEBOARDS

Two (2) Contract nameboards shall be erected within two weeks of the Contractor receiving occupation of the Site. Any damage to these boards will be repaired within fourteen (14) days of a written instruction received from the Engineer.

The Employers Agent may at any time order the removal, repair and/or relocation of the nameboards if any objections are received with regard to them.

All name boards shall be removed fourteen (14) days prior to the date of issue of the Final Approval Certificate.

PSAB 5.5 SURVEY AND MATERIALS ASSISTANTS

The Contractor shall make available to the Employers Agent two suitably experienced survey and materials assistants to assist on and about the Site with surveys, measurements and materials testing, as and when required during normal working hours

PSAB 8 MEASUREMENT AND PAYMENT

PSAB 8.3 SCHEDULED ITEMS

PSAB 8.3.1 Fixed Charge and Value-Related Items

Payment for fixed charge and value-related items with respect to facilities to be provided for the Employers Agent will be effected in accordance with Clause PSA 8.3 as applicable.

The sum for the Employers Agent office shall include the furniture and ablution facilities as specified. It shall also include costs of providing a meeting room as specified.

The prices shall include all fixed contract costs associated with providing the following items for the Engineer.

<u>Item</u>	<u>Unit</u>
Fixed Charge Items	
a) Engineer's office	Sum
b) Cellular Phone	Sum
c) Computer	Sum
d) Survey equipment	Sum
e) Contract nameboards (2 No)	Sum

PSAB 8.3.2 Time-Related Items

Payment for time-related items with respect to facilities to be provided for the Employers Agent, will be effected in accordance with Clause PSA 8.4 as applicable.

The sum for the Employers Agents office, shall include costs of providing a meeting room as specified under PSAB 3.3.

The sum for the items listed below shall be full compensation for all fixed monthly charges and costs including contract payments and insurance but shall exclude charges for phone calls.

<u>Item</u>	<u>Unit</u>
Time Relates Items	
a) Engineer's office	Month
b) Cellular Phone	Month
c) Computer	Month
d) Survey equipment	Month
e) Contract nameboards (2 No)	Month

PSAB 8.4 SURVEY AND MATERIALS ASSISTANTS

The unit of payment shall be by man.hour and shall be full compensation for the use of the labour by the Employers Agent Representative.

<u>Item</u>	<u>Unit</u>
a) Survey Assistants.....	Man.hours
b) Materials Assistants	Man.hours

PSAB 8.5 CELLULAR PHONE CALLS

The Contractor shall pay all cell phone accounts. Data transfer via the modem will be included in this item.

<u>Item</u>	<u>Unit</u>
a) Monthly cellular phone call charges	Prov Sum
b) Overheads, charges and profit on (a) above	%

PSC SANS 1200 C: SITE CLEARANCE

PSC 3 MATERIALS

PSC 3.1 DISPOSAL OF MATERIAL

Natural material comprising stones, gravel, soil and topsoil shall be stockpiled along the edge of the Construction Width and spread over the Construction width after completion of the backfill.

All rubble and waste arising from the demolition of structures shall be removed from site.

Tree trunks, branches and any other cleared vegetation constituting a fire hazard shall be removed from site.

All cleared material removed from site shall be disposed of at an approved landfill site selected by the Contractor.

Burning of material on site will not be permitted.

PSC 5 CONSTRUCTION

PSC 5.1 AREAS TO BE CLEARED

The Contractor shall clear the Construction Width, to the extent necessary to allow access and the execution of the Works as specified.

No established trees or wild olives shall be removed without the Employers Agents prior approval. Prior to commencing clearing, the Contractor shall give adequate notice to the Employers Agent and the area to be cleared shall be inspected jointly by the Contractor's representative and a botanical specialist designated by the Employers Agent. Any vegetation to be protected shall be identified and marked and where necessary, minor adjustments to the pipeline alignment will be made to avoid damage to significant vegetation.

No vines shall be removed without prior approval from the Employers Agent. Prior to removal of any vines, the Contractor shall give adequate notice to the owner and give him the opportunity to recover any plants and or materials.

PSC 8 MEASUREMENT AND PAYMENT

PSC 8.1 PRINCIPLES

PSC 8.1.1 Demolition

Payment for demolition work, should it arise, shall only be made after all waste generated from the demolition work concerned has been cleared from site to the satisfaction of the Employers Agent.

Where indicated that materials recovered from demolition or dismantling of existing structures or plant are to be handed over to the Employer, the rate shall include all costs of removing, transporting and stacking the material at the designated location. No additional payment will be made for transport of material from any location along the pipe route to any location within 500 m of the Construction Width.

Where indicated that materials are to be reused in the Works, the rate shall cover all costs associated with dismantling, setting aside and storing the materials and protecting them from damage, until they are reused.

PSC 8.2 SCHEDULED ITEMS

PSC 8.2.1 Clear and Grub

Clearing and grubbing will not be measured where the pipeline is laid within existing gravel roads.

PSC 8.2.5 Fences

Protection/Reinstatement of Fences

Where existing fences cross the pipeline route, the item shall cover the costs of adequately supporting them, protecting them from damage and reinstating them, as well as providing temporary gates as required by the Contractor.

Where existing fences run along and within the Construction Width, the item shall cover the costs of protecting the fence from damage or temporarily relocating it outside of the Construction Width and reinstating it after completion of the works.

The fences may be reinstated using the original materials recovered from the existing fences provided that the Contractor shall, at his own cost, replace any materials that have been lost or damaged during the construction period.

The quantity measured shall be the number of fences affected, or in the case of fences running longitudinally the length of the portion of fence lying within the Construction Width.

<u>Item</u>	<u>Unit</u>
Protect/Reinstate fences that intersect the pipe route.....	No
Protect/Reinstate fences that follow the pipe route	m

PSD	SANS 1200 D: EARTHWORKS
PSD 1	SCOPE Items of work covered by this specification shall include, bulk and restricted earthworks for the pump stations as well as all other incidental excavations required to complete the Works.
PSD 3	MATERIALS
PSD 3.1	CLASSIFICATION FOR EXCAVATION PURPOSES
PSD 3.1.1	<u>Method of Classifying</u> The Contractor may use any method he chooses to excavate any class of material, but his chosen method of excavation shall not determine the classification of the excavation. The Engineer or his Representative will decide on the classification of the materials. In the first instance the classification will be based on inspection of the material to be excavated and on the criteria given in PSD 3.1.2 below. All material shall be considered to be soft material unless agreed and approved otherwise in writing with the Employers Agent prior to excavation taking place. In the application of this classification, no differentiation shall be made between "bulk" or "restricted" excavations.
PSD 3.1.2	<u>Classes of Excavation</u> All material encountered in any excavations for any purpose including restricted excavation will be classified as follows: a) Hard rock excavation Hard rock excavation shall be excavation in material (including un-decomposed boulders exceeding 0,17 cubic metres in individual volume) that cannot be efficiently removed without blasting or without wedging and splitting. b) Boulder excavation Boulder excavation shall be excavation in material containing more than 40% by volume of boulders of sizes ranging between 0,01 m³ and 0,17 m³. c) Soft excavation Soft excavation shall be all material not falling into the categories of hard rock or boulder excavation.
PSD 3.2	CLASSIFICATION FOR PLACING PURPOSES
PSD 3.2.1	<u>Material suitable for Embankments and Terraces</u> (d) The material arising from excavations for structures, foundations, footings and the like shall be used for the embankments, berms and terraces or as directed by the Employer's Agent and shall be compacted to a minimum of 90% modified AASHTO density (100% for sand).
PSD 3.2.2	<u>Material suitable for Replacing Overbreak in Excavations for Foundations</u> Add the following Subclause to 3.2.2: "Any overbreak, in locations where concrete work is to be cast against excavated undisturbed surfaces (e.g. below bulk excavation) is to be refilled with Grade 10 concrete".
PSD 3.2.4	<u>Backfilling and Embankments</u> Sufficient material arising from excavations for structures, foundations, footings and the like and which is suitable for forming and shaping including compaction of embankments, berms and backfilling against finished structures shall be temporarily stockpiled in the vicinity of the construction. All other material from the excavations shall be disposed of at the designated area.

PSD 5 CONSTRUCTION

PSD 5.1 PRECAUTIONS

PSD 5.1.1 Safety

PSD 5.1.1.2 Safeguarding of Excavations

The Contractor shall be responsible for all lateral support and the safe-guarding of all excavations, and all costs involved with the proper safeguarding of the excavations shall be included in the tendered rates.

PSD 5.1.1.4 Excavation of Rock by Blasting

In addition to complying with the provisions of Sub-clause 5.1.1.3, the Contractor shall record for the information of the Employer's Agent the spacing and loading of the charge in each blast and compliance with this requirement will not relieve the Contractor of any responsibility in terms of the said Sub-clause.

PSD 5.2 METHODS AND PROCEDURES

PSD 5.2.1 Site Preparation

PSD 5.2.1.2 Conservation of Topsoil

Add the following to Subclause 5.2.1.2:

"Topsoil shall not be stockpiled higher than 2.0m. Care shall be exercised to prevent the contamination and compaction of topsoil in any way especially by vehicles travelling over such material."

Topsoil shall consist of fertile, friable soil of loamy character obtained from areas having a good coverage of natural vegetation, preferably grasses. It shall be free from deleterious matter such as large roots, stones, refuse, stiff or heavy clays and the seeds of noxious weeds.

Topsoil shall be obtained from wherever suitable material occurs on the site or borrow areas. The Employer's Agent shall indicate the areas from where topsoil is to be removed, and unless otherwise permitted by the Employer's Agent, topsoil shall be taken from within 400mm of the surface. If the Contractor fails to stockpile the topsoil indicated, he shall obtain suitable topsoil from other sources at no extra cost to the Employer.

PSD 5.2.2 Excavation

PSD 5.2.2.3 Disposal

Where excavated material is disposed of on site or at location designated by the Engineer, the topsoil shall be stripped to a depth of 150 mm or as directed, stockpiled and reinstated to its original depth over the spoil. The spoil site shall be graded to smooth, free-draining contours.

PSD 5.2.4 Finishing

PSD 5.2.4.2 Top soiling

Delete the contents of Subclause 5.2.4.2 and replace with the following:

"Before top soiling, the area must be shaped to line and level and then loosened to a depth of 150mm. All rubble, large rocks, stones, etc shall be raked up and removed from the site prior to the topsoil being evenly distributed over the area to be grassed at a thickness of not less than 100mm. The topsoil shall be levelled with rakes. Following top soiling, the contractor shall apply 2:3:2 fertilizers at a rate of 40gm/m² prior to planting of vegetation cover".

PSD 5.2.5 Transport for Earthworks

All haulage for materials obtained from commercial sources selected by the Contractor or disposed of off-site by the Contractor shall be regarded as free-haul.

PSD 8 MEASUREMENT AND PAYMENT

PSD 8.3 SCHEDULED ITEMS

PSD 8.3.2 Bulk Excavation

Unless an item has been specifically scheduled for dewatering, the cost of dewatering of excavations will be held to have been included in the tendered rates for excavation. Provision is

made under item PSA 8.4.5 (a) which shall cover all the Contractor's costs involved with the control of surface and subsurface water, not included in the rates for excavation and trench excavations.

The Contractor shall provide adequate temporary drains in and around the excavations to control surface water. Such drains may be self-draining or lead to sumps equipped with pumps.

Should the Contractor allow saturated conditions to develop he shall take such steps to rectify the conditions as the Employers Agent may order, entirely at his own cost, including dewatering.

The tendered price for excavation shall also include for trimming, levelling and compacting the floor of the excavation ready for the application of the blinding layer.

Where embankments are to be constructed with boulder material, embankments are to be laid and compacted in layers (specified by the Employers Agent in writing) and boulders of diameter greater than the layer thickness are to be removed before compaction. The cost for this exercise is deemed to be included in the tendered rates.

PSD 8.3.2 a) Excavate in all materials and use in embankment or backfill or dispose of as ordered

Where the sequence of operations requires temporary stockpiling of excavated material, the rates for excavation shall cover temporarily stockpiling the excavated material on site and maintaining stockpiles until the material is used.

Removal of Excess Material

Where material is surplus or unsuitable for use in embankments or spreading on site, the Employers Agent may order such material to be carted away and disposed of off-site at a location determined by the Contractor. The rate shall cover loading and transport and all disposal charges. The volume shall be computed on the basis of the volume of hauling vehicles in accordance with 8.2.2.

PSD 8.3.3 Restricted Excavation

The provisions of PSD 8.3.2 shall apply. Rates tendered shall include for restricted backfilling around the structure.

PSD 8.3.14 Importation of Topsoil

The item shall cover all costs in sourcing, transporting to site and offloading, topsoil material from an approved source, for vegetating of site.

<u>Item</u>	<u>Unit</u>
Importation of topsoil.....	m ³

PSDB	SANS 1200 DB: EARTHWORKS (PIPE TRENCHES)
PSDB 3	MATERIALS
PSDB 3.1	CLASSES OF EXCAVATION The excavation of material will be classified as specified in Clause PSD 3.1.
PSDB 3.2	BACKFILL MATERIAL Delete the contents of Clause 3.5(b) and replace with the following: "Materials used in the reinstatement of trenches beneath or within a new roadway, up to underside of the road layers, shall be 37,5mm basecourse quality material conforming to SANS 1200 MF compacted in 150mm layers to 98% Modified AASHTO density. The area subject to loads from road traffic shall be held to apply for a width of 150mm beyond the back of kerb."
PSDB 5	CONSTRUCTION
PSDB 5.1	PRECAUTIONS
PSDB 5.1.5	<u>Shoring of Pipe Trenches</u> The Contractor shall be responsible for ensuring that pipe trenches are safe by either cutting back the walls to safe slopes or shoring. The rates for trench excavation shall be deemed to include for this. When excavating the Contractor shall exercise due caution to ensure that the excavations does not undermine any existing structures or services, including existing thrust blocks.
PSDB 5.4	EXCAVATION <u>Trench Depths</u> All trenches are to be excavated to a depth sufficient to accommodate the pipes at the levels and cover as shown on the drawings. Unless otherwise stated, a minimum cover of 1000 mm will generally be required. Allowance must also be made for the required depth of pipe bedding.
PSDB 5.6.3	<u>Disposal of Surplus Material</u> Surplus material shall be disposed of off- site or spoiled on site, as directed, in accordance with the provision of PSD 5.2.2.3.
PSDB 5.6.6	<u>Completion of Backfilling</u> Add the following to Subclause 5.6.6: "If in the opinion of the Employer's Agent's Representative, the Contractor is lagging in the backfilling of trenches, he will be entitled to order that no further excavation takes place until the backfilling operation has caught up."
PSDB 5.7	COMPACTION OF TRENCH BACKFILL Compaction of trench backfill above the bedding (fill blanket) shall be 90% Modified AASHTO density (100% for non-cohesive materials).
PSDB 8	MEASUREMENT AND PAYMENT
PSDB 8.3	SCHEDULED ITEMS
PSDB 8.3.1	<u>Site Clearance and Removal of Topsoil</u> The rate tendered shall include all costs of complying with the relevant requirements of the Environmental Management Plan. d) <u>Strip and Conserve Gravel in Roadways</u> Where pipes are laid within gravel roads, the contractor shall strip and conserve separately the existing gravel to a depth of 150 mm (or such other depth ordered) for use in reinstating the road surface. Any shortfall in gravel due to loss of material or contamination shall be made up at the Contractor's cost by importing laterite gravel from an approved source.

The quantity shall be calculated from the trench width determined in accordance with 8.2.3, and the length of pipe along the centreline between road edges. The quantity shall be adjusted for depths other than 150 mm where so ordered.

The rate tendered shall include all costs in stripping, stockpiling and conserving the material and replacing shortfall as specified.

<u>Item</u>	<u>Unit</u>
Strip and conserve gravel in roadways.....	m²

PSDB 8.3.2 Excavation

PSDB 8.3.2 (a) Excavation in all materials for Trenches

The Contractor is to note that Trench Excavation will be measured and paid as per SANS Drawing DB-2, in lengths for depth increments. The depth for each increment will be the total depth measured as per the Longitudinal Sectional drawings issued for Construction purposes, and will be measured from the bottom of the designed Bedding level to the top natural ground level after Clear and Grub, measured along the centre line of the pipeline.

PSDB 8.3.2 (b) Extra-over item (a) above for:

Delete (1) and (2) of Sub-Clause 8.3.2 (a) and replace with the following:

- a) Hard rock excavation
- b) Boulder excavation

Hard rock excavation and boulder excavation will only be paid when written permission is obtained from the Employers Agent prior to the excavation operation actually commencing.

PSD 8.3.4 Particular Items

Add the following to Sub-Clause 8.3.4:

PSDB 8.3.4 (c) Excavate by hand in all materials to verify existing services, or as directed by the Employers Agent and backfill

This item shall apply where the excavation is only required to confirm the position of an existing service and the removal of the service is not intended.

Measurement shall be the cubic metres actually excavated by hand to expose the services or hand excavations as directed by the Employers Agent.

The rate shall cover the additional cost of care in excavation necessitated by the presence of the service.

Excavations by hand will only be paid upon written order by the Employers Agent to perform excavations by hand.

<u>Item</u>	<u>Unit</u>
Excavation by hand in all materials to verify existing services and backfill.....	m³

PSG	SANS 1200 G: CONCRETE (STRUCTURAL)
PSG 3	MATERIALS
PSGA 3.8	CURING COMPOUND Curing compound shall be white pigmented natural resin based liquid curing compound complying with ASTM C 309-74."
PSG 4	PLANT
PSG 4.4	FORMWORK
PSG 4.4.2	<u>Finish</u> The finish to all exposed concrete shall be smooth and that to buried or backfilled surfaces, rough.
PSG 5	CONSTRUCTION
PSG 5.1	REINFORCEMENT
PSG 5.1.2	<u>Fixing</u> Delete the words "or, if permitted by the Employer's Agent, by welding" in the second paragraph of this subclause. Welding will not be permitted.
PSG 5.4	CONCRETE
PSG 5.4.1	<u>Quality</u>
PSG 5.4.1.5	<u>Strength Concrete</u> Add the following to subclause 5.4.1.5: "The Contractor shall when requesting approval of a mix design, submit the constituent proportions of the proposed mix together with the results of compressive strength tests carried out."
PSG 5.4.1.6	<u>Ready-mixed concrete</u> Notwithstanding the provisions of this subclause, the results of tests carried out by the manufacturer as part of his quality control system will not be used as a basis for evaluating the acceptability of delivered concrete in terms of subclause 7.3.
PSG 5.4.2	<u>Batching</u> Notwithstanding the requirements of this subclause, the method of batching shall be subject to approval. If volume batching is allowed, only full standard 50kg bags of cement may be used to make up a batch.
PSG 5.4.6	<u>Compaction</u> Replace "or (if approved) forking" in the first sentence of subclause 5.4.6.3 with "using approved vibrators".
PSG 5.4.7	<u>Curing and Protection</u> Notwithstanding the provisions of this subclause, all cast in situ concrete shall, except where otherwise authorised, be cured in accordance with the requirements of subclause (c) using curing compound of the type specified in PSGA 3.8.
PSG 5.4.8	<u>Concrete surfaces</u> All unformed concrete surfaces shall be given a wood float finish.
PSG 7	TESTS
PSG 7.1	FACILITIES AND FREQUENCY OF SAMPLING
PSG 7.1.2	<u>Frequency and Sampling</u> Notwithstanding the requirements of this subclause, the Contractor shall take note that he is responsible for taking an adequate number of tests to ensure that the concrete being used complies with the specification. The Employer's Agent will only carry out such check testing as he requires.

PSG 8 MEASUREMENT AND PAYMENT

PSG 8.1 MEASUREMENT AND RATES

PSG 8.1.3 Concrete

Add after "testing" in the second line of subclause 8.1.3.3(a) "including transport to an approved laboratory".

PSG 8.4 SCHEDULED CONCRETE ITEMS

PSG 8.4.4 Unformed Surface Finishes

Add the following to Subclause 8.4.4:

"The rate shall further include the cost for complying with Clause PSGA 5.4.8".

PSH STRUCTURAL STEELWORK

PSH 3 MATERIALS

PSH 3.1 STRUCTURAL STEEL

All steel used in the construction of these works shall comply with SABS 1431 Grade 300WA.

PSH 3.6 BOLTS, NUTS AND WASHERS

All bolts, nuts and washers shall be Precision Bolts Grade 8.8, unless otherwise specified on the drawings.

PSH 5 CONSTRUCTION

PSH 5.1 DRAWINGS AND SHOP DETAILS

It shall be the structural steel fabricator's responsibility to prepare full shop details for approval by the Engineer.

The structural steel fabrication will be executed as a Subcontract to the Civil Works contract. The Main Contractor will be responsible for providing the Subcontractor with copies of all the relevant drawings and specification clauses to enable him to prepare the required shop details.

PSH 5.1.2 Contractor Provides Shop Details

The shop drawings shall be submitted to the Engineer at least three (3) weeks before fabrication is due to commence. The Engineer will provide his approval and/or comments within two (2) weeks of receipt of ALL the shop details.

PSH 5.2 FABRICATION

PSH 5.2.2 Identification

The Contractor shall maintain adequate records to ensure that all steel can be positively identified in respect of its grade.

PSH 5.2.3 Cutting

If flame cutting is utilised all edges of plates shall be dressed by grinding to remove all burrs and notches.

PSH 5.2.4 Holes for Fasteners

No holes may be formed by flame cutting and punching.

PSH 5.6 GROUTING OF SUPPORTS

PSH 5.6.1 Responsibility

Grouting of base plates may be carried out either by the Civil Contractor or the Structural Steelwork Subcontractor as agreed between them. In either event the following shall apply.

It is important that the base plates of the portal columns in particular are grouted to ensure full and intimate contact between the underside of the base plate and the foundation.
No grouting shall commence until the Engineer's approval is given for grouting to commence.

All base plates shall be grouted using Durabed NF grout as supplied by Messrs ABE Industrial Products or equal approved.

All grout shall be mixed and used in strict compliance with the manufacture's instructions. The grout shall be placed in a "Flowable" state and shall be poured into a mould formed around the base plate. The mould shall be constructed in such a manner that an effective head of grout equal to 50mm

above the bottom of the base plate can be achieved and maintained until after the final setting time of the material.

The grout shall be poured in a manner agreed with the Engineer in advance of the commencement of grouting operations to ensure that no air is trapped beneath the base plate.

PSH 7 TESTING

PSH 7.1 TEST CERTIFICATES

The structural steel fabricator shall obtain and submit to the Engineer certificates from all suppliers from whom steel is purchased stating that the material supplied conforms in all respects with SABS 1431 Grade 300WA.

PSH 8 MEASUREMENT AND PAYMENT

PSH 8.3 SCHEDULED ITEMS (Subclauses 8.3.1 to 8.3.5)

The unit of measurement shall be the metric tonne with weights being calculated as defined in Clause 8.2, or for single items combining the requirements of Subclauses 8.3.1 to 8.3.5, as scheduled.

The rates tendered shall include for all aspects contemplated in these subclauses including but not confined to the preparation of shop drawings, supply, fabrication, delivery to site and erection complete of the structure including the provision of all bolts, nuts and washers required for the full and proper erection of the structure as detailed.

The rate tendered shall include for provision of formwork as required and specified above, the supply and deliver to site of the proprietary grout, mixing of grout and placing the grout in position as specified. It shall include all labour, materials and plant of whatever nature required for the operation.

PSL SANS 1200 L: MEDIUM PRESSURE PIPELINES

PSL 1 SCOPE

PSL 1.1 This section covers the supply and installation of the following piping systems for the rising mains:

- a) High-Density Polyethylene (HDPE) pipes and,
- b) Stainless Steel pipework and fittings

PSL 2 INTERPRETATIONS

PSL 2.3 DEFINITIONS

Allowable Operating Pressure: Internal pressure, excluding water hammer, that a component can safely and continuously withstand under permanent hydraulic service.

Maximum Operating Pressure: Maximum internal pressure, including water hammer, that a component can safely withstand during service.

Allowable Test Pressure: Maximum hydrostatic pressure that can be applied on site to a newly installed component

PSL 2.4 ABBREVIATIONS

DI	:	Ductile Iron
DN	:	Nominal Diameter

PSL 3 MATERIALS

PSL 3.1 GENERAL

Add to Sub-Clause 3.1

Unless otherwise scheduled or shown on the drawings, the pipes to be used on the contract are as follows:

- (i) Pipelines shall be high-density polyethylene (HDPE) pipes are specified.
- (ii) Pipework specials in pump stations, chambers and crossing the rivers via pipe bridge shall be steel.

The following alternatives will be considered for pipeline and rising mains, subject to the Engineer's approval:

- (i) Ductile iron, spigot and socket pipes, cement mortar lined (DI)
- (ii) Spigot and socket steel pipes

In the event of the Contractor proposing an alternative pipe material, the Contractor shall demonstrate to the Engineer that the alternative offered is equal or better than the specified materials in respect of head losses at the design flow, pressure class, resistance to external loads and durability.

The Contractor shall provide adequate storage facilities for pipes, couplings and specials to conform with the following:

(a) Couplings and specials

Until required for use, the rubber rings shall be stored in a cool dark place, away from grease, oil or harmful chemicals. If rubber rings have been tied, they shall be separated a few days before they are required for use in order to eliminate minor impressions, which the ties may have caused.

Couplings, into which rubber rings have been fitted, ready for use, shall be stored under cover. All couplings and specials shall be stacked off the ground to ensure that the protective coatings are not damaged.

(b) Stacking of pipes.

Pipes may be placed off the ground alongside the pipe route. When stacking is necessary, the Contractor shall make necessary arrangements for stacking areas and shall stack as recommended by the manufacturer.

(c) Valves.

Valves shall be stored under cover and shall be stacked off the ground in a manner which will prevent the ingress of dirt and ensure that the valve faces, spindles and coatings are not damaged.

PSL 3.3 C.I. PIPES, FITTINGS AND SPECIALS (SUB-CLAUSE 3.3)

Add the following to Subclause 3.3 :

Cast iron fittings shall comply with SANS 546 class D.

PSL 3.4 STEEL PIPES, FITTINGS, AND SPECIALS

PSL 3.4.1 General

The Contractor shall submit to the Engineer or his representative, the certificates covering the chemical analysis and physical properties of the iron used in the manufacture of pipes and specials.

Written confirmation that welding has been carried out by coded welders shall also be provided if required.

Each pipe or fitting shall have its relevant item number painted onto the exterior surface prior to despatch from the factory.

PSL 3.4.3 Pipes of Nominal Bore over 150mm

Add to the Subclause 3.4.3:

All steel pipes, fittings and specials shall be manufactured from 4,5mm thick Grade B steel plate and shall comply with the requirements of SABS 719.

PSL 3.4.4 Fittings and Specials

Add to the Subclause 3.4.4:

All fittings and specials shall be manufactured from straight pipe materials specified under the previous Clauses; the pipe so used shall have satisfactorily passed the stipulated hydraulic pressure test.

PSL 3.4.5 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 to be used with couplings, the external weld reinforcement shall be ground flush with the outer wall of the pipe over a suitable distance from the end. Pipes shall preferably have a continuous helical seam but nevertheless, longitudinal and circumferential seams would be acceptable for this Contract.

PSL 3.4.6 Puddle Pipes

Puddle pipes shall be manufactured from 4,0mm grade B carbon steel pipes and shall comply with the requirements of SABS 719 for electric welded low carbon steel pipes for aqueous fluids.

PSL 3.7 OTHER TYPES OF PIPES

PSL 3.7.1 uPVC Pipes

The uPVC pipes shall be Class 12 spigot and socket complying with SANS 966.

PSL 3.7.2 Polyethylene Pipes

Polyethylene pipes shall be high density polyethylene (HDPE), in accordance with SANS 4427. The pressure class shall be as specified on the drawings or in the Bill of Quantities. The class of material shall be PE 100.

Unless otherwise indicated, all bends shall be long radius bends and all branches shall be 45 degree branches.

PSL 3.8 JOINTING MATERIALS

PSL 3.8.2 Flexible Couplings

Flexible couplings for steel pipes shall be of the "Viking Johnson" type. All nuts and bolts shall be hot dipped galvanised (heavy duty).

The plain end of the steel pipe shall be properly prepared, before corrosion protection, so as to accept the flexible coupling

PSL 3.8.3 Flanges and Accessories

Where new pipework is to be joined onto existing pipework, the Contractor shall measure the existing flanges and report the dimensions to the Engineer. The drilling of new flanges shall match the existing flanges.

In new installations, where pipes are not coupled onto existing pipework, the flanges shall be in accordance with SANS 1123. The dimension and drilling of flanges shall be in accordance with the requirements of SABS 1123, table 1600, unless scheduled otherwise. All flanges shall be truly at right angles to the axis of the pipe or fitting.

Puddle flanges used as pipe anchorage shall be of the same dimensions as corresponding flanges but are to be undrilled. The flange shall be welded to the pipe with sufficient strength to be capable of transmitting a longitudinal force 50% greater than the force to be applied under test conditions.

Flanges shall be machined flat and without a raised joint face.

Flanges for low-pressure applications (less than 10 bar) shall be of the slip-on type. Flanges for high-pressure applications (greater than 10 bar) shall be of the socket weld type, unless otherwise agreed with the Engineer.

Flanges shall be manufactured from materials equal to or better than the pipes to which they are connected.

PSL 3.8.6 Spigot and socket Pipes

Add the following:

The shortest length of pipe which may be used in the pipeline is 0,5m, thus the shortening of an adjacent pipe may be necessary so as to ensure compliance with the position of specials. When pipes of 1m or less in length are used or where specials are laid within 1m of each other, they shall be jointed by means of C.I. repair couplings.

PSL 3.8.8 Jointing Gaskets

Jointing gaskets for flanged joints shall comply with the requirements of BS 4865 and be cut to the full width of the flange. The materials shall be suitable for and compatible with the required pressure and temperature duties, and characteristics of the material conveyed.

PSL 3.8.9 Fasteners

Bolts and nuts shall be hexagon head type complying with SANS 1700 with threads of the coarse pitch series.

Washers of similar material to the bolts shall be provided under each nut and bolt head. Multiple washers or shims shall not be used. Spring washers or other approved locking arrangement shall be used, together with flat washers on all fasteners subject to vibration.

All fasteners shall be manufactured of grade 316 stainless steel.

PSL 3.8.10 Anti-seize Compound

Before assembly, threads shall be treated with a nickel based, anti-seize/corrosion protection compound such as Chesterton 725: Nickel Anti Seize Compound, or equivalent and approved.

Copper based compounds are not acceptable and, if used, shall be cleaned off before the correct compound is applied.

If it is found during inspection that compound has not been applied, the Contractor shall disassemble all fasteners and comply with this requirement.

A small amount of compound shall be applied along the full length of the thread before the nut is applied. Excessive compound visible on the thread after the nut has been applied shall be cleaned off.

PSL 3.9 CORROSION PROTECTION

PSL 3.9.2 Steel Pipes

Add the following to Subclause 3.9.2:

Steel Pipes except Puddle Pipes

Before leaving the factory all mild steel pipes, fittings and other steelwork shall be abrasive blast-cleaned internally and externally to Grade Sa2½ of the Swedish Standard SIS 05-5900 to an angular surface profile within the limits of 30 - 50 microns and immediately thereafter all mild steel pipes and fittings shall be galvanised.

After galvanising, the pipework shall be degreased and cleaned using an approved degreasing agent. The surface shall be self-etch primed with a primer which is suitable for a galvanised surface and which is compatible with the specified paint system.

Steel pipes shall receive the following paint system:

Internally (including end of plain ended pipes and fittings): A polyamide-cured epoxy system consisting of three coats of Copon EP 2300 or other approved (by the Engineer) non-toxic epoxy resin paint to give a total minimum dry film thickness of 250 micrometres without holidays, both coats being supplied within the time limits specified for the paints.

Externally: As above (the same system specified for "Internally").

Plain ends of pipes and fittings shall be covered and protected against damage whilst being transported from the factory to the Site.

Puddle Pipes

Carbon steel puddle pipes shall be protected against corrosion in terms of System C described in Particular Specification PA for immersed conditions.

PSL 3.9.5 Joints, Bolts, Nuts and Washers

Add the following to Sub-clause 3.9.5:

Bolts, nuts and washers shall conform to SANS 135. All bolts, nuts and washers shall be hot dipped galvanised (heavy duty) Gr8.8.

PSL 3.9.6 Corrosive Soil

Saddles, cast iron detachable and flanged joints together with their bolts, and a minimum of 100mm of pipe on each side of the joint shall be protected by means of either an approved protective petrolatum paste, then wrapped with three layers of an approved petrolatum impregnated tape, or other means of inhibiting corrosion approved by the Engineer. All overlaps shall be 30mm minimum. This protection shall also be applied to the bolts and flanges used by the manufacturer in the construction of valves and hydrants.

The rates shall cover the cost of corrosion protection for the complete joint.

PSL 3.10 VALVES

Valves shall comply with the requirements of SANS 1200 LK, and the following requirements:

PSL 3.10.1 Gate Valves

All valves shall be AVK or similar approved by the Engineer. Resilient seal valves shall be used for general applications and shall:

- a) bear the SABS mark of approval, shall comply with SABS 664;
- b) be double socketed for PVC pipes or flanged for steel pipes, or as scheduled by the manufacturer;
- c) The direction of rotation shall be anti-clockwise for closing when viewed from above. The direction of opening or closing of each valve, and the appropriate words and have the direction of opening clearly embossed on the valve body and spindle cap;
- d) be heavy duty Class 16, unless a different class is specified;
- e) have non-rising spindles along pipelines, but have rising spindles within the Pump Stations;
- f) Bodies, gates and glands shall be cast iron or cast steel, spindles bronze, and sealing rings on gate and body gunmetal or stainless steel;
- g) be fitted with cast iron square cap tops or handwheels (as specified) secured with retaining bolts, top permanently marked with the direction of closing;
- h) Dimensions and drilling of flanges shall be in accordance with the requirements of SANS 1123 Table 1600/3 unless scheduled otherwise;
- i) Before or after completion of the factory tests, whichever is applicable, all valves shall be thoroughly cleaned and painted at the factory prior to despatch to Site;
- j) be protected against corrosion by:
 - 1) Electrostatically applied epoxy resin to DIN 30677 with a minimum coating thickness of 250 micron; or
 - 2) coating with a minimum thickness of 250micron copon KSIR 88 epoxy paint applied to all internal and external surfaces after it has been thoroughly cleaned by grit blasting to SA 2 ½ finish in compliance with the requirements of SIS 05 09 00, or similar approved coatings.

Rates shall include for testing and providing the test certificates and the specifications from the manufacturer before installation of the valves commence. The batch serial numbers for cross reference shall be clearly marked on the body. No payment will be made unless the test certificates and specifications have been submitted.

PSL 3.10.2 Sluice Valves

Sluice valves shall be double flanged and shall comply with the requirements of SABS 664, Class 10. Valves shall be drop tight under test and working conditions and shall have non-rising spindle, wedge closure, and flanged suitable for repacking under pressure. Bodies, gates and glands shall be cast iron or cast steel, spindles bronze, and sealing rings on gate and body gunmetal or stainless steel. Dimensions and drilling of flanges shall be in accordance with the requirements of SABS 1123 Table 1600 unless scheduled otherwise.

All sluice valves shall be fitted with square caps. The direction of rotation shall be anti-clockwise for closing when viewed from above. The direction of opening or closing of each valve, and the appropriate words shall be embossed on the cap and gland.

Before or after completion of the factory tests, whichever is applicable, all valves shall be thoroughly cleaned and painted at the factory prior to despatch to Site.

All cast iron surfaces of every valve shall be prepared for painting to a thoroughly clean condition free of all grease and deleterious matter.

Valves shall be protected against corrosion by:

- 1) Electrostatically applied epoxy resin to DIN 30677 with a minimum coating thickness of 250 micron; or
- 2) coating with a minimum thickness of 250micron copon KSIR 88 epoxy paint applied to all internal and external surfaces after it has been thoroughly cleaned by grit blasting to SA 2 ½ finish in compliance with the requirements of SIS 05 09 00, or similar approved coatings.

Rates shall include for testing and providing the test certificates and the specifications from the manufacturer before installation of the valves commence. The batch serial numbers for cross reference shall be clearly marked on the body. No payment will be made unless the test certificates and specifications have been submitted.

PSL 3.10.3 Air Valves

The materials and workmanship employed in the manufacture of air valves shall be of a similar standard to that set out in SABS 664 for gate valves. Air valves shall be type RGX or similar to be approved, tested in the factory to pressures of 3 200, 5 000 and 8 000 kPa respectively shall be suitable for operating pressures of 1 600, 2 500 and 4 000 kPa and shall be suitable for a normal working pressure in the range 15 m to 400 m of water and also for site test pressures.

All double air valves required shall combine the following functions:

- exhausting accumulated air under pressure
- exhausting air in bulk when mains are being filled and ventilating mains when being emptied.

The large orifice shall contain a vulcanite covered ball, closing on a rubber seating outlet ring and fitted with an external dirt shield. The small orifice is to be suitable for the automatic release of entrained air under pressure, with a rubber covered ball seating on a bronze outlet nipple.

The air valves are to be flanged, with inlet diameter 80mm as scheduled, and all flanges are to be in accordance with and drilled to SANS 1123 except where stated otherwise.

The air valves must be complete with isolating valves to permit inspection and maintenance without shutting off the main. The operating spindle of the isolating valve must be fitted with a hand wheel, the direction of rotation of which must be clockwise for opening when viewed from above. The direction for opening and closing of the gate valve must be indicated on the body of the valve.

Each air valve shall be drilled and tapped 9,5 mm BSPT on the air vent side of the isolating valve seat and fitted with 9,5 mm cock.

Air valves shall be reliable in operation and of a design which shall preclude the possibility of being blown shut by the passage of air when the pipeline is being filled.

After completion of factory tests, all air valves are to be thoroughly cleaned and twice coated with approved protective paint.

A complete Specification accompanied by drawings should be submitted at the time of tendering.

PSL 3.11 **MANHOLES, VALVE CHAMBERS AND SURFACE BOXES**

PSL 3.11.1 Brickwork for Manholes, Valve Chambers and Surface Boxes
Hard burnt engineering grade bricks to SANS 227/1970 shall be used.

PSL 3.11.4 Step Irons

Step irons shall be copolymer polypropylene with a 12mm diameter high tensile steel core ("Calcamite" or equal approved) installed according to the manufactures specification.

PSL 3.11.5 Manhole Cover and Frames

Unless otherwise indicated, all covers and frames shall be constructed of ductile iron, in accordance with the requirements of EN 124, Class C250, or D400, as indicated on the Drawings.

Once installed, all covers must be securely seated in the frame and may not wobble, rock or exhibit any instability. Unstable covers will not be accepted and shall be replaced at the Contractor's own cost. Any associated costs, such as the removal, replacement and making good of frames, layerworks, kerbing and surfacing, shall also be borne by the Contractor.

PSL 3.11.6 Surface boxes

Unless otherwise indicated, surface boxes for valves and hydrants shall be of the same dimensions and shapes shown in SANS 558 and shall be constructed of cast iron in accordance with SANS 558 or ductile iron in accordance with EN 124.

PSL 4 PLANT

PSL 4.3 TESTING

Pipelines shall be tested in sections, to allow joints to be backfilled as soon as possible. The sequence of testing shall be subject to the Engineer's approval

The Contractor shall provide all necessary pipework, valves, pumps and fittings required to temporarily connect to a water supply to fill the pipe and to pressurise it to the specified test pressure.

Suitable equipment shall be provided to allow the test pressure to be maintained and for the volume of water admitted to the pipeline to be accurately measured.

The Contractor shall supply all necessary temporary end-caps and fittings to close off sections of pipeline being tested. These shall be adequately designed for the specified test pressures and shall be equipped with acceptable venting valves to allow air to be released from the pipeline during filling.

PSL 5 CONSTRUCTION

PSL 5.1 LAYING

PSL 5.1.3 Keeping Pipelines Clean

All pipes and specials strung out above ground along the line of the trench shall have both ends closed by means of an adequately fixed plastic cap or other approved material, supplied by the Contractor, in order to prevent the ingress of foreign material.

PSL 5.1.4 Depths and Cover

PSL 5.1.4.1 Add the following to Sub-Clause 5.1.4.1

Watermains and rising mains shall be laid so that the cover to the top of the pipe barrel from finished surface level is generally, but not less than, 800 mm in the case of watermains less than 250 mm diameter, and 1.0 m in the case of the 300 mm and larger diameter pipelines.

The value of 800 mm above shall be increased to 1 m within road reserves.

During construction there shall be not less than 0.5 metre of cover over the pipes, where construction traffic is liable to cross them, hence road crossings, shall be constructed after the construction of the road layers has reached the stage where 0.5 metre cover is available.

PSL 5.1.4.3 Add the following to Sub-Clause 5.1.4.3

Where the minimum clearance between pipe crossings would be less than that specified in Sub-Clause 5.1.4.3, the watermain shall be laid beneath the service crossed at an invert level which allows for the clear space as specified. The watermain shall be laid horizontally at this level for a distance of at least 1.0 m on either side of the centreline of the service crossed and then revert to the specified cover.

No decrease in cover or clear space between the pipe barrels as specified will be permitted unless otherwise instructed by the Engineer in writing.

PSL 5.1.6 Changes in Direction

Vertical and horizontal direction changes less than 11¼° shall be achieved by deflecting the pipes at the joints. The deflection at each joint shall not exceed the value recommended by the pipe manufacturer and if necessary, the specified change in direction shall be achieved over a number of pipe lengths.

PSL 5.2 JOINTING METHODS

PSL 5.2.1 Detachable Couplings (AC and uPVC Pipelines)

Add the following to Sub-Clause 5.2.1 :

Unless otherwise specifically detailed on the drawings, uPVC water pipes, specials and fittings shall be coupled with spigot and socket joints fitted with rubber sealing rings. In the following cases, ductile iron repair couplings shall be used:

(a) on one end of each valve and hydrant;

(b) where pipes have to be cut to fit specials in designated positions, refer to PSL 3.8.6.

PSL 5.2.5 Welding HDPE Pipelines

Unless otherwise indicated, field joints in HDPE pipes shall be formed by heated tool butt-welding or electrofusion couplings.

Welding of HDPE pipes shall be in accordance with SANS 10268, and shall only be carried out by thermoplastic welders who are certified by the Plastics Federation of South Africa (PFSA).

PSL 5.2.6 Joints between HDPE and Other Materials

Joints between HDPE and pipes, valves or fittings of other materials shall be flanged. Flanges shall be loose Grade 304 stainless steel flanges (backing rings) in accordance with SANS 1123.

PSL 5.3 SETTING OF VALVES, SPECIALS AND FITTINGS

Add the following :

Valves and hydrants shall be so sited that the valve spindle or hydrant outlet is directly opposite an erf side boundary or splay corner peg, to within 150 mm, or as otherwise dimensioned on the drawing.

Where specials are required in close proximity of one another the minimum pipe length between specials shall not be less than one metre unless adequate precautions are taken to prevent excessive movement of the numerous flexible couplings.

The shortening of the adjacent pipes may be necessary to achieve the above and ensure compliance with the position of specials" (see sub-clause PSL 3.8.6).

PSL 5.5 THRUST BLOCKS

All thrust blocks shall be cast against undisturbed material. In the event of the Contractor over-excavating, he shall carry the cost of any additional concrete required to comply with this provision.

Prior to casting any thrust blocks, the Contractor shall notify the Engineer who shall inspect the nature of the ground against which the thrust block is to be cast and either confirm that the specific conditions do not differ from those on the basis of which the thrust blocks shown on the drawings were designed, or instruct the Contractor to alter the dimensions of the thrust block to suit the actual ground conditions.

Any pipe laid on a gradient exceeding 25% shall be anchored as directed by the Engineer.

PSL 5.6 VALVE AND HYDRANT CHAMBERS

PSL 5.6.1 General

Delete in Sub-Clause 5.6.1. and 5.6.2 the reference to drawings L1, L2, and L3 and replace by "the standard drawings."

PSL 5.6.2 Construction of Chambers

Add the following to Sub-Clause 5.6.2 :

The depth from the cover of the surface box at final level to the top of a valve spindle shall be not less than 75mm nor more than 400mm. Hydrant outlets shall be not more than 400mm below the level of the hydrant cover.

To achieve the above cover requirements in the case of hydrants and double air valves, double-flanged distance pieces shall be provided when necessary.

Where for practical purposes it is not possible to provide the required cover for gate valves, an extension spindle may, subject to approval of the Engineer, be provided.

PSL 5.11 PIPE MARKERS (NEW CLAUSE)

Pipe markers shall be installed above the pipeline centreline at all horizontal changes of direction and at intersections with property boundaries.

PSL 5.12 CONNECT TO EXISTING MAINS

Where connections have to be made to the existing water mains, the following procedure has to be followed:

- (a) Liaise with the Local Authority to arrange a suitable time period for the proposed connection.
- (b) Ensure all tools and fittings of the correct size and type are on site prior to requesting the shut down of the mains.
- (c) Advise the Local Authority at least 3 days in advance of the intention to commence work, in order for them to shut down the mains.
- (d) Arrange with the Local Authority to have an official present on site when the work commences.
- (e) Advise the Local Authority when work is complete and thrust block in place and sufficiently cured, for the system to be recharged. Work to be completed to minimise the disruption to the supply to a maximum of 12 hours.

All arrangements and planning must be made in close collaboration and with the approval of the Engineer's Representative on site. Names and contact personnel at the Local Authority will be advised at the required time.

PSL 5.13 AS BUILT SURVEYS

The Contractor shall survey the final position of all buried pipework installed, prior to backfilling.

The pipework shall be surveyed and the information submitted to the Engineer as the work progresses. No joint shall be backfilled before the survey information has been approved by the Engineer.

The pipelines shall be coordinated at centrelines of all bends, specials and fittings and intermediate points at intervals of not more than 50 m.

The survey data shall be presented in tabular format giving Y-Coordinate, X-Coordinate, chainage and level. All coordinates and levels shall be referenced to the WGS 84 system and Mean Sea Level (MSL).

PSL 7 TESTING

PSL 7.3 STANDARD HYDRAULIC PIPE TEST

PSL 7.3.1 Test Pressure and Time of Test

PSL 7.3.1.2 Delete Sub-Clause 7.3.1.2 and replace with :

Subject to the provisions of 7.3.1.3 and 7.3.1.4 the test pressure for field-testing shall be 1,5 times the maximum working pressure. The maximum working pressure shall be 12 bar.

No testing against closed valves will be allowed, unless approved by the Engineer. Field tests on mains should be carried out prior to the installation of saddles, ferrules and/or erf connections.

Payment for field-testing of pipelines shall be included in the rate for supply, lay and bed pipes as described in SANS 1200: L Clause 8.2.1.

PSL 7.5 COMMISSIONING TEST

Prior to the handing over to the Employer of a particular area or zone, it shall be subjected to a commissioning test.

The section to be tested shall be isolated by closing sluice valves in the line and brought up to a pressure equivalent to the working pressure of 12 bar being applied at the lowest point in the installation.

The duration of the test and the permissible leakage rates shall be in accordance with SANS 1200L Clause 7.3.3.

Payment for commissioning tests of pipelines shall be included in the rate for supply, lay and bed pipes as described in SANS 1200L Clause 8.2.1.

PSL 8 MEASUREMENT AND PAYMENT

PSL 8.1 GENERAL

Add the following to Sub-Clause 8.1 :

The tendered rates for the supply of materials shall cover the cost of all protective coatings and linings.

No extra payment will be made for any cutting, etc., required for permanent closure pipes (Sub-Clause 8.2.1).

No extra payment will be made for testing, nor for temporary water supply connections for testing, which will be held to be included in the price for laying of pipes, valves and specials.

The cost of conforming to the requirement to install repair couplings as specified in PSL 3.8.6 and PSL 5.2.1 must be allowed for in the cost of the pipes and fittings.

Notwithstanding instructions for backfilling, the Contractor shall bear the cost of finding and repairing leaks.

PSL 8.2 SCHEDULED ITEMS

PSL 8.2.1 Supply, Lay and Bed Pipes

No additional payment will be made for small changes of direction achieved by deflections at pipe joints as specified in PSL 5.1.6.

The rate for pipe laying shall include all costs associated with carrying out as-built survey as specified in PSL 5.13.

The quantity measured shall exclude sections of pipe installed by horizontal directional drilling and measured separately under Section PLX.

No payment will be made under this sub-clause until acceptable as-built survey data has been submitted to the Engineer in respect of the length of pipeline concerned.

PSL 8.2.2 Extra-Over for Specials

Add the following:

The item shall cover the supply, laying and bedding of specials, complete with couplings.

The rate shall include cutting of pipes and tape wrapping of couplings with fasteners.

Thrust blocks shall be measured separately.

Bulk Flow Meters

Bulk flow meters shall be Endress and Hauser Promag 50W or equal approved electromagnetic flow meters suitable for wastewater applications.

The sensor unit shall have an IP 68 protection rating.

The Transmitter shall be remote mounted with an IP 65 protection rating.

The transmitter shall be installed in a stainless steel weather proof enclosure. The reading shall be visible through a glass window with the enclosure closed.

PSL 8.2.11 Anchor/thrust Blocks and Pedestals

Add the following:

Anchor/thrust blocks will be measured by the cubic metre of concrete. The tendered rate shall cover the cost of the concrete, formwork, excavation and additional plant, labour and material to complete the construction of the blocks.

PSL 8.2.16 Markers for Valves and Fire Hydrants

Markers shall be measured by the number, as detailed on the drawings.

(a) Marker posts

The tendered rate shall cover the supply and installation of the marker posts including painting, excavation and disposal of spoil all as detailed on the drawings.

<u>Item</u>	<u>Unit</u>
Markers Posts	No

PSL 8.2.17 Connection to Existing Mains

Connection to existing mains shall be measured by number for each diameter of existing pipe.

The tendered rate shall cover the cost of excavating to expose existing main, the removal of thrust block and/or end caps, cutting into the existing main as necessary, dealing with water and completing the connection, backfilling, disposal of spoil and making good. It shall also allow for all dealings with the Local Authority to arrange for the temporary termination of supply, as specified in Clause PSL 5.1. Fittings required for the connections shall be measured elsewhere.

<u>Item</u>	<u>Unit</u>
Connection to existing main (diameter and type stated)	No.

PSLB	SANS 1200 LB: BEDDING (PIPES)
PSLB 3	MATERIALS
PSLB 3.1	SELECTED GRANULAR MATERIAL (BEDDING CRADLE) Selected granular material shall comply with the provisions of Clause 3.1 of SANS 1200 LB and in addition, the PI shall not exceed 2.
PSLB 3.2	SELECTED FILL MATERIAL (FILL BLANKET) Selected fill material shall comply with the provisions of clause 3.2 of SANS 1200 LB. Add the following to Clause 3.2: “Where expansive clay is encountered in the trench bottom, the material in the selected fill blanket shall be selected granular material”.
PSLB 3.3	BEDDING The bedding of the rising main shall be in accordance with the drawings. There are no designated borrow pits, and the Contractor will be expected to make his own arrangements regarding importing bedding and blanket material.
PSLB 5	CONSTRUCTION
PSLB 5.1	GENERAL
PSLB 5.1.4	<u>Compaction</u> The degree of compaction required will be 93% Mod. AASHTO density (or 100% for sand).
PSLB 5.2	PLACING AND COMPACTING OF RIGID PIPES
PSLB 5.2.1	<u>Class A bedding</u> Add the following to sentence to Subclause 5.2.1 (d): “...or a period of 5 days has elapsed after the placing of the concrete in that section, whichever occurs first”.
PSLB 5.2.2	<u>Class B bedding</u> 1. The dimension “x” for all rigid and flexible pipes (except for HDPE erf connections) as referred to in drawing LB-1 and LB-2, shall be 100mm. 2. The Dimension “x” for HDPE erf connections shall be 100mm.
PSLB 8	MEASUREMENT AND PAYMENT
PSLB 8.2	SCHEDULED ITEMS
PSLB 8.2.6	<u>Bedding in Waterlogged Conditions (new item refer to PSDB 5.1.2)</u> In the event of waterlogged conditions occurring in the bottom of the trench, the Employers Agent may order the Contractor to place a crushed stone bedding layer (minimum thickness 150 mm) on the trench bottom. Should the trench bottom conditions remain unstable due to the nature of the soil and the degree of saturation, the Employers Agent may order the Contractor to install a geotextile on the trench bottom prior to the provision of the stone layer. After placing the stone bedding, the geotextile shall be folded over the stone with a minimum overlap of 300 mm to form an enclosed drain. The specified bedding material shall then be used to bed the pipe. The Contractor shall only provide and lay the stone bedding layer and geotextile after receipt of the written order to do so from the Employers Agent. The tendered rate shall cover the cost of all additional excavation and preparation of the trench bottom to accommodate the layer of stone, the removal of unsuitable material, the supply and placing of a 150 mm thick layer of stone over at least the specified width, the cost of supply of the

geotextile, placing and losses as a result of overlaps and over excavated trench widths and all related activities in order to produce a stable platform.

Where the use of a layer of crushed stone in the trench bottom has been authorised by the Employers Agent, it will be measured by volume calculated according to the length multiplied by the minimum base width and specified thickness.

The cost of dealing with water as specified in SANS 1200 DB, Sub-Clause 5.1.2.1 will be held to have been included in the tendered sums for excavation.

<u>Item</u>	<u>Unit</u>
a) Single size 19mm stone.....	m ³
b) Geotextile.....	m ²

PSLD SANS 1200 LD: SEWERS

PSLD 3 MATERIALS

PSLD 3.1 PIPES, FITTINGS, AND PIPE JOINTS

Unless otherwise scheduled or shown on the drawings the pipes shall be of unplasticised polyvinyl chloride (uPVC) Class 34 heavy duty complying with SANS 791.

PSLD 3.5 MANHOLES, CHAMBERS, ETC.

PSLD 3.5.2 Precast Concrete Sections

Add the following to Sub-Clause 3.5.2:

All sand and aggregate used in concrete for sewer manholes and chambers shall be dolomitic.

PSLD 3.5.7 Step Irons

Plastic encapsulated step irons or similar approved by the Employers Agent in manholes will be required.

PSLD 3.5.8 Manhole Covers and Frames

Notwithstanding the requirements of Sub-Clause 3.4.3 all covers and frames shall be constructed of ductile iron, and shall conform to the requirements of EN 124, Class C250, or D400, as indicated on the Drawings. Concrete cover manholes both medium to heavy duty as maybe deemed appropriate.

Where grid inlets are required these shall be manufactured from ductile iron conforming to the requirements of EN 124, Class C250 or shall be constructed in concrete. A sample of the grid shall be provided to the Engineer for approval.

Once constructed, all covers must be securely seated in the frame and may not wobble, rock or exhibit any instability. Unstable covers will not be accepted and shall be replaced at the Contractor's own cost. Any associated costs, such as the removal, replacement and making good of frames, layer works, kerbing and surfacing, shall also be borne by the Contractor.

PSLD 5 CONSTRUCTION

PSLD 5.6 MANHOLES

Refer to PSD 3.5.2 above for the type of material.

Notwithstanding the requirements of Sub-Clause 5.6 manholes constructed of precast concrete rings shall have watertight joints.

Manholes shall be provided with copolymer polypropylene step irons with a 12 mm diameter high tensile steel core ("Calcamite" or equivalent) installed according to the manufacturer's specifications.

PSLD 5.6.7 Cast in-situ concrete manholes

Refer to Municipal Standard Detail Drawings for details.

20 MPa strength concrete shall be used. Aggregate size may be 19 mm or 13 mm to suite Contractor. Dolomitic aggregates are not required.

When the concrete is mixed on site, an approved rotary mixer, suitable in size for a batch containing cement in increments of one sack of 50 kg, shall be used. The Contractor's method of batching of the ingredients shall be to the approval of the Employer's Agent's Representative. Samples of the materials to be used shall be submitted for approval. The proportions of cement, coarse and fine aggregate and water necessary to produce the 20 MPa concrete shall be determined and submitted to the Employer's Agent's Representative together with the results of compressive strength tests, before the Contractor will be allowed to use site mixed concrete in the construction of manholes.

The Contractor shall bear the costs of determining the proportions of the mix and making and testing cubes for this purpose. If the Contractor submits reliable test records of concrete made from the same materials and mix proportions which he proposes to use, then the Employer's Agent may

waive all or part of the strength tests required above to verify that the concrete mix design which the Contractor proposes to use is satisfactory.

The Contractor shall carry out his own testing during the construction of the Works to ensure that the concrete being used complies with the Specification. The Employer's Agent's Representative shall carry out such test check testing as he/she requires, and the Contractor shall render any assistance necessary in taking of samples and the carrying out of tests.

All concrete being placed shall be vibrated by means of approved vibrators. Curing shall be by means of the application of a natural resin based liquid curing compound complying with ASTM C309-74. When the surface to be cured is to receive further concrete it shall be cured with water only, by sprinkling, spraying or ponding such as to maintain it in a continuously wet condition.

If the concrete is found to be cracked, honeycombed, soft or defective in any way, or if cube test strength results do not comply with the requirements, then the concrete shall be rejected. Rectification shall be by removal of the defective portion and replacement with sound concrete.

If the manhole is constructed in more than one lift the construction joint formed shall in addition to being prepared as specified in sub- clause 5.4.5.4 of SABS 1200 GA, be reinforced with 8 No 12 mm diam. x 300 mm long mild steel dowel bars, cast in to a depth of 150 mm, placed centrally in the joint face and equally spaced about the circumference.

PSLD 5.11 PIPE LAYING WITH HIGH WATER TABLE (NEW CLAUSE)

Where a high- water table is encountered and a probability exists of water entering the trench after the pipeline has been laid, the Contractor will be permitted to bed and lay the pipes and backfill sufficiently to prevent flotation, prior to testing.

PSLD 6 TOLERANCES

PSLD 6.6 AS-BUILT INFORMATION

The Contractor shall submit "As-Built" levels, distances between manholes and the grades of pipelines for which he requires payment at the time he submits his monthly payment claim. A sample form is obtainable from the Employer's Agent.

PSLD 7 TESTING

PSLD 7.2.7 Acceptance Criteria

The acceptance of the pipe length or manhole shall depend upon whether it satisfies the criteria set out in SABS 1200 LD clauses 6, 7 and the PS clauses above.

Where pipes other than vitro clay pipes are laid, only tests carried out on the pipelines after completion of the backfilling to ground level (excluding surface restoration) and completion of the construction of manholes to roof height, including benching, will be considered for acceptance purposes.

In the case where vitro clay pipes are being laid, no pipelines are to be covered prior to inspection and approval by the Employer's Agent. Once the pipeline has been laid and bedded in the compacted bedding cradle (to half pipe) between control points, the Employer's Agent must be called out to inspect the installation. The Contractor is to provide the necessary equipment in order for the Employer's Agent to adequately assess that the pipeline has been laid to the specified tolerances. Further, an air test, in accordance with the specifications, is to be conducted and witnessed by the Employer's Agent prior to the placing of the Fill Blanket.

PSLD 8 MEASUREMENT AND PAYMENT

PSLD 8.2 SCHEDULED ITEMS

PSLD 8.2.1 Supply, lay, Joint, Bed and Test Pipeline (Sub-Clause 8.2.1)

add the following:

No deductions will be made for the internal length of manholes and the cost of all invert channels irrespective of diameter shall be included in the rate tendered for this payment item.

The measured quantity of completed pipe length will only be included in the payment certificate when the pipeline has satisfied the test after the completion of the backfill to ground level

PSLD 8.2.2 Extra-over Item 8.2.1 for specials

add the following:

Rodding Eyes

Rodding eyes shall be measured by number complete as shown on the drawing, for each different diameter and type of material.

The tendered rate shall cover the cost of all excavation, disposal of material, supply of fittings and labour to construct the rodding eyes as detailed on the drawings.

PSLD 8.2.3 Manholes

Manholes will be measured and paid in accordance with Sub-Clause 8.2.3.

The tendered rates for the different types of manholes shall cover the cost of the supply and installation of the complete precast concrete or brick manhole, including flexible joints, step irons, concrete landing slabs where applicable, concrete cover slabs, masonry between concrete cover slab and covers and covers and frames, as shown on the drawings. The rate shall also cover the cost of waterproofing the joints between manhole rings in the case of precast manholes.

For the purposes of measurement and payment, the depth of a manhole is defined as the depth from the top of the cover to the lowest invert level of the manhole.

PSLD 8.2.4 Extra-over Item PS LD 8.2.3 for construction of manholes on existing pipelines

The rate tendered shall include full compensation for breaking into the pipeline, cutting pipes, dealing with the existing flow, preventing unacceptable debris entering the drain line and making good.

PSLD 8.2.7 Encasing of Pipes in concrete

Add the following to Sub-Clause 8.2.7

The volume of concrete material will be measured net, excluding the volume occupied by the pipe ducts and 30/19MPa concrete shall be used.

<u>Item</u>	<u>Unit</u>
Encasing of pipes in concrete.....	m ³ .

PSLD 8.2.14 Connections into Existing Manhole (New Item)

The unit of measurement for connecting into existing manholes shall be by the number of connections.

The rate tendered shall include full compensation for breaking into the manhole, connecting the pipe, modifying or enhancing the benching, cutting pipes, dealing with the existing flow, preventing unacceptable debris entering the drain line and making good any benching, finish walls, covers and frames.

The item shall distinguish between type of structure, diameter of connecting pipe or size of culvert.

<u>Item</u>	<u>Unit</u>
Connections into existing manhole for pipe (diam)	No.

PSLD 8.2.15 Internal Backdrop into Manhole (New Clause)

Measurement will be by number for each diameter of backdrop in 0,5 m depth ranges.

The rate shall include breaking into the existing manhole and making good on completion including ensuring that the manhole is watertight, the supply and installation of all pipes and fittings, and the alterations to the benching to suit.

<u>Item</u>	<u>Unit</u>
Internal backdrop into manhole	No.

PLX TRENCHLESS PIPE UPGRADING BY MEANS OF "PIPE CRACKING" METHOD

PARTICULAR SPECIFICATION

PLX 1 SCOPE

This particular specification covers the trenchless installation of pipes to be installed using "**Pipe Cracking Methods**", for the purpose of increasing the diameter of the existing sewage rising main, without disturbing the road surface via conventional trenching.

The Primary Contractor will have to engage the specialist services of a Sub-Contractor at Tender Stage if they do not have the expertise in-house to perform this work scope completely, who will have to price the applicable work scope in detail.

The Primary Contractor will however still remain fully liable for the programming, performance, quality control and completion of this work component, and shall price the applicable items sufficiently to deal with and manage their Sub-Contractor accordingly.

No upfront payments will be authorised for this work scope, and measurement and payment for this work will only be made on completion of the specific work scope activities.

The "Pipe Cracking" Specialist Sub-Contractor must familiarise them with the designed levels of the sewer line invert levels upstream and down stream of each section to be exposed and cut, prior to commencement of the "Pipe Cracking" process.

The interaction and work programme between the Primary Contractor and the Specialist "Pipe Cracking" Sub-Contractor must be managed by the Primary Contractor to ensure the correct position and levels and timeously excavation of the launching pits and reception / exit pits. All cost related to this activity shall be fully priced for in the applicable line items of the Pricing Schedules.

PLX 2 INTERPRETATIONS

PLX 3 MATERIALS

PLX 3.1 PIPES

Unless otherwise specified, pipes to be installed by means of "Pipe Cracking" shall be HDPE material, in accordance with the relevant specifications of SANS 1200 L as amended by section PSL of the Works Specifications.

No sleeve pipe are required, and the installed pipe pulled through the old pipe section, shall serve as the duty conduit, and shall therefor have to be tested to proof to be watertight, as part of the final quality control process.

PLX 4 PLANT

The drilling plant shall be suitable for guided / controlled "Horizontal Directional Drilling" to the specified depths and gradients, without disruption of the overlying ground or road surface.

The Contractor and the identified Sub-Contractor, shall determine the plant required to suit the specified installation. The plant shall be adequately sized for the specified diameter and length of the installation.

PLX 4.1 MICRO-TUNNELLING BORING MACHINE (MTMB)

Micro-tunnelling, where specified, shall be carried out by means of a closed, full-face excavation machine with a hydraulic slurry circuit. The soil to be excavated shall be removed using a cutter head adapted to the expected geology, be it soft soils or hard rock. A crusher inside the excavation chamber shall crumble stones and other obstructions to a conveyable grain size while tunnelling and advancing; this debris is to be removed through the slurry line to a series of settlement tanks where the solids are settled out and the water returned to the system.

The jacking shafts shall be constructed with steel sheet piled shafts. A hydraulic jacking frame shall be installed to advance the MTBM and trailing jacking pipes forward. The bore alignment shall be controlled by a laser and computer controlled guidance system.

PLX 5 CONSTRUCTION

PLX 5.1 EXCAVATION OF LAUNCH AND RECEPTION PITS

Excavation shall conform to the relevant requirements of SANS 1200 D, DA and DB as applicable. Deep excavations shall be shored.

The Contractor shall be responsible for determining the requirements of the excavations to suit his / his Sub-Contractor's plant and method of operation.

PLX 5.2 REMOVAL OF DISPLACED MATERIAL

The method of installation shall be such that material displaced by the ducts shall be removed from the bore to prevent lifting of the overlying road surface. This shall be done mechanically, manually, by washing out with drilling fluids or by other approved means.

However, any voids shall be filled with an approved grout or bentonite slurry to eliminate the possibility of settlement of the road surface.

PLX 5.3 PIPE JOINTS

The pipe joints shall be welded by means of extrusion welding or fusion bonding, in accordance with the relevant specifications of SANS 1200 L as amended by section PSL of the Works Specifications. All bunds shall be cut and completely removed after welding, before the HDPE pipe shall be used for the drilling process.

PLX 6 TOLERANCES

The acceptable deviations shall be agreed between the Contractor and the Engineer, taking cognisance of the ground conditions.

PLX 7 TESTING

The installed pipe shall be pressure tested in accordance with the relevant specifications in SANS 1200 L, to prove that the installed conduit is water tight, and installed at correct levels and single gradient as per Construction Drawings issued.

PLX 8 MEASUREMENT AND PAYMENT

PLX 8.1 SITE ESTABLISHMENT OF DRILLING CONTRACTOR

The item shall cover the "Once off" costs of the complete Site establishing and disestablishing of the drilling Sub-contractor and all necessary equipment on site. This shall include all transport to Hankey with Plant, equipment and containers, as well as to transport all material to site as may be required.

All additional Health & Safety requirements, eg to provide an additional portable chemical toilet to each site / each area where "Pipe Cracking" will be performed, and to provide shelters for workers, and to provide washing and drinking water and to provide all required PPE and Covid-19 protection, shall be fully covered under this item, or under other applicable OHS items. No additional payment shall be authorised for the above requirements. No excavation of launch pits or reception / exit pits may commence, before all of the above OHS / Covid-19 requirements are not in place at the specific "HDD" site.

A detailed "Method Statement" which shall cover the technical and Health & Safety aspects in full, shall be prepared and presented to the Employer's Agent for approval, before any Site Establishment of the "Pipe Cracking" Plant may take place.

PLX 8.2 TRAFFIC ACCOMMODATION AT "HDD" ROAD SECTIONS

The Contractor's attention is drawn to the fact that the "Pipe Cracking" alignment is adjacent to a surfaced road in a residential build-up area, which may accommodate high traffic volumes, including a percentage of heavy vehicles and pedestrians.

The Contractor shall ensure that all Traffic Accommodation principles as required by the Eastern Cape Provincial Roads Department shall be in place, prior to the commencement of the drilling process. This shall amongst others, but not be limited to these activities, include the following requirements :

- a) Inform the Kouga Local Municipality before commencement;

- b) Supply and erect temporary applicable Road Traffic, "Construction Ahead", and "Deep Excavations" signage at least 100m before the launching and receiving pits on both sides of the road (in the direction of approach traffic), and at the positions of the excavation pits.
- c) Barricade the excavations with orange netting, and firmly secure anchor poles to span at least 1m away from and all around the excavation pits;
- d) Deploy a flagman on each side of the road, at the position of the excavation pits, to warn traffic and pedestrians;
- e) If the excavation pits will be left open after hours / over night, flicker lights / cat eyes will be erected around the excavation pits.

PLX 8.3 SETTING UP AT EACH DRILLING LOCATION

PLX 8.3.1 Move Directional Drilling Plant and Setup

The item shall cover all costs of moving plant, equipment etc., drilling fluid tanks, etc. to each location where directional drilling is required, and setting up. All conditions to OHS and Covid-19, as applicable to PLX 8.1, shall also apply to this clause.

<u>Item</u>	<u>Unit</u>
Move "Pipe Cracking" plant and setup for each new position.....	Sum/No

PLX 8.3.2 Excavation and Preparation of Launch and Reception Pits

The item shall cover the costs of machine or hand excavation as deemed suitable for the site, topography, surrounding infrastructure and soil conditions, as well as for the preparing and levelling off the bottom of these pits for the drill rig platform at both the launch and reception pits at either end of the bore section.

The size of excavation shall be determined by the Contractor to suit his method of operation and the quantity shall be a lump sum, irrespective of the actual volume of excavation.

The rate shall include shoring and dewatering of the excavation.

<u>Items</u>	<u>Unit</u>
Excavation, preparation and levelling of launch and reception pits	Sum/No

PLX 8.4 SUPPLY OF NEW SEWAGE RISING MAIN PIPES FOR PIPE CRACKING METHOD

The rate shall cover the supply, transport, off-load and handling of all specialist pipes required for the "Pipe Cracking" as specified, per type and diameter.

<u>Item</u>	<u>Unit</u>
HDPe Pipe	per linear meter installed

PLX 8.5 PIPE CRACKING METHODS (PULLING THROUGH OF PIPE)

The item shall cover the complete cost of supply all specialist plant and equipment, hydraulic pulling through of the pipe, and complete the jointing of pipe sections.

The rate shall include the handling, welding (extrusion of fusion bond), trimming of the bund, pulling through and water pressure testing after installation of the pipe.

The quantity shall be the final length of pipe supplied and installed. No payment will be made for waste and off-cuts.

An item will be scheduled for each type and diameter of pipe.

<u>Item</u>	<u>Unit</u>
Pulling through of (diameter and type as stated) pipe and jointing.....	m

PLX 8.6

DEALING WITH LIVE RAW SEWAGE IN EXISTING SEWER RISING MAIN

The item shall cover the complete dealing with the raw sewage in the existing rising main.

The Contractor shall liaise with the Kouga Municipality every instance (new position) when they plan to shut-off the sewage pumps, after the existing pipe is exposed (by hand excavation), before cutting into the existing pipe. No shut-off period may exceed the agreed shut-off duration, which will typically not be longer than an 8h duration (ie 9h00 to 17h00). No shut-off may take place during weekends, or after-hours.

Once the existing sewage pipe is cut, the contractor shall fully deal with the sewage spillage to avoid any contamination of ground water and the surrounding. A "honey-sucker" truck or submersible sewage pump and generator shall be available at the position where the pipe cutting takes place, to immediately clean all spilled sewage.

The Contractor shall further fully comply with the specific Environmental requirements for this work activity, and shall liaise with the ECO on this matter.

<u>Item</u>	<u>Unit</u>
Dealing with Raw Sewage.....	Sum

ELECTRICAL INSTALLATION

A : DETAILED SPECIFICATIONS

1.0 Introduction & General

This detail specification complements & qualifies the foregoing specifications of material & workmanship. The standard specification should be regarded as a basis and guideline, with this detailed specification taking preference where any ambiguity is concerned.

Should there be any conflict or ambiguity between sections of this enquiry, then the sections will be considered in the following order of priority:-

- Schedule of Quantities
- Project Specification including Equipment Schedules
- Drawings (loose and bound-in)
- Standard Specification

Should the Tenderer notice any inconsistencies between these sections, it is his responsibility to notify the Engineer in order to obtain clarification thereon.

2.0 Scope of Work

This subcontract calls for the general LV electrical installation comprising lighting, power, back-up power, alarm, telemetry and lightning protection for Hankey and Centerton sewer pump stations.

The following sections of work are included in the contract:-

- LV distribution boards
- Pump controls
- LV distribution cabling
- Earthing system
- Conduit and wireways
- Intruder alarm
- Telemetry system
- Backup power
- Performing and submission of test records and certificates
- Issuing of Certificate of Compliance
- All other materials and labour necessary to complete the Works in full accordance with the specification and design contained or referred to in this document

3.0 Site Conditions

3.1 General

This is an existing building project.

Design conditions are:-

- | | | |
|--------------------|---|------------|
| • Max. temperature | - | 42 C db |
| • Min. temperature | - | -5 C db |
| • Voltage | - | 415 / 241V |
| • Frequency | - | 50 Hz |

4.0 Builder's Work

The following will be provided by the principal Contractor under the building works contract:-

- Openings through walls, floorslabs, etc.

The electrical subcontractor will be responsible for the following (if required):-

- Manholes and covers
- PVC sleeves 50mm dia. To 110mm dia.
- Trenching and backfilling for LV cables etc.

All excavation shall be executed in accordance with the Standard Specification.

5.0 Excavation

5.1 General

Tenderers are to note that excavation shall be carried out in strict accordance with the Detailed Specification. The contractor may use any method he chooses to excavate any class of material, but his chosen method shall not determine the classification of the excavation.

The Engineer will decide on the classifications of the material based on the inspection of the excavated material and the criteria entailed in Clause 5.2 below.

NOTE: Before any cable(s) are installed in the trench or trenches, such trench or trenches shall be inspected by the Engineer at a site meeting agreed upon and once approval is given that such trench or trenches are acceptable, may the cable or cables be installed.

5.2 Measurement, Pricing & Payment

For the purpose of this contract, only two classes of material have been measured, and comprise the following criteria :

5.2.1 Soft excavation :

Excavation generally by pick and shovel in soft soil.

5.2.2 Intermediate excavation :

Excavation deemed to be possible by pneumatic tools. Determining factors include descriptions in :

- "Intermediate Excavation"
- "Boulder Excavation Class A"
- "Boulder Excavation Class B"

5.3 Classes of Excavation

The following criteria has been extracted from SANS 1200.

5.3.1 Soft excavation :

- a) Soft excavation, other than in restricted excavation, shall be excavation in material that can be efficiently removed or loaded, without prior ripping, by any of the following plant:
 - i) a bulldozer of mass (including mass of ripper if fitted) approximately 22t and flywheel power approximately 145kW, or
 - ii) a tractor-scraper unit of total mass approximately 28t and flywheel power approximately 245kW, pushed during loading by a bulldozer equivalent to that specified in 5.3.1 a) below, or
 - iii) a track-type front-end loader of mass approximately 22t and flywheel power approximately 145kW.
- b) In the case of restricted excavation, soft excavation shall be excavation in material that can be efficiently removed by a back-acting excavator of flywheel power approximately 0,10kW for each millimeter of tinned bucket width, without the assistance of pneumatic tools such as paving breakers.

5.3.2 Intermediate excavation :

- a) Intermediate excavation, other than in restricted excavation, shall be excavation (excluding soft excavation) in material that can be efficiently ripped by a bulldozer of mass approximately 35t, fitted with a single-tine ripper suitable for heavy ripping, and of flywheel power approximately 220kW.
- b) In the case of restricted excavation, intermediate excavation shall be excavation (excluding soft excavation) in material that requires a back-acting excavator of flywheel power exceeding 0,10kW for each millimeter of tinned-bucket width or the use of pneumatic tools before removal by equipment equivalent to that specified in 5.3.1 b) above.

5.3.3 Hard rock excavation :

- a) Hard rock excavation, other than in restricted excavation, shall be excavation (excluding boulder excavation) in material that cannot be efficiently ripped by a bulldozer equivalent to that specified in 5.3.1 a) above before removal.

NOTE : Such excavation generally includes materials such as formations of unweathered rock that can be removed only after blasting.

- b) In the case of restricted excavation, hard rock excavation shall be excavation in material (excluding boulder excavation) that cannot be efficiently removed without blasting or without wedging and splitting.

5.3.4 Boulder excavation Class A

Boulder excavation Class A shall be excavation in material containing more than 40 % by volume of boulders of size between 0,03m³ and 20m³, in a matrix of soft material or smaller boulders.

Excavation in dolomite formations other than solid dolomite will be classed as boulder excavation Class A if the formation contains more than 40 % by volume if lumps of hard dolomite of size between 0,03m³ and 20m³, in a matrix of soft material or smaller lumps of hard dolomite.

Excavation of solid boulders or lumps of size exceeding 20m³ will be classed as hard rock excavation.

Excavation of fissured or fractured rock will not be classed as boulder excavation but as hard rock or intermediate excavation according to the nature of the material.

5.3.5 Boulder excavation Class B :

Boulder excavation Class B shall be excavation of boulders only in a material containing 40 % or less by volume of boulders ranging in size between 0,03m³ and 20m³, in a matrix of soft material or smaller boulders. Those boulders requiring individual drilling and blasting in order to be loaded by a track type front-end loader or back-acting excavator, as the case may be, as specified in 5.3.1 a) or 5.3.1 b) above, will each be separately measured as boulder excavation Class B. The excavation of the rest of the material will be classed as soft or intermediate excavation according to the nature of the material.

6.0 Schedules of Information

The schedules of information contained in this document consists of 2 sections :

- Information supplied by the Engineer (schedules of drawings, cables, distribution boards, etc. as applicable.)
- Information to be supplied by the Contractor at tender stage (tender form, information on the makes, types and ratings of equipment and materials offered, schedules of prices and rates for variations, schedules of quantities, etc. as applicable.)

Tenderers are required to enter, at the time of tendering, in the "Schedule of Equipment and Material Offered", sufficient details to enable the equipment concerned to be identified without ambiguity.

It is not sufficient for a tender to state "as specified" in the schedules.

Failure to complete these schedules (if applicable) may render a tender invalid.

7.0 Samples and Alternatives

Bidders may be required to submit for approval, comment or records samples of materials, apparatus or components, and also drawings, schematic diagrams or technical details, including calculations, upon which their design and/or offer is based before any contract is awarded. Such details may also be called for during the course of the Contract prior to installation. Any approvals given or comments made shall be on the generality of the scheme and shall not relieve the Contractor of his responsibility to ensure the full compliance with all performance and regulatory criteria.

NOTE : A request for submission of samples or drawings does not imply that the Bidders quotation will necessarily be accepted.

Any particular make or model of equipment referred to in the Documentation is for guidance purposes only in setting standards / types / performances required; equipment that is equal or superior in all respects, and to the approval of the Engineer, may be offered by Bidders. No reference to any particular make of any equipment shall be construed as that equipment having been selected by the Engineer or Client and the Contractor shall be fully responsible for the guarantee and performance of such equipment.

8.0 Supervision, Workmanship and Delays

The work shall at all times, for the entire duration of the contract, be executed under the supervision of a skilled and competent representative of the contractor, who must be able and authorized to receive and execute instructions on behalf of the electrical contractor.

In the event that inferior materials or bad workmanship, on the part of the subcontractor, leads to remedial work requiring redesign by the Engineer, the cost of this work, including related professional fees, shall be borne by the contractor.

Similarly, should delays in the contract be caused by poor performance on the part of the Contractor causing the Engineer to spend extraordinary time on the project, the extra costs incurred shall be borne by the Contractor.

These costs will be based on the CESA hourly rates and will be deducted from claims due or claims which will become due to the Contractor.

9.0 Making Good

The contractor will carry out in all instances any work to be made good such as damage to, or disturbances of the building installations caused by himself or his employees during the execution of the contract, at his own cost.

10.0 Commissioning and Testing

10.1 Commissioning

A documented method shall be followed whereby the electrical subcontractor shall ensure that his installation is correctly constructed in accordance with the manufacturers' specifications, consultant's specification, consultant's design and all codes of practice and international design codes.

The commissioning procedure must allow for signing off of the major items of equipment by a qualified person in terms of the codes. These signed off documents will form part of the record drawings.

10.2 Performance Tests

The electrical contractor shall be responsible for the physical testing, in the manufacturing works, or on site, of the items of plant or systems as required by the Engineer. These tests shall be performed by the electrical subcontractor or supplier of the equipment, and where called for, the Engineer shall witness such tests. The Engineer may also only witness a representative sample of the equipment tests. In any event, the electrical contractor will supply documentary proof of full performance tests of all relevant equipment.

10.3 Acceptance Tests

Acceptance tests will be performed on site of the working system or sub system, to show that the works, as installed, is functioning according to the specifications and design. The onus for the correct functioning of the systems is still on the electrical subcontractor irrespective of whether the Engineer has witnessed the acceptance tests or not.

Prior to the system being connected, a test certificate must be issued by / given to the local electricity supply authorities.

10.4 Testing Equipment

Testing equipment required for the successful commissioning of the Works described herein is to be made available by the Contractor.

Details of the Contractor's testing equipment is to be stated in schedule Part A.16.6 "Schedule of Contractor's Testing Equipment". Should the Contractor not have suitable equipment for carrying out the tests at the time of testing, the Engineer will make the necessary arrangements for this equipment or instruct testing specialists to undertake this work. All arrangements for this equipment or instructing of testing specialists to undertake this work and all associated costs, including professional fees shall be deducted from money due to the Contractor.

11.0 Compliance with Regulations, Standards and Codes

The contractor will arrange for all inspections and testing of the installation after completion, including the issuing of the Certificate of Compliance. All notices, fees, including inspection and re-inspection are the responsibility of the subcontractor and all the relevant costs shall be borne by him.

The workmanship throughout the Works will be to the satisfaction of the Employer. Any materials or workmanship considered as faulty or incorrectly or inadequately erected or repaired, will be substituted, altered or rectified to the satisfaction of the Employer, without additional cost to the Employer.

The Works will be executed in strict accordance with the following:-

- All relevant by-laws and regulations of local authorities.
- All relevant SANS, BS and other international standards of the latest revision, where applicable.
- The latest Occupational Health and Safety Act as amended.
- The latest Construction Regulations as amended.

12.0 Programme

The Contractor must conform to the programme as submitted by the principal Contractor. The cost of overtime, additional labour and plant for the completion of the works, in accordance with the programme, must be included in the Tenderer's price for the project. The cost of any work outside the requirements of the programme or necessary under exceptional circumstances will be for the Employers' account only if covered under a variation order.

13.0 Drawings

13.1 General

Generally, the term "detail" shall mean that the drawing is exact in all aspects to what shall be provided. Where the term "illustration" is used, however, it shall be construed that the drawing is to be regarded as a proposal or guideline as to what is to be provided, manufactured or supplied.

13.1 Bid Drawings

All drawings, those supplied loose, as well as those bound in, form part of this enquiry. It is the Bidder's responsibility to inform the Engineer as to the absence of any of these drawings.

13.2 Record / As-Built Drawings

The Contractor must prepare record/as-built drawings of the completed installation as constructed e.g. indicating actual cable runs, circuiting, distribution board details, final sleeve pipe positions, luminaire and power point layout details. The contract will not be deemed complete until these drawings have been submitted.

13.3 Construction / Workshop Drawings

Unless otherwise stated in the Standard Specification and / or the Detailed Specification the Contractor shall submit, in triplicate, installation drawings within 21 (twenty one) days after the signing of the Contract, to allow the Consulting Engineer to examine and approve them before equipment manufacture is started, or material delivered to site.

Should the Consulting Engineer require that any drawing be amended, the Contractor shall make the necessary alterations and re-submit the drawing within 2 (two) weeks.

The Contractor shall provide the Main Contractor and the Consulting Engineers with complete layout, installation and shop drawings, together with any necessary descriptions and specifications. Sufficient details shall be given to permit a full appraisal of all parts of the installation and their relation to the building structure.

Drawings shall give details of all foundations, ducts, chases, pits and openings and shall set out all lines and levels for the work (where applicable).

Delays caused by the submission of drawings or by an error, omission or inadequacy in these drawings, shall not be considered a reason for an extension of the Contract time.

The successful Bidder shall submit construction drawings of manufactured equipment, such as distribution boards, panels, etc., for consideration by the Engineer prior to manufacture thereof.

The Engineer's approval of construction or workmanship drawings does not relieve the contractor of his responsibility with regards to any of the deviations from the requirements of this contract unless the Engineer has been clearly informed, in writing, of such deviations at the time of submission and the Engineer subsequently gives written approval for the specific deviation. Similarly, the Engineer's approval shall not relieve the contractor of responsibility for errors or omissions in the construction / workmanship drawings.

14.0 Sufficiency of Bid

The Bidder's offer shall be for the supply, delivery, installation and commissioning of the complete installation as detailed, described or implied in this document and on the accompanying drawings.

The Bidder's offer shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender for the Works and that the rates and prices he has entered in the schedules shall cover all his obligations under the contract for the proper completion of the Works.

15.0 Measurement

The Bidder shall not make any assumption regarding the installation. If there is any doubt or ambiguity, the Engineer must be consulted. The Tenderer shall take cognisance of the fact that the schedule of quantities is remeasurable and the quantities may be adjusted at the end of the contract.

All outlet boxes up to 100 x 100mm are measured as one item regardless of the number of entries.

Conduit boxes shall always include the fixing to the conduit with lock and bush nuts as specified.

All switches and plug units shall include the fixing to conduit as specified.

Outlet boxes shall be without covers and draw boxes shall include covers, screws, etc.

Light switches, switch plugs, etc. shall include screws, cover plates and other equipment specified.

All fittings and accessories always include the connections thereto. All light fittings shall be complete with lamps and tubes, unless otherwise stated in the Bill.

300mm additional length per conductor has been measured for conductors drawn into conduit, per termination point. Tenderers must allow in their rate for any conductor lengths required for his own purposes, in addition to the 300mm measured.

All measurements are nett, unless otherwise stated, and Tenderers must allow in the rate for wastage.

16.0 Monthly Certificates

Pro forma claim forms are available from the Engineer. These are available in a blank copied format or as a computer file in Excel. This is the preferred method of submitting payment claims. Should the contractor have developed his own method of claiming, this may be submitted to the Engineer for consideration.

17.0 LV Distribution Boards

All existing distribution boards will be fitted with new equipment, wired and complete with all equipment of quantities, types, sizes and ratings as specified on the distribution board schematics, which are included in this document. The distribution boards shall be manufactured in accordance with the Standard Specification for Electrical Building Services.

The Contractor shall ensure on site and on the drawings, before commencing with any work that sufficient space and access is available to install the DB's as specified. No additional claims for failure to check these details and rectify any default will be entertained.

Before handing over, the boards shall be thoroughly cleaned inside and outside. Finished surfaces shall be made good where necessary with identical paint to the original finish.

PVC sleeve pipes as indicated on the drawings shall be provided and built into the wall for incoming and outgoing cables.

18.0 LV Distribution Cables

All cables shall be in accordance with the Standard Specification. The cables shall be of sizes and construction as shown on the drawings.

The Contractor is advised to measure actual lengths of cable required on site before ordering as he will not be compensated for redundant cable or in fact any other material over supplied.

19.0 Earthing

It is the electrical subcontractor's responsibility to ensure that the complete earthing system of the building is in accordance with the code of practice.

To this end the subcontractor shall perform earth resistivity tests to ascertain which method of earthing is most suitable to ensure compliance with the code.

All metallic hot and cold water as well as waste pipes must be effectively bonded by 12,5 x 1,6 mm solid or perforated copper tape (not wire) clamped by means of brass screws at intervals not exceeding 150 mm.

The earth connection from the main earth bars of all the distribution boards must be made to the cold water mains and in the incoming service earth conductor or such conductor as the Engineer may direct. Where applicable all metallic roof sheeting as well metallic walkways and stairs shall be suitably earthed.

Furthermore, earth electrodes (earth spikes) of at least 1,5m long must be provided and driven into the ground at least 1m from all the building's perimeter and shall clear all aprons and water channels. The earth spike must be driven into the ground at least 300mm below ground level. Only after final bonding and tests have been carried out must backfilling and compacting of same be executed.

The earth conductor must be bonded to the roof sheeting at intervals not exceeding 5m, ensuring that roof sheeting on both of the ridge are properly bonded.

The overall earth resistance at any distribution board shall not exceed 1 Ohm. The contractor shall access the soil and site conditions at the time of tendering and allow for this to enable him to perform the proper earthing and bonding of the installation.

21.0 Conduit, Wireways and Accessories

21.1 Conduit

All conduit/outlet boxes and associated fittings for use in this installation will be SABS approved.

The electrical subcontractor must provide all conduit and accessories for the lighting and power as shown on the drawings and as measured in the schedule of quantities.

Flexible metallic tubing of galvanized steel shall be used for connections to water heaters, fans and other similar equipment. The corrugations of the tubing shall have a rectangular cross section suitable to fit standard brass connections.

21.2 Powerskirting

Powerskirting has been utilised and shall be of sheet metal manufacture with clip-on covers, structured light beige. The body shall be hot dip galvanised. The powerskirting shall be as specified "Conduit and Wireways Schedule".

22.0 Wiring

Lighting and Power wiring in conduit and channel wireways shall comprise 600/1000V single core PVC insulated copper wire sized in accordance with the distribution board schematics. Conductor outer sheaths shall be of the following colours:-

- Phase Conductors : red, white, blue
- Neutral : black
- Earth : green

23.0 Wall Switches and Switch Socket Outlets

All wall switches to be of the flush type complete with cover plates and screws in 100 x 50 x 50 extension outlet boxes mounted on the wall surfaces. Colours of outlet boxes and cover plates to match.

All surfaces mounted switch socket outlets in bedrooms to be chased into walls in 100 x 100 x 50 extension outlet boxes mounted on the wall surfaces. Colours of outlet boxes and cover plates to match.

All switched socket outlets mounted in power skirting to have matching cover plates.

Further details of these outlets are listed in Part A.15.2, Switch, SSO and Isolator Schedule.

The electrical subcontractor will be responsible for the installation of power points to feed equipment such as water heaters, air-conditioners, fans, security equipment, etc. This equipment, if supplied and installed by others, will be connected by the electrical subcontractor.

The cover plates to all outlets shall be fixed **AFTER** the final coat of paint has been applied. The Tenderer shall allow for this in his programme and pricing of the Works.

24.0 Luminaires, Standards and Photocells

The luminaires are detailed in section **Error! Reference source not found.** and **Error! Reference source not found.**

The electrical subcontractor shall comply with the installation requirements of the luminaire manufacturer. The method of supporting the luminaires is to be approved by the Engineer prior to installation.

Photocells shall be tested in existing positions as indicated on the drawings to ensure compliance. The following specifics shall apply:-

- Activating Light Level : 50 lux
- De-activating Light Level : 90 lux
- Protection Rating : IP 44
- Rated Switching Load : 16 A

Protection against voltage surges will also be provided.

25.0 Telephone, Computer and Security Installations

If required, the electrical contractor will be responsible for the installation for conduit only. This will include all distribution boards, outlet boxes with cover plates and draw wires, all as indicated on the layout drawings.

The equipment, cabling and wiring for these systems will be done by others.

26.0 Copyright

Copyright on designs, specifications, patents (including pending), systems and processes contained in this document remain the reserve of the Author. Any transgressor shall be held responsible jointly and severally, in their personal and corporate capacities for any contravention of this right.

27.0 Facsimile Bids

No facsimile bids will be accepted.

28.0 Schedule of Sub-Contractors

The Bidder shall state in the Schedule of Proposed Sub-contractors the name of any Sub-contractors he proposes to employ to assist him to complete the Works, and the proposed extent of the Sub-contractor's responsibilities.

29.0 Schedule of similar types of installations carried out by Bidder

The Bidder shall list in the Schedule of Similar Types of Installations Carried Out By the Bidder the name, year, value, etc. of any similar contract undertaken previously by the Tenderer.

30.0 Schedule of staff available

The Tenderer shall list in the Schedule of Staff Available (Part A.16.5 of this document) the name, designation, years of relevant experience (i.e. similar type of work) of all staff (from senior personnel to labourers) that will be made to perform any duties for and on behalf of the Tenderer on this project.

31.0 Cession for materials stored off site

An appropriate form shall be used to facilitate payment and cede rights in respect with ownership of materials stored OFF site in terms of the Conditions of Contract between the Contractor and Main Contractor. This will require approval from the client.

32.0 Schedule of work in hand

The Tenderer shall list brief details of all projects which are currently in progress indicating Name of Project, Client, etc. including details of 3 projects where the quality of your workmanship can be inspected.

33.0 Identification

Tenderers are kindly reminded to enter their company's name in the space allocated on the front cover of this document for ease of reference.

DO IT NOW!

34.0 Progress Meetings

Progress meetings will be held on site every month or as mutually arranged by all parties. The Contractor must arrange for his authorized representative, who must be approved by the Engineer, to attend these progress meetings when required to do so. All costs for these meetings, including testing, commissioning, snagging and handing over meetings, shall be deemed to have been covered by the Preliminary and General Costs.

35.0 Occupancy Sensors

Should it be deemed necessary to install occupancy sensors, the following specification shall apply:

OS1:

- PIR and sound technology sensor
- Ceiling Mounted
- 360 degree coverage
- Adjustable time delay
- Green LED indicator
- Push-button programmable
- Self-contained relay switches line voltage
- No minimum load requirements
- Operating temperature : -10 to 71 Degree Celsius
- Relative humidity : 20 to 90% non-condensing
- 3 Year warranty
- Provide 8.5m radial coverage at 2.7m mounting height
- Maximum load 1200W
- White color

The electrical contractor will provide a wired on/off output from the sensor to the closest AC unit. The AC contractor will connect the wire to their AC units.

B: CONDUIT AND WIREWAYS SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER	MODEL
1.	Conduit for lighting circuits	PVC	20mm dia. SABS approved PVC/Metal
2.	Conduit for power circuits	PVC	20mm dia . SABS approved PVC/Metal
3.	Conduit for telephone, data and other services	PVC	25mm dia. SABS approved PVC/Metal with 16SWG draw wire
4.	Powerskirting : 3 compartment, 2 tier with galvanised body and mild steel covers	CABSTRUT or equal and approved	Series 8
5.	Sleeve pipes for Electrical and Telephone	uPVC or equal and approved	SANS 791 PVC-U Sewer pipe Class 51
6.	Cast iron manhole covers for Electrical and Telkom manholes, including frames		Type 4 to SANS 558
7.	Conduit for cable entry	PVC	40mm dia. SABS approved Galvanised Metal
8.	Conduit for cable entry	PVC	32mm dia. SABS approved Galvanised Metal

C : SWITCH, SWITCH SOCKET OUTLET & ISOLATOR SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER
A.	1-way lightswitch flush mounted to 100 x 50 outlet box, including coverplate	CRABTREE CLASSIC or approved equal
B.	2-way lightswitch flush mounted to 100 x 50 outlet box, including coverplate	CRABTREE CLASSIC or approved equal
C.	Flush single switch socket outlet for normal power mounted to 100 x 100 outlet box, including coverplate	CRABTREE CLASSIC or approved equal
D.	Flush double switch socket outlet for normal power mounted to 100 x 100 outlet box, including coverplate	CRABTREE CLASSIC or approved equal
E.	Single switch socket outlet for normal power mounted to powerskirting with white toggle and receptacles	CRABTREE CLASSIC or approved equal
F.	Single switch socket outlet for dedicated power mounted to powerskirting with red toggle and receptacles	CRABTREE CLASSIC or approved equal
G.	Flush single dedicated switch socket outlet for normal power mounted to 100 x 100 outlet box, including coverplate	CRABTREE CLASSIC or approved equal
H.	Double pole isolator, surface mounted, including standard dimension outlet box, complete with cover	CRABTREE CLASSIC or approved equal
I.	Unswitched 5A, 3 pin socket with cover mounted to 60mm dia. Round box	CRABTREE CLASSIC or approved equal

D : DETAILED LUMINAIRE SPECIFICATION

1.0 Type A – Vapour Proof Fluorescent

The luminaire shall consist of an injection-moulded, flame-retardant polycarbonate housing and prismatic diffuser. The powder coated white reflector and control gear tray, upon which all electrical components are mounted, shall be secured by means of multiple twist lock latches to secure the reflector to the housing. The silicon sponge seal shall be moulded into the housing to ensure an optimal seal between the housing and the prismatic diffuser. Two of the stainless steel latches shall facilitate the hinging of the diffuser and shall ensure correct alignment when closing the diffuser. It shall be designed to operate fluorescent lamps from 1*36W to 2*36W.

The luminaire shall bear the SANS 475 performance mark and the SANS 60598-2-1 safety mark.

The luminaire shall have a degree of protection that complies with SANS 60598-2-1.

Lamp compartment: IP 65

Gear compartment: IP 65

The body shall be manufactured from injection-moulded, flame-retardant polycarbonate material. Mounting shall be facilitated through removable external stainless steel mounting brackets, which can accommodate either surface or suspension mounting. A 20mm gland entry shall be provided at one end with a knock out at the opposite end, making it suitable for surface or through wiring. A silicon sponge gasket shall be fitted into a special groove in the housing. This, in conjunction with the tongue provided on the diffuser, shall ensure the optimal sealing of the total enclosure, thereby maintaining the certified IP65 ingress protection rating.

The diffuser shall be manufactured from the same material as the housing, thus ensuring the flame-retardant integrity of the luminaire. The highly effective internal prisms of the diffuser shall ensure an optimal distribution of more than 80%. The diffuser shall be secured in place through multiple sprung stainless steel clips which shall ensure the integrity of the IP rating. Two of these clips shall keep the diffuser attached to the luminaire when hinged open, for ease of lamp replacement.

The ballast and all auxiliary components shall be mounted on the reverse side of the powder coated steel reflector and shall be accessible for maintenance. The internal reflector and control gear tray shall be attached to the body of the luminaire by multiple wingnut shaped fasteners. Two removable control gear tray straps shall suspend the reflector and control gear tray when released from the body, for ease of maintenance. The electronic control gear shall be suitable for operation with the specified lamps on a 230V +3%/-10% at 50Hz, single phase supply. All control gear components shall be removable and bear the relevant SABS mark. Mains connections shall be by means of a suitable screw terminal block with a wire clamping contact. The luminaire shall be power factor corrected to a minimum of 0,9.

2.0 TYPE B - LED Flood Light

a) Light Fitting

i) Product Description

The luminaire consists of an LED engine, power supply and spigot compartment. This allows the easy installation of the LED engine by means of a hinging action onto a spigot base casting, with incorporated leveling device. It is secured by stainless steel latches and an access screw. The LED engine, consisting of the LED light source and the power supply, can be easily replaced or upgraded (FutureProof). Both compartments are rated IP 66. Electronic temperature monitoring prevents overheating of LEDs and power supply, positioned directly next to LEDs (ThermiX®). The power supply is automatically disengaged when opening the luminaire. The luminaire housing is manufactured of marine grade aluminium. It is designed for LED light sources between 55W and 279W.

ii) Photometry

Light source - LED

LED - 2mm² LED

Light color - Neutral White (4000K)

Color rendering (Ra) - >70

Lumen package - 10W

Optics - wide area

iii) Mechanics

Electronic control Gear - Constant Current Driver IP 66

Materials and finishing - Housing – Aluminium, Protector – High-impact clear glass (IK 07) or polycarbonate

Installation - Bottom-entry mounting stirrup

Fixing - 3 x Ø18 Fixing holes

iv) Electrical Characteristics

Line Voltage - 230VAC

Line frequency - 50Hz

Surge protection – Yes - 10kV/10kA

Power Factor - ≥0.95

v) Environment

Storage temperature - -40 < T < 60

Enclosure Tightness - IP 66

Enclosure Mechanical Withstand Impact - IK 08

E : LUMINAIRE SCHEDULE

ITEM	DESCRIPTION	MANUFACTURER	MODEL
Type A	Surface mounted fluorescent with 2 x 36W lamps with vapour proof polycarb lens	Actom, Voltex, Unique Lighting	
Type B	Surface mounted LED 10W	Actom, Voltex, Unique Lighting	

F : GENERATOR SPECIFICATIONS

DETAILED SPECIFICATION FOR THE SUPPLY, INSTALLATION AND COMMISSIONING OF DIESEL/ALTERNATOR GENERATING SETS

1. **GENERAL**

This installation must comply fully with all the sections and drawings of this document.

This detail specification is supplementary to the Standard Technical Specification and must be read together where they are at variance the detail specification shall apply.

The generating set is required to provide mains failure power for certain lighting and power requirements.

2. **SITE CONDITIONS**

The site conditions are as follows:-

(a)	Altitude above sea level	:	To be determined by contractor
(b)	Maximum temperature	:	45°C
(c)	Relative humidity at this temperature	:	To be determined by contractor

3. **OUTPUT AND VOLTAGE**

After the de-rating factors for the engine and generator due to site conditions have been taken into account, the set must have a site output and voltage as follows:-

(a)	Voltage	:	230V/ 1 phase
(b)	Rating (standby)	:	6.5 kVA
(c)	Power factor	:	0.8
(d)	Frequency	:	50Hz

The generating set shall be capable of accepting 70% of the specified site electrical output within 10 seconds after the starter motor is energized and the remaining 30%, 5 seconds thereafter, i.e. 100% load acceptance shall not exceed 15 seconds.

4. **THE ALARM DEVICE**

The audible alarm and red light shall be of the weatherproof type and shall be installed on the exterior of the enclosure.

5. **FUEL DRIP TRAY**

A galvanized or 3CR12 drip tray approximately 100mm deep shall be mounted below the fuel tank and must be large enough to collect any fuel that drips from the tank accessories. The drip tray shall be manufactured from mild steel. The thickness of the drip tray sheet steel shall not be less than 2mm.

6. **NOTIFICATION OF TEST**

The successful Bidder shall inform the Engineer when the set is ready for installation.

7. **CONTRACT CO-ORDINATION**

The supplier of the generator set shall work in close co-operation with the Electrical Contractor regarding the time for delivery and installation of any or all the equipment and also make the necessary arrangements with the Electrical Contractor regarding loading and offloading of any or all the equipment. No on-site storage will be provided.

8.1 **SPECIFIED GENERATOR SET**

8.1.1 **Engine**

- Compact and extremely smooth running
- Low emission levels
- Quiet running – low noise levels
- Fast and easy all weather starting
- Convenient “one side” maintenance for easy economical servicing

8.1.2 **Alternator**

- Brushless
- Self exciting
- Automatic voltage regulation
- High motor starting capacity
- Excellent wave form for sensitive loads
- Full load recovery in less than 0.3 seconds

8.1.3 **Units**

- Compact sturdy skid base
- Integrated fuel tank
- Circuit breaker protected alternator
- Compact for easy transport
- Custom designed panel
- Twelve month warranty on complete unit

8.2 **GENERATOR SET SPECIFIED**

ALTERNATOR	
Type	Brushless
Power factor - %	80%
AC volts	230V
Phase	1 Phase
Frequency	50Hz
Standby power kVA	6.5
Prime power kVA	
ENGINE	
Type	Diesel
Cooling system	Air
Lubrication system	Oil
Starting system	Automatic
Standby power – kW	5
UNIT (approximate)	
Continuous operating hours per fuel tank (rated)	12hrs full load

G :DETAIL MECHANICAL TECHNICAL SPECIFICATIONS

1.0 Extractor Fans

The fans selected are of the anti-corrosive direct drive single inlet centrifugal fan type. These are robust and can withstand corrosive and aggressive site conditions. Any ductwork to be used in the pump station will be uPVC pipework [Class 4] of an appropriately calculated size.

Slots [25mm] are to be cut into the pipes to fit the dimensions on the drawing to draw in air

Ductwork outside of the building will be of 316 SS complete with a 316 SS insect screen mesh. All equipment will be housed in the pump station to limit the amount of exposed items to vandalism.

The fan and associated equipment selected is;

- Dry well fan –Ground Floor Level – 1 x 0.5kW, SEAT 25 corrosion resistant type air fan. On/off control by the DB, triggered by opening the door and switched off by a timer
- A wall mounted Galvanised Weather Louvre – Type WG will be included for compensate air required by the diesel driven engine pump as well as ventilation for the UPS/ supplementary generator that will power the telemetry equipment

The fan in the Dry well shall be controlled by duplicate micro-switches on all access doors and by adjustable timers, directly and via the PLC.

2.0 Diesel Tank

The fuel tank will be installed on a pedestal and supplied with a visible fuel level indicator, breather/filler cap, isolating valve on the filler line; the tank will be in preference of the double wall type. If of the single wall type the fuel tank will be installed inside a stainless steel sheet metal tray to act as a bund. The tray will be valved to allow drainage and the valve fitted with a removable brass plug.

A low fuel level potential free contact will be provided to allow interfacing with the control panel and will be displayed separately on the panel and relayed as a coded fault condition: "LOW FUEL LEVEL" via the automatic dialing system on the annunciator system.

If not standard supply the engine will be fitted with a status /display panel incorporating the following:

- Odometer
- Hour meter
- Oil pressure switch
- Cooling water temperature gauge

The diesel pump exhaust piping and muffler supplied by the Contractor will be of mild steel inside the pump room and terminate with a flange; stainless steel exhaust piping will be installed from the flange to a point of suitable discharge outside the Pump Room building.

All exhaust piping inside the plant room and the muffler will be painted with heat resistant aluminium silver paint and adequately insulated with lagging rope.

If required the exhaust discharge shall be fitted with a gooseneck or a flap valve / rain cap to prevent rain ingress.

2.0 Weather Louvres

The weather louvres shall be of Type WG; Blades and support mullion in formed galvanised sheet steel. The weather louvre is to be fixed onto a frame built into the wall cavity and complete with a wire mesh screen from galvanised steel. Mesh size 25 x 25 mm

3.0 Diesel Engine Pump

a. Diesel Pump

The diesel engine must be of the compression ignitions type capable of being started without the use of wicks, cartridges, heater plugs or ether, at a pump room temperature of 4°C and must accept full load within 15 seconds from the receipt of the signal to start.

The diesel engine must be naturally aspirated, supercharged or turbo-charged and either air or water cooled. Air Cooled engines are preferable for this application.

The radiator must be ducted externally to the pump house where applicable or the supplier must advise on the allowable louvre size for this application.

The diesel engine must be capable of operating continuously on full load at the site elevation for a minimum period of 6 hours.

The diesel engine must be provided with a governor to control the engine speed within 5.0% of its rated speed under any condition of load up to the full load rating.

Should electronic injection be installed in order to achieve the required level of governing engine speed, the following shall be implemented:

- All fail safe features shall be removed;

Where a communication bus is being used:

- Annunciation of communication failure shall be monitored;

Where analogue controlled linear actuators are used:

- Two controllers shall be run in parallel.

The diesel engine must not have any manual device fitted to the engine which could prevent the engine starting. Where any device is fitted it shall automatically return to the reset position for automatic starting.

The diesel engine must be provided with a tachometer and hour meter which must be permanently attached to the engine or the controller panel.

The diesel engine must be provided with an excess fuel device for the automatic cold starting of the engine. The device is to return automatically to the reset position for automatic starting. The diesel engine must be provided with dual auxiliary starting solenoids which shall be continuously rated.

b. Cooling System

The following systems are acceptable:

Direct air cooling of the engine by means of a multiple belt driven fan. When half the belts are broken, the remaining belts must be capable of driving the fan.

c. Air Filtration

The air intake must be fitted with a filter of adequate size to prevent foreign matter entering the engine.

d. Exhaust System

The exhaust pipe run must be as short as possible in order to minimise back pressure and fitted with a flexible section and suitable silencer and the total back pressure shall not exceed the engine manufacturers' recommendation.

The exhaust system must be supported in order to ensure that there is no weight on the flexible pipe.

The flexible pipe is designed to accommodate expansion and not misalignment.

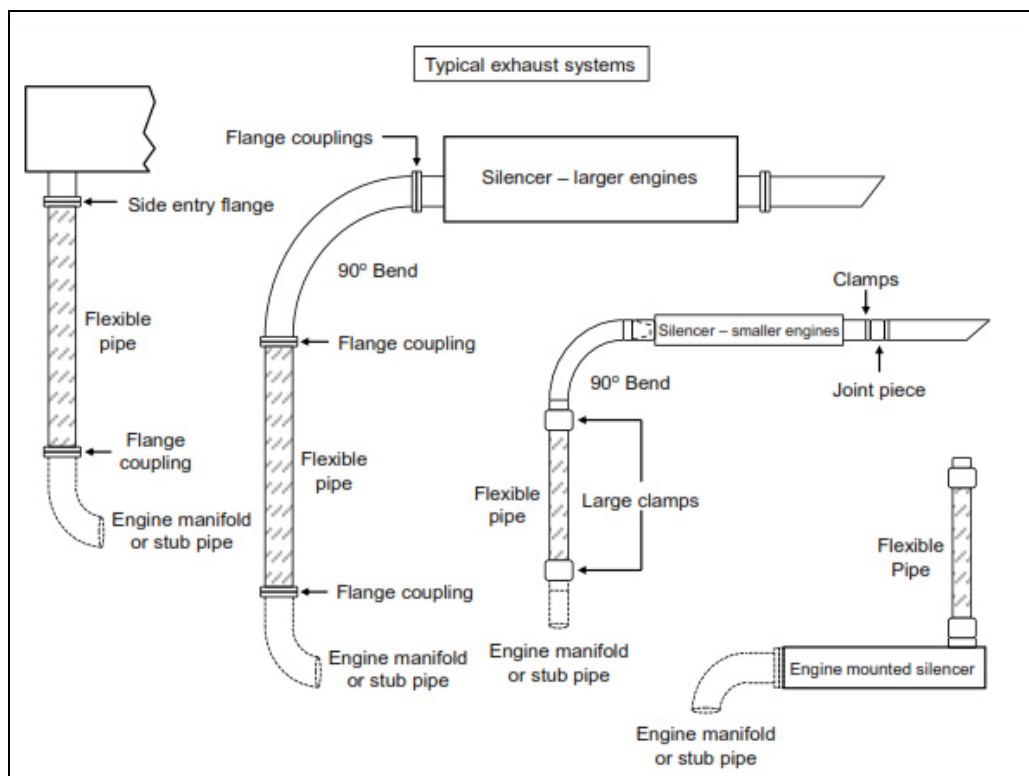
The flexible section may not be welded to the exhaust pipe but must be fixed using purpose made flanges or couplings.

Where the exhaust system rises above the engine, means must be provided to prevent any condensate flowing into the engine.

The exhaust system must run at least 300mm above the engine base plate level.

The engine exhaust system **within the pump house** shall be lagged or guarded, as necessary, for the safety of personnel.

Attention is drawn to the need to ensure that the point of exit of the exhaust pipe from the engine house does not pose any fire risk to the structure, and that exhaust fumes cannot be drawn into the engine house or into any occupied building.



e. Engine shut Down Mechanism

On the diesel engine an extended accessible fuel stop control or, for engines with electronic governor, a stop pushbutton clearly labelled must be manually operated and return automatically to the starting position after use.

f. Fuel

The engine fuel to run must comply with the engine manufacturers' requirements.

Sufficient fuel to run the engine on full load for 6 hours in addition to that in the engine fuel tank must be kept on hand at all times.

The capacity of the tank must be sufficient to allow the engine to run on full load for 6 hours and provisions shall be made for the retention of any spilled fuel using a brick or similar material bund which shall contain not less than the contents of the fuel tank plus 10%.

g. Fuel Tank

The fuel tank shall be of welded steel and shall be located above ground in accordance with municipal requirements. The static head of the fuel tank when full shall not exceed the manufacture's pressure limit.

The fuel tank shall be fitted with a drain valve or at least 20mm diameter at the base of the tank.

The fuel tank may be fitted at the end of the pump set furthest away from the pump or outside the pump house but shall be positioned in a safe location in order to ensure there is convenient filling access and that the fuel line runs are as short as possible.

The tank shall be mounted higher than the engine fuel transfer pump and be provided with an indicator showing the level of the fuel in the tank. The fuel level indicator shall not allow any leakage or spillage of fuel if broken.

Where there is more than one compression ignition engine-driven pump set there must be a separate fuel tank and fuel feed pipe for each engine.

Fuel tanks shall not be fitted to nor above either the engine or the batteries; neither shall they be positioned such that any spillage or leakage from the fuel tank can come into contact with any hot surface on the engine.

h. Fuel Feed Pipes

The fuel feed pipe shall be located at least 20mm above the bottom of the fuel tank.

Any valve in the fuel feed pipe between the fuel tank and the engine shall not automatically close and shall be placed adjacent to the tank locked in the open position.

Pipes that carry lubricating oil or fuel shall be of flame-resistant reinforced flexible hose or suitable material listed for this service. Pipes shall not be made from plastic, rubber and pipe joints may not be soldered. Piping for any fuel line shall not be copper, cast iron, aluminium or galvanised tubing.

i. Fuel System Auxiliary Equipment

The following shall be provided:

- Sludge and sediment trap.
- A readily visible fuel level gauge which must not be of the glass or plastic tube type.
- Damage or fracture of the fuel level gauge must not result in fuel spillage
- An inspection and cleaning hole.

- A filter between the fuel tank and fuel pump mounted in an accessible position for cleaning.
- Means to enable the entire fuel system to be bled or air.
- An air vent to prevent air locks or a vacuum forming.
- Means to fill the fuel tank.

Air relief cocks are not allowed, screwed plugs are permitted.

j. Starting Mechanism

Provision must be made for two separate methods of engine starting as noted below.

Two separate batteries of adequate capacity must be provided for automatic and manual starting of the engine. Where electric starting is used, the system must operate from a battery supply recommended by the engine supplier.

Automatic starting by means of a battery powered electric starter motor of the axial displacement type having no retaining catches or inertial features. The pinion must rotate at reduced speed during the process of engagement with the flywheel gear ring, but during the initial engagement the pinion and armature shaft assembly must mesh by moving axially towards the gear ring.

The starting sequence must be initiated by power mains failure to the installation, and repeat engagement facilities must be provided should the starter pinion fail to engage with the engine flywheel ring.

When the engine fires the starter motor pinion shall be withdrawn from the flywheel ring automatically by means initiated by a directly driven tacho generator or centrifugal speed switch or proximity switch. Flexible drives are not permitted.

Battery charging, voltage generators, alternators and pressure switches on the engine lubricating system or water pump outlet, as a means of de-energising the starter motor, are not permitted.

The starter motor in combination with each battery power supply shall have a design capability to rotate the engine for at least 3 minutes or 12 cycles of not less than 15 seconds cranking and not more than 6 seconds rest.

k. Batteries

Sealed maintenance-free batteries only are acceptable. Batteries shall be readily accessible for servicing, positioned side by side and not stacked, located on stillages above the floor, secured against displacement and in a position where they will not be exposed to excessive temperature, vibration, mechanical damage or flooding water.

Current carrying parts, regardless of voltage, shall be at least 300mm above finished floor level. Battery cables must be at least 50mm² with a current carrying capacity of not less than 345 amperes and be fitted with suitable bolt through lug style terminals. Cable insulation must be resistant to petrol, diesel, lubricating oils and diluted acids.

Batteries used for starting the diesel engine shall be located as close to the starter motor as possible. The length of the battery cables shall be as short as possible subject to a maximum allowance of 300mm slack.

A built-in hydrometer shall be provided to enable the state of the batteries to be determined. An information chart pertaining to the built-in hydrometer must be mounted on the battery case.

Each battery used for starting must be of a type suitable to accommodate the method of charging with an expected life of approximately 4 years and not less than 3 years with a capacity to provide 3 minutes continuous cranking or 12 cycles of cranking a cold engine of 4°C according to the method of starting employed.

Batteries not used for an automatic starting of diesel engine driven pumps, when fully charged and disconnected from the charger, shall be of sufficient capacity to monitor all specified circuits for at least 48 hours, followed by 1 hour in fully operational alarm condition.

Any battery used for an automatic power failure alarm shall not be used for the automatic starting of a diesel engine driven pump or for any purpose other than protection against fire. All batteries within a pump house shall be engraved with the date of installation and shall be replaced at least every 3 years regardless of their condition.

I. Battery Chargers

The means of charging the batteries must be by a fully automatic continuously connected constant voltage, variable current up to 5 amperes charge having automatic trickle and boost charge facilities. The equipment must indicate that each battery and the relevant charger circuits are connected and carrying direct current.

The charging rate shall be set so that the battery does not gas excessively at any stage during the charging and the rate shall be automatically adjusted to suit the state of the battery. The circuits of the batteries must not be linked so that power may be transferred from one to the other.

The charger must have self-resetting overload protection and shall be capable of operating on a short circuit. The charger shall operate on a short circuit and operate even when the batter is totally flat.

KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3)

**CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON**

C3.7 Health and Safety Specifications

PROJECT HEALTH AND SAFETY SPECIFICATION

Detailed Health and Safety Specifications and Risk Assessment documentation was compiled for **PHASE 3** of this project pertaining to the Gravity Network installation of the sewer pipeline, in the build-p residential areas of Hankey. This is bound in **Annexure 4 of Section 3.9** of this Bid Document. The Contractor shall ensure that he familiarise himself with this OHS Specification prior to Tender Stage, and to ensure that all applicable aspects are covered in his tender rates in the Pricing Schedule.

The Contractor shall comply with all relevant requirements of the Site Specific Project Health and Safety Specifications and the cost of so doing shall be measured and paid as specified in PSA 8.3.5 and PSA 8.4.6.

The OHS File must be approved by the Kouga Local Municipality, or their appointed OGS Agent, prior to the commencement of any construction activities.

KOUGA LOCAL MUNICIPALITY
BID NO. 76/2021
HANKEY SANITATION UPGRADE (PHASE 3)
CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON

C3.8 Construction Environmental Management Programme

CONSTRUCTION ENVIRONMENTAL MANAGEMENT PROGRAMME

The scope of PHASE 3 of this project do require an Environmental Authorization, and several construction activities to be executed, will be triggered to justify any Environmental Processes, Applications or Approvals.

The Primary Contractor will therefore be inducted by the ECO with detail Environmental principles for Civil Engineering Construction and a Construction Environmental Management Programme (CEMP_r) and it will be issued to the Contractor at Site hand-over, for compliance during the full duration of the Construction Stage.

Monthly Environmental Audit will be conducted to ensure compliance of the Primary Contractor, and all his/her Sub-Contractors, to comply with this Contract.

The Contractor shall comply with all relevant requirements of the Construction Environmental Management Programme and the cost of so doing shall be measured and paid as specified in PSA 8.3.6 and PSA 8.4.7.

KOUGA LOCAL MUNICIPALITY
CONTRACT NO. 76/2021
HANKEY SANITATION UPGRADE (PHASE 3)
CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN
HANKEY AND CENTERTON

C3.9 Annexures

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KOUGA LOCAL MUNICIPALITY

BID NO. 76/2021

HANKEY SANITATION UPGRADE (PHASE 3) : CONSTRUCTION OF NEW AND UPGRADING OF EXISTING SEWER PUMP STATIONS IN HANKEY AND CENTERTON

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ANNEXURE 3 : LIST OF TENDER DRAWINGS

5024.HANKEY SANITATION			
PHASE 3 - SEWAGE PUMP STATIONS			
Package 1 : New Hankey Sewage Pump Station - Civil & Structural			
Package 2 : New Hankey Sewage Pump Station - Mech & Elec			
Package 3 : Upgrading of Centerton Sewage Pump Station - Civil & Structural			
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TENDER DRAWINGS			
DRAWING NUMBER	REV. No	DESCRIPTION	DATE
LOCALITY PLAN DRAWINGS			
5024-PH3-C001-T	A	General Locality Map	03/04/2020
5024-PH3-C100-T	3	Site Layout Showing Hankey Pump Station nr. 2 (with image)	14/09/2020
5024-PH3-C101-T	3	Site Layout Showing Hankey Pump Station nr. 2 (without image)	14/09/2020
5024-PH3-C102-T	0	Detailed Site Layout Plan: Hankey Pump Station No. 2	30/09/2020
5024-PH3-C103-T	1	Site Layout Showing Centerton Pump Station nr. 3 (with image)	14/09/2020
5024-PH3-C104-T	1	Site Layout Showing Centerton Pump Station nr. 3 (without image)	14/09/2020
5024-PH3-C105-T	0	Detailed Site Layout Plan: Centerton PS	30/09/2020
HANKEY PUMP STATION (PS-2) DRAWINGS			
5024-PH3-C300-T	1	Schematic Hydraulics of Sewage PS Design	30/09/2020
5024-PH3-C301-T	0	Plan and Elevations of Sewage PS at FFL16.2masl	01/10/2020
5024-PH3-C302-T	1	Cross Sections A-A and B-B	01/10/2020
5024-PH3-C303-T	0	Cross Sections C-C and D-D (Sewage P/S & Inlet Chamber Pipework)	01/10/2020
5024-PH3-C304-T	0	Pump Station Pipe Work Details & Pipe Schedule	01/10/2020
5024-PH3-C310-T	0	Layout of Sewage Detention Pond	30/09/2020
5024-PH3-C311-T	0	Plan Layout and details Sewage Conservancy Tank with New Rising Main	01/10/2020
PUMP STATIONS - STRUCTURAL DRAWINGS			
20-058 / 30-01	0	Centerton Pump station - Layout sections	25/10/2020
20-058 / 30-02	0	Hankey Pump station - Layout sections	25/10/2020
20-058 / 30-03	0	Pump Station Structural Details	31/10/2020
CENTERTON PUMP STATION (PS-3) DRAWINGS			
5024-PH3-C401-T		Plan and Elevations of Sewage PS at FFL 31.5masl	01/10/2020
5024-PH3-C402-T		Cross Sections A-A and B-B	01/10/2020
5024-PH3-C403-T		Cross Sections C-C and D-D (Sewage P/S & Inlet Chamber Pipework)	01/10/2020
5024-PH3-C404-T		Pump Station Pipe Work Details & Pipe Schedule	01/10/2020
5024-PH3-C410-T		Layout of Sewage Detention Pond	01/10/2020
TYPICAL DETAILS			
5024-PH3-C500-T		PS Typical Details - Doors & Crawl Beam	01/10/2020
5024-PH3-C501-T		PS Typical Details - Handrail installations	01/10/2020
HANKEY PUMP STATION - MECHANICAL AND ELECTRICAL DRAWINGS			
P068 - 010	1	Hankey Pump Station - Small Power Layout	11/11/2020
P068 - 020	1	Hankey Pump Station - Lighting Layout	11/11/2020
P068 - 030	1	Hankey Pump Station - Site & Sleeve Layout (sheet 1)	11/11/2020
P068 - 040	1	Hankey Pump Station - Site & Sleeve Layout (sheet 2)	11/11/2020
P068 - 050	1	Hankey Pump Station - Distribution Board Layout	11/11/2020
P068 - 060	1	Hankey Pump Station - Security Alarm Layout	11/11/2020
P068 - 070	1	Hankey Pump Station - Telemetry Layout	11/11/2020
2025-M-VENT-001		Hankey Sewage Pump Station - Ventilation layout	02/10/2020
CENTERTON PUMP STATION - MECHANICAL AND ELECTRICAL DRAWINGS			
P068 - 110	1	Centerton Pump Station - Small Power Layout	11/11/2020
P068 - 120	1	Centerton Pump Station - Lighting Layout	11/11/2020
P068 - 140	1	Centerton Pump Station - Site & Sleeve Layout (sheet 2)	11/11/2020
P068 - 150	1	Centerton Pump Station - Distribution Board Layout	11/11/2020
P068 - 160	1	Centerton Pump Station - Security Alarm Layout	11/11/2020
P068 - 170	1	Centerton Pump Station - Telemetry Layout	11/11/2020
2025-M-VENT-002		Centerton Sewage Pump Station - Ventilation layout	02/10/2020

ANNEXURE 4 :

HEALTH AND SAFETY SPECIFICATIONS AND RISK ASSESSMENT

Refer to attached OHS Specifications for PHASE 3 of this Project.

Part C4: Site Information

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KOUGA LOCAL MUNICIPALITY
CONTRACT NO. 76/2021
HANKEY SANITATION UPGRADE (PHASE 3)
INSTALLATION OF NEW AND UPGRADING OF EXISTING SEWER RISING MAINS
IN HANKEY AND CENTERTON

C4.1 General Site Information

1. SITE LOCATION AND ACCESS

1.1. Location of The Site

The works are to be executed in two separate areas in Hankey :

The new proposed **Hankey Sewer Rising Main** will be installed in and around the Hankey CBD area and along the embankments of the Klein River which crosses the Hankey town (see Annexure 1: Site Locality Plan in Section C3.10).

The upgrade on the existing **Centerton Sewer Rising Main** will be executed in a separate area, approx. 2km from the Hankey construction area, in the Centerton residential area.

Site conditions are described in detail in Section C4: Site Information

1.2. Access

Various existing gravel and surfaced roads provide access to various points along the pipeline routes. These gravel and surfaced roads, in turn can be accessed via the Provincial Main Roads (R330), known as North Street and Main Street, accessible from the N2 via Humansdorp and Port Elizabeth, and from Patensie north of Hankey town.

2. GENERAL DESCRIPTION

The site of the works is the Hankey CBD and residential areas, which is located and accessible via the R330 from the N2 or Hankey Main Roads.

The site slopes gently from north-east to the south-west, towards the Klein River and Gamtoos River.

3. CLIMATE

The site falls within the Eastern Cape which experiences moderate climate with winter rainfall and possible high temperatures in summer.

Temperature typically ranges between 5°C and 35°C although higher and lower extremes are possible. Relative humidity, 20-30% in summer to 100% in winter.

4. GEOTECHNICAL

No Geo-Technical investigation was conducted for the soil conditions along the Road Reserves in the town Hankey areas where the new sewer rising main pipelines have to be installed.

The anticipate trench depths are fairly shallow and no major difficulties are foreseen due to trench excavations. Provision has been made for hard rock excavations, should this be encountered in the trench excavations.

5. DISCLAIMER

The site information is provided in good faith for the Contractor's convenience as an indication of the conditions likely to be encountered. The Employer offers no guarantees regarding the information and the provision of such information shall not be regarded as in any way limiting or detracting from the Contractor's responsibilities in terms of the Contract.

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C4.2 Geotechnical Report

The electronic PDF-version of the Geo-Technical Reports will be distributed to all prospective tenderers who register with the Kouga Local Municipality for the compulsory Tender Clarification meeting.

The contents and potential impacts of any soil conditions on the construction activities, should be noted by the Contractor.

It will be deemed that all potential negative impacts and Risks have been assessed and have been included in the applicable Pricing Items. No additional payment will be authorised for any unforeseen sub-soil conditions, which have not been adequately provided for in the Pricing Schedule.

The Contractor's attention is drawn to the following Risk identified in the Geo-Technical Reports :

- Soft soil conditions for deep trenches and bulk excavations, eg for the Wet Sump construction. Any necessary shoring, side wall stabilization, over excavations and bottom working condition preparations will be deemed fully assessed;
- Any unknown hard rock or boulder excavation will be deemed fully assessed and priced accordingly;
- Any ground water and severe wet conditions will be deemed fully assessed and allowed for in the pricing Scheduled items;