SEKHUKHUNE
DISTRICT MUNICIPALITY

TENDER

SK8/3/1-08/
2025/26

TENDER NO.	**SK8/3/1-07/2025/26**				
		BIDDER	WITNESS	EMPLOYER	WITNESS

Sekhukhune District Municipality

3 West Street
Groblersdal
0470
Tel: 013 262 7300
Fax: 013 262 3688
Email: sekinfo@sekhukhune.co.za

TENDER REFERENCE: SK8/3/1-08/2025/26
REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS

SEPTEMBER 2025

CIDB Registered Contractors who are 7 CE or Higher

EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK

mig | Municipal Infrastructure Grant

ISSUED FOR:	ISSUED BY:
THE MUNICIPAL MANAGER SEKHUKHUNE DISTRICT MUNICIPALITY PO BOX 106 GROBLERSDAL 0470 SCM: Mr V Masemola TEL : 013 262 7669 Email: masemolav@sekhukhune.gov.za	KUTLO CONSULTING ENGINEERS (PTY) LTD 2 HEUWELKRUIN THABAZIMBI 0380 Tel: 014 312 0112 Fax: 086 674 3227 Email: admin@kutloconsulting.co.za

Registered Name(s) of Tenderer:	
Tender Amount:	
Contact Person:	
Tel. No:	**E-Mail Address:**
Cell No:	**Fax No:**
CIDB CRS Number (s):	**CIDB GRADING LEVEL:**
CIDB CRS Number (s):	**CIDB GRADING LEVEL:**
JV GRADING LEVEL:	

SEKHUKHUNE
District Municipality

SEKHUKHUNE DISTRICT MUNICIPALITY

TENDER NO: SK8/3/1-08/2025/26

CLOSING DATE: 27 October 2025

TENDER DESCRIPTION: REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS

In terms of Section 110 of the Municipal Finance Management Act, 2003 (No. 56 of 2003), tenders are hereby invited for the construction of **REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS**

Tender documents will be available as from **26 September 2025** on payment of non-refundable deposit of **R 1 000.00** per set at Sekhukhune Municipality Offices (Cashiers) and the document collected at Bareki Mall at the cashier's offices. The document can be downloaded for free on the etender website (www.etenders.gov.za)

The closing time for receipt of tenders is **11:00 on Monday the 27 October 2025.** Telegraphic, telephonic, telex, facsimile, e-mail, unmarked and **late tenders** will under no circumstances be considered and accepted. The tender box will be emptied just after closing time on the closing date. Hereafter all bids will be opened in public.

Any technical enquiries relating to the tender document may be directed to the responsible department as stated on the tender advert.

A compulsory clarification meeting with representatives of the employer will take place at the AB Sikhosana Fire Station in Groblersdal on **26 September 2025** starting at **10:00**. Contract documentation will not be available on site.

Fully completed tender documents, clearly marked "**Tender No. SK8/3/1-08/2025/26 " REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS**" with **"**NAME of TENDERER**" must be placed in a sealed envelope and placed in the** tender box at **AB Sikhosana Fire Station, R33 Groblersdal,** by no later than **11:00** on **Monday, 27 October 2025.** The envelope must be endorsed with number, title and closing date as indicated above.

Bidders will be evaluated on functionality whereby 70 points has to be attained before financial proposals can be looked at. A preferential point system shall apply whereby a contract will be allocated to a tenderer in accordance with the Preferential Procurement Policy Framework Act, Act No. 5 of 2000 and as defined in the Conditions of Tender in the tender document, read in conjunction with the Supply Chain Management Policy of SEKHUKHUNE DISTRICT Municipality where 80 points will be allocated in respect of price and 20 points in respect of Specific Goals.

The municipality reserves the right to withdraw any invitation to tender and/or to re-advertise or to reject any tender or to accept a part of it. The municipality does not bind itself to accepting the lowest tender or award a contract to the bidder scoring the highest number of points.

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LIMPOPO PROVINCE

SEKHUKHUNE DISTRICT MUNICIPALITY

REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS

PART T1: TENDER PROCEDURES

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TENDERS

SEKHUKHUNE
District Municipality

SEKHUKHUNE DISTRICT MUNICIPALITY

CONTRACTORS ARE HEREBY INVITED FOR THE TENDERS BELOW

TENDER NO:	DESCRIPTION	PRICE PER DOCUMENT	TENDER DOCUMENT WILL BE AVAILABLE ON	CLOSING DATE & TIME	CONTACTS PERSON(S)
SK8/3/1-08/2025/26	Refurbishment of Dennilton Waste Water Treatment Works **CIBD GRADING 7 CE**	At Municipal Offices (Groblersdal) at a cost of R 1 000.00 per document. Or downloaded for free on the etender website (www.etenders.gov.za)	26 September 2025 at the Municipal Offices (Groblersdal) at Bareki Mall, Cnr Van Riebeeck and Chris Wiid Streets at 10;00.	27 October 2025 at AB Sikhosana Fire Station, R33 Grobersdal at 11:00	**Supply Chain Management Enquiries:** Mr V Masemola Tel: 013 262 7669 Email: masemolav@sekhukhune.gov.za **Technical Enquiries: Kutlo Consulting Engineers:** Mr B Semenya Tel: 014 312 0112 Email: boitumelo@kutloconsulting.co.za **Director Infrastructure& Water Services Enquiries:** Mr F Mashele Tel : 013 262 7535 Email: mashelef@sekhukhune.gov.za

TENDER NO.	SK8/3/1-07/2025/26				
		BIDDER	WITNESS	EMPLOYER	WITNESS

NB! Bidders take note of the following important requirements:

1. ***The attachment of latest Company and Director(s)'s Municipal account statement or certified lease agreement must be accompanied by the lessor's municipal rates.***
2. ***All municipal account statements must not be later than three months.***

Tender documents are obtainable at Municipal Offices (Groblersdal) at a cost of R 1 000.00 per document on a non-refundable deposit in cash. EFT; Cheques will not be accepted. The tender document can be downloaded for free on the etender website (www.etenders.gov.za). Payment is made at the cashier's office, Bareki Mall. Bids will be adjudicated according to council's Supply Chain Management Policy, based on the Preferential Procurement Framework Act, 2022. Tenders must be completed in accordance with the conditions attached to the tender documents and must be sealed and endorsed: Contract (Specify Tender Number: Example SK8/3/1-08/2025/26). Tenders must be placed in the tender box in the foyer of the AB Sikhosana, R33 Groblersdal, not later than the specified closing time and date tenders. Tender shall remain valid of a period of 90 (NINETY) days from closing date. The Council reserves the right to accept or reject any tender or part thereof.

Municipal Manager:

M Kgwale

SUBMISSION OF REQUIRED DOCUMENTATION

SERVICE PROVIDER IS REQUESTED TO SUBMIT THE FOLLOWING DOCUMENTATON [INCLUDING PARTNERS IN A JOINT VENTURE]:

Section 45(1)(d) of Municipal Supply Chain Regulations requires that the municipality must reject a bidder whose municipal rates and taxes are in arrears for more than three months.

The purpose of this schedule is to obtain proof that municipal services, rates and taxes of the **service provider and the director(s)** are not in arrears for more than three months, with the relevant municipality / landlord in the municipal area where the service provider and the director(s) conduct his / her business.

The following **administrative compliance** has been identified for this bid and any non-compliance thereto will lead to the bid being regarded as non-responsive and therefore will be disqualified from further evaluation:

Mandatory Requirements

1. Registered with minimum required Construction Industry Development Board (CIDB) Grading Level **7 CE**
2. A fully complete pricing schedule
3. Resolution of Board of Directors (authority to sign)
4. Resolution of Board of Directors to enter into consortia or JV's
5. Attached latest Company and Director(s)'s Municipal account statement or certified lease agreement must be accompanied by the lessor's municipal rates.
6. All municipal account statements must not be later than three months
7. Company registration documents, showing equity ownership (e.g. form CM 29, CK1 etc.)
8. Joint venture agreement (if applicable).

The following will also invalidate your bid:

1. Scratching out without initialling next to the amended rates or information
2. Rates and taxes that are in arrears will invalidate the bid
3. The bidder has not written over / painting out rates / the use of tippex or any erasable ink, e.g. pencil, tippex pen etc.
4. The tenderer's attempts to influence or has in fact influenced the evaluation and/or awarding of the contract.
5. The tender has been submitted after the relevant closing date and time.
6. If any tenderer who during the last five years has failed to perform satisfactorily on a previous contract with the municipality or any other organ of state after written notice was given to that tenderer that performance was unsatisfactory.

Administrative Requirements (During the appointment, bidders to be given a period of fourteen (14) calendar days to submit outstanding requirements)

1. A valid Tax Clearance Certificate issued by SARS or Tax Compliance Letter with a unique Pin in terms of the electronic Tax Compliance Status (TCS) System from SARS has been submitted.
2. Certified copies of Identification Documents of all shareholders.
3. Most recent full detailed Central Supplier Database (CSD) report must be attached.

PART A
INVITATION TO BID

MBD1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE SEKHUKHUNE DISTRICT MUNICIPALITY					
BID NUMBER:	**SK8/3/1-08/2025/26**	**CLOSING DATE:**	**27 October 2025**	**CLOSING TIME:**	**11:00**
DESCRIPTION	**REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS**				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7).					

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

AB Sikhosana Fire Station
Groblersdal
0470

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:	
SPECIFIC GOALS STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	☐ Yes ☐ No		SPECIFIC GOALS STATUS LEVEL SWORN AFFIDAVIT	☐ Yes ☐ No	

[SPECIFIC GOALS STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR SPECIFIC GOALS]

ARE YOU THE ACCREDITED REPRESENTATIVE **IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?**	☐Yes ☐No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR **THE GOODS /SERVICES /WORKS OFFERED?**	☐Yes ☐No [IF YES, ANSWER PART B:3]
TOTAL NUMBER OF ITEMS OFFERED		**TOTAL BID PRICE**	**R**
BIDDER SIGNATURE	……	**DATE**	
CAPACITY UNDER WHICH THIS BID IS SIGNED			

BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:		**TECHNICAL INFORMATION MAY BE DIRECTED TO:**	
DEPARTMENT	SUPPLY CHAIN MANAGER	DEPARTMENT	INFRASTRUCTURE & WATER SERVICES
CONTACT PERSON	V MASEMOLA	CONTACT PERSON	F MASHELE
TELEPHONE NUMBER	013 262 7669	TELEPHONE NUMBER	013 262 7535
FACSIMILE NUMBER	013 262 3688	FACSIMILE NUMBER	013 262 3688
E-MAIL ADDRESS	masemolav@sekhukhune.gov.za	E-MAIL ADDRESS	mashelef@sekhukhune.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: ……..

T1.2 and T1.3 Pink Pages X 25

T1.2 TENDER DATA

The conditions of tender are the Standard Conditions of Tender as contained in **Annexure F** of **Standard for Uniformity in Construction Procurement (May 2010)**, bound into Section T1.3

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

CLAUSE NUMBER		TENDER DATA
F.1.1	Actions	The Employer is **SEKHUKHUNE DISTRICT Municipality**
F.1.2	Tender Documents	Volume 1: Tender Document **THE TENDER** **Part T1: Tendering Procedures** T1.1 – Tender notice and invitation to tender T1.2 – Tender data T1.3 – Standard and Particular Conditions to tender **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 guarantee C1.4 – Health and Safety agreement C1.5 – Form for Adjudicators and appointment **Part C2: Pricing data** C2.1 – Pricing Instructions C2.2 – Bill of Quantities C2.3 – Summary of Pricing Schedule C2.4 - Calculation of Total Cost **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 – Health and Safety Specifications **Part C4: Site Information** **Part C5: Annexures (Drawings)**
F.1.3 *F.1.3.4*	Interpretation	**Add** the following new clause: *The tender documents have been drafted in English. The contract arising from the invitation to tender shall be interpreted and construed in English.*

CLAUSE NUMBER		TENDER DATA
F.1.4	Employer	Sekhukhune District Municipality Address: 3 West Street Groblersdal 0470 Tel: :013 262 7300 Fax: :013 262 3688 E-Mail: sekinfo@sekhukhune.gov.za
F1.4	Employer's Agent	The Employer's Agents are: Kutlo Consulting Engineers (Pty) Ltd 2 Heuwelkruin Thabazimbi 0380 Tel: 014 312 0112 Fax: 086 674 3227 Email: admin@kutloconsulting.co.za
	Eligibility	Only those tenderers who are registered with the CIDB, or are capable of being so prior to the evaluation of submissions, in a contract grading designation equal to or higher than a contractor grading designation determined in accordance with the sum tendered for a **7 CE or higher** class of construction work, are eligible to submit tenders.
		Joint Ventures are eligible to submit tenders provided that: 1. Every member of a joint venture is registered with the CIDB within 10 days of the closing date of tenderers; 2. The lead partner has a contractor grading designation in the ***7 CE or Higher*** class of construction work; and 3. The combined contractor grading designation calculated in accordance with the Construction Industry Development Regulations is equal to or higher than a contractor designation in accordance with the sum tendered for a **7 CE *or Higher*** class of construction work or a value determined in accordance with Regulation 25(1B) or 25(7A) of the Construction Industry Development Regulations.
F.2.2	Cost of Tendering	The employer will not compensate the tenderer for any costs incurred in attending interviews or making any submissions in the office of the employer.
F.2.7	Clarification meeting	No arrangements for a compulsory clarification meeting
F.2.8	Seek clarification	**Replace** the clause with the following: *Request clarification of the tender documents, if necessary, by notifying the employer at least five**(5)** working days before the closing time stated in the tender data.*
F.2.9	Insurance	**Add** the following to the clause *Accept that the submission of a tender shall be construed as an acknowledgement by the tenderer that he is satisfied with, where applicable, the insurance cover the employer will affect under the contract.*
F.2.12	Alternative tender offers	No alternative tender offers will be considered.
F.2.13	Submitting a tender offer	The **whole original** bid document, **as issued by Sekhukhune District Municipality** shall be submitted. No copies will be accepted. Bids may only be submitted on the Bid documentation issued by the **Local Municipality of Sekhukhune**.

CLAUSE NUMBER	TENDER DATA
F.2.134	The Tenderer shall 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. **Add** the following to the clause *Only authorised signatories may sign the original and all copies of the tender offer where required.* *In the case of a **ONE-PERSON CONCERN** submitting a tender, this shall be clearly stated.* *In the case of a **COMPANY** submitting a tender, include a copy of a **resolution by its board of directors** authorising a director or other official of the company to sign the documents on behalf of the company.* *In the case of a **CLOSE CORPORATION** submitting a tender, include a copy of a **resolution by its members** authorising a member or other official of the corporation to sign the documents on each member's behalf.* *In the case of a **PARTNERSHIP** submitting a tender, **all the partners** shall sign the documents, unless one partner or a group of partners has been authorised to sign on behalf of each partner, in which case **proof of such authorisation** shall be included in the Tender.* *In the case of a **JOINT VENTURE/CONSORTIUM** submitting a tender, include **a resolution of each company** of the joint venture together with a **resolution by its members** authorising a member of the joint venture to sign the documents on behalf of the joint venture.*
F.2.13.5	The identification details are: Tender Reference: **SK8/3/1-08/2025/26** Tender Description: **REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS** Closing Time: **11:00** Closing Date: **27/10/2025** Each tender shall be enclosed in a sealed envelope, bearing the correct identification details and shall be placed in the tender box available at the offices located at: **Sekhukhune District Municipality** **AB Sikhosana Fire Station** **Groblersdal** **0470**
F.2.13.9	Telephonic, telegraphic, telex, facsimile or e-mailed offers will **not** be accepted
F.2.15 Closing time	The closing time for submission of tender offers is stated in the tender notice and invitation to tender.
F.2.16 Tender offer validity *F.2.16.5*	The tender offer validity period is ***90 days***. **Add** the following new clause *If the tender validity period expires on a Saturday, Sunday or public holiday, the tender offer shall remain valid and open for acceptance until closure of business on the following working day.*

CLAUSE NUMBER		TENDER DATA
F.2.18	Provide other material	The tenderer shall, when requested by the employer to do so, submit the names of all management and supervisory staff that will be employed to supervise the labour-intensive portion of the works together with satisfactory evidence that such staff members satisfy the eligibility requirements.
F2.20	Submit securities, bonds, policies, etc.	During the appointment process, tenderer will be required to submit all securities, performance bonds and guarantees from an approved insurer included in Section C1.3 of this procurement document.
F2.23	Certificates	Refer to part T2 of this procurement document for a list of the documents that are to be returned with the tender.
F2.24	*Canvassing and obtaining of additional information by tenderers*	**Add** the following new clause *The tenderer shall not make any attempt either directly or indirectly to canvass any of the Employers' officials or the Employer's agent in respect of his tender, after the opening of the tenders but prior to the Employer arriving at a decision thereon.* *The tenderer shall not make any attempt to obtain particulars of any relevant information, other than that disclosed at the opening of tenders.*
F2.25	*Prohibitions on awards to persons in service of the state*	**Add** the following new clause *The Employer is prohibited to award a tender to a person -* *a) who is in the service of the state; or* *b) if that person is not a natural person, of which any director, manager, principal shareholder or stakeholder is a person in the service of the state; or* *c) a person who is an advisor or consultant contracted with the municipality or municipal entity.* ***In the service of the state** means to be -* *a) a member of: -* *• any municipal council;* *• any provincial legislature; or* *• 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;* *e) provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999);* *f) a member of the accounting authority of any national or provincial public entity; or* *g) an employee of Parliament or a provincial legislature.* In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.
F2.26	*Awards to close family members of persons in the service of the state*	**Add** the following new clause *Accept that the notes to the Employer's annual financial statements must disclose particulars of any award of more than R2000 to a person who is a spouse, child or parent of a person in the service of the state (defined in clause F2.25), or has been in the service of the state in the previous twelve months, including -* *a) the name of that person;* *b) the capacity in which that person is in the service of the state; and* *c) the amount of the award.* In order to give effect to the above, the questionnaire for the declaration of interests in the tender of persons in service of state in part T2 of this procurement document must be completed.

CLAUSE NUMBER		TENDER DATA
F2.28	*Tax*	**Add** the following new clause *A valid tax clearance certificate must be submitted during the appointment process.* *In the case of a Joint Venture/Consortium the tax clearance certificate must be for the Joint Venture/Consortium and individual tax clearance certificates for the members of the Joint Venture/Consortium are not acceptable.*
F.3.1	Respond to requests from the tenderer	The employer will respond to requests for clarification up to five ***5*** working days before the tender closing time.
F.3.4	Opening of tender submissions	Tenders will be opened immediately after the closing time for tenders
F 3.9.1	Arithmetical Errors	Delete paragraphs (b) and (c) of Cl. F.3.9.1 and replace with: b) If a bill of quantities (or schedule of quantities or schedule of rates) applies and there is an error in the line item resulting from the product of the unit rate and the quantity, the rate shall be binding and the error of extension as entered in the tender offer will be corrected by the Employer in determining the Contract Price. c) Where there is an error in addition, either as a result of other corrections required by this checking process or in the Bidder's addition of prices, such error will be corrected by the Employer in determining the Contract Price. d) The Contract Price for the completed Contract shall be computed from the actual quantities of authorised work done and compliant with the Contract Data, valued at rates contracted against the respective items in the bill of quantities, schedule of Quantities or schedule of rates and shall include such authorised Provisional Sums and items of extra work as have become payable in terms of the Contract Data.
F.3.13	Acceptance of Tender Offer	Tender offers will only be accepted if: a.) The bidder has in his or her possession a Valid Central Supplier Database (CSD) number; b.) The tenderer is able to produce a valid Tax Clearance Certificate issued by the South African Revenue Service; c.) The tenderer submits a letter of intent from an approved insurer undertaking to provide the Performance Bond to the format included in Section C1.3 of this procurement document; d.) The tenderer is registered with the Construction Industry Development Board in an appropriate contractor grading designation. e.) The tenderer is not in arrears for more than 3 months with municipal rates and taxes and municipal service charges; f.) The tenderer or any of its directors is not listed on the Register of Tender Defaulters in terms of the Prevention and Combating of Corrupt Activities Act of 2004 as a person prohibited from doing business with the public sector; g.) The tenderer has not: i) abused the Employer's Supply Chain Management System; or ii) failed to perform on any previous contract and has been given a written notice to this effect. h.) The tenderer has completed the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the tenderer's ability to perform the contract in the best interests of the employer or potentially compromise the tender process and persons in the employ of the state are permitted to submit tenders or participate in the contract; i.) The tenderer is registered and in good standing with the compensation fund or with a licensed compensation insurer;

CLAUSE NUMBER	TENDER DATA
	j.) The employer is reasonably satisfied that the tenderer has in terms of the Construction Regulations, 2003, issued in terms of the Occupational Health and Safety Act, 1993, the necessary competencies and resources to carry out the work safely.
F.3.11.3 Method 4: Functionality, Price and Preference	The procedure for the evaluation of responsive tenders is Method 4 80/20 Preference Point System shall be used for scoring the bidders. Price = 80, Specific Goals = 20 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 5 below. The 80/20 preference point system for acquisition of services, works or goods up to Rand value of R50 million 4) (a)(i) The following formula must be used to calculate the points for price in respect of tenders (including price quotation) with a rand value equal to, or above R 30 000 and up to Rand value of R 50 000 000 (all applicable taxes included): $$Ps = 80\left(1 - \frac{Pt - P\min}{P\min}\right)$$ *Where* *Ps = Points scored for comparative price of tender or offer under consideration; Pt = Comparative price of tender or offer under consideration; and Pmin = Comparative price of lowest acceptable tender or offer.* (4)(a)(ii) An employer of state may apply the formula in paragraph (i) for price quotations with a value less than R30 000, if and when appropriate: 4)(b) Subject to subparagraph(4)(c), points must be awarded to a tender for attaining the Specific Goals status level of contributor in accordance with the table below:

CLAUSE NUMBER	TENDER DATA

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
	20	**20**
HDI (Black, Indian, Coloureds)	12	
Woman Ownership of more than 50%	2	
Disability of more than 50% (Physically Impaired)	2	
Youth (more than 50%)	2	
Locality (Within SDM Jurisdiction)	2	
TOTAL	**20**	

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 Specific Goals 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.

F.3.1.7	Scoring financial offers	Score the financial offers of remaining responsive tender offers using the following formula: $N_{FO} = W_1 \times A$ where: N_{FO} is the number of tender evaluation points awarded for the financial offer. W_1 is the maximum possible number of tender evaluation points awarded for the financial offer as stated in the Tender Data. A is a number calculated using the formula and option described in F.1 as stated in the Tender Data.

<table>
<tr><th colspan="2">CLAUSE NUMBER</th><th>TENDER DATA</th></tr>
<tr><td colspan="2"></td><td>
<table>
<tr><th>Formula</th><th>Comparison aimed at achieving</th><th>Option 1</th><th>Option 2</th></tr>
<tr><td>1</td><td>Highest price or discount</td><td>$A = (1 + (P - Pm)) Pm$</td><td>$A = P / Pm$</td></tr>
<tr><td>2</td><td>Lowest price or percentage commission / fee</td><td>$A = (1 - (P - Pm)) Pm$</td><td>$A = Pm / P$</td></tr>
</table>
where:
Pm = the comparative offer of the most favourable tender offer.
P = the comparative offer of tender offer under consideration.</td></tr>
<tr><td>F.3.13.8</td><td>Scoring preferences</td><td>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.</td></tr>
<tr><td>F.3.17</td><td>Copies of Contract</td><td>The Employer shall provide one signed copy of contract to the successful Tenderer.</td></tr>
<tr><td></td><td>Evaluation process & Criteria</td><td>Evaluation Criteria

The following evaluation process and criteria will be used to evaluate all bids submitted:

1. Functionality-Phase 1 (100 points allocation)

The bidders who complied administratively are considered for further evaluation on ability to execute the project.

A panel of members will be appointed to adjudicate the bids. The actual individual scoring awarded by each of the panel members will be completed on individual score sheets per bid and signed by the panel member.

The evaluation of the service providers would be on the basis of Functionality 75 of 100.

The assessment of functionality will be done in terms of the evaluation criteria and minimum threshold as specified. A bid will be disqualified if it fails to meet the minimum threshold of 75 for functionality as per the bid invitation
<table>
<tr><th colspan="5">FUNCTIONALITY SCORECARD</th></tr>
<tr><th>CRITERIA</th><th colspan="4">PREVIOUS COMPANY EXPERIENCE</th></tr>
<tr><td rowspan="3">Number of completed projects related to Waste water projects with a minimum value R15 000 000.00 by the company.

Failure to submit the required Appointment Letters & Final Completion Certificate from the Client will result in the bidder getting zero points.</td><td colspan="2">SCORING CRITERIA</td><td>POINTS</td><td>SCORED POINTS</td></tr>
<tr><td rowspan="2">(MAX 40 Points)

Completion certificates must be signed by all parties namely: The Employer, Engineer and the Contractor (certificates that is not signed by all relevant parties will result in the bidder forfeiting points).

Note that, 1 completed projects with final completion certificates</td><td>3 and more related waste water projects completed above R15 000 000.00 by the company;</td><td>40</td><td></td></tr>
<tr><td>2 related waste water projects completed above R10 000 000.00 by the company;</td><td>30</td><td></td></tr>
</table></td></tr>
</table>

TENDER NO.	SK8/3/1-08/2025/26				
		BIDDER	WITNESS	EMPLOYER	WITNESS

CLAUSE NUMBER	TENDER DATA				
		and appointment letters will be assessed as Wastewater related projects with a minimum of R15 000 000.00 will be assessed as follows:	1 related waste water project completed above R5 000 000.00 by the company	**20**	
			TOTAL SCORE	**40**	
	CRITERIA	**PERSONNEL QUALIFICATIONS, PROFESSIONAL MEMBERSHIP & EXPERIENCE**			
		SCORING CRITERIA (Academic Qualifications)		**POINTS**	**SCORED POINTS**
	KEY STAFF (Max 30 Points) **2**.1 Academic Qualification / Specific Personal Knowledge Certified copies of academic qualification certificates need to be attached for functionality points scoring otherwise no points will be allocated. **NB: Those with international qualifications must attach the SAQA credit certificates and Work Permit/ Certified SA Citizenship**	**CONTRACT MANAGER** **(MAX 07 Points)** Must be based on site for the project duration. A Construction Manager with Civil Engineering experience, before and after professional registration will be assessed as follows:	Minimum qualification in Civil Engineering, i.e. Engineering degree (B Eng./BSC/ B Tech) **(3points)** 5 years and more experience (**4 points**) 2 years' experience **(2 points)** Less than 2 years' experience **(1 point)**	**07 pts** **3** **4** **2** **1**	
			TOTAL	**07**	
		SITE AGENT **(MAX 10 Points)** Must be based on site for the duration of a project. A Site Agent with Waste water experience, will be assessed as follows:	➢ Minimum qualification in Civil Engineering degree (B-Tech Eng./ BSC Eng.) (**5 points**); ➢ 5 years and more experience (**5 points**); ➢ 2 years' experience **(3 points)**; ➢ Less than 2 years' experience **(1 points)** ;	**10pts** **05** **05** **03** **01**	

CLAUSE NUMBER	TENDER DATA				
			➢ Minimum qualification in Civil Engineering, i.e. engineering diploma (National Diploma / National Higher Diploma **(2 point)** ➢ 5 years and more experience (**5 points**) ➢ 2 years' experience **(2 points)** ➢ Less than 2 years' experience **(1 point)**	**07pts** **02** **05** **02** **01**	
			TOTAL	**10**	
		FOREMAN **(MAX 07 Points)** Must be permanently based on site for the duration of the project. A Site Foreman with Waste water experience before or after qualification will be assessed as follows:	➢ Minimum qualification in Built Environment, (N6) **4 points** ➢ 5 years and more experience (**3 points**)	**07pts** **4.0** **3.0**	
			➢ Minimum qualification in Built Environment, (N3) **1 points** ➢ 3 - 5 years' experience **(2 points)**	**03pts** **1.0** **2.0**	
			TOTAL	**07**	
		SAFETY OFFICER **(MAX 06 Points)** Safety Officer registered as a construction health and safety officer with SACPMP permanently based on the site for the duration of a project. The safety office with Civil Engineering experience before or after professional registration, will be assessed base on the following:	➢ Minimum qualification in Safety, i.e. B-Degree (**02 points**) ➢ Registered with council SACPCMP (**02 points**) ➢ 5 years and more experience (**02 points**)	**06pts** **02** **02** **02**	
			➢ Minimum qualification in Safety i.e. Diploma (**02 points**) ➢ Candidate with council SACPCMP (**01 points**) ➢ 3 – 4 years' experience **(01 point)**	**04pts** **02** **01** **01**	
			TOTAL	**06**	
			TOTAL SCORE	**30**	

CLAUSE NUMBER	TENDER DATA

(Failure to submit proof of the bank rating from the relevant bank will result in the bidder getting zero points. Bidder to attach originally stamped and signed bank rating letter from the banking institution.	**BANK RATING**		
	SCORING CRITERIA	**POINTS**	**SCORED POINTS**
	A	**10**	
	B	**6**	
	C	**2**	
	TOTAL BANK RANKING	**10**	

CLAUSE NUMBER	TENDER DATA

CRITERIA	CONSTRUCTION PLANT AND EQUIPMENT			
Tenderers must provide proof of ownership, or letter of intent from hiring or leasing companies for the minimum construction equipment determined by the engineer. The plant and equipment must be available as and when required for the current tender.	**SCORING CRITERIA**		**POINTS**	**SCORED POINTS**
	(MAX 20 Points) Tenderers must provide proof of ownership, or letter of intent from hiring or leasing companies for the minimum construction equipment determined by the engineer. The plant and equipment must be available as and when required for the current tender.	2 x 20t Excavator	**4**	
		2 x TLB	**4**	
		1 x Water truck	**4**	
		3 x Tipper trucks	**4**	
		1 x Flatbed truck	**2**	
		1 x Walk Behind Bomag	**1**	
		1 x concrete mixer	**1**	
		TOTAL SCORE	**20**	
TOTAL SCORED POINTS FOR FUNCTIONALITY				
TOTAL POINTS FOR FUNCTIONALITY				**100**

2. Points Awarded for Price and Specific Goals

Points Awarded for Price and Specific Goals, where the responsive bids will be evaluated on 80/20 Preference point system, i.e. 80 will be for price (Ps) and 20 points for Specific Goals.

2.1 Price

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

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

Where
Ps = Points scored for price of bid under consideration
Pt = Price of bid under consideration
Pmin = Price of lowest acceptable bid

2.2 Points Awarded for Specific Goals

In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

TENDER NO.	SK8/3/1-08/2025/26				
		BIDDER	WITNESS	EMPLOYER	WITNESS

<table>
<tr><th>CLAUSE NUMBER</th><th>TENDER DATA</th></tr>
<tr><td></td><td>
In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

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

b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system, then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.
(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.
Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)
<table>
<tr><th>The specific goals allocated points in terms of this tender</th><th>Number of points allocated (80/20 system) (To be completed by the organ of state)</th><th>Number of points claimed (80/20 system) (To be completed by the tenderer)</th></tr>
<tr><td></td><td>20</td><td>20</td></tr>
<tr><td>HDI (Black, Indian, Coloureds)</td><td>12</td><td></td></tr>
<tr><td>Woman Ownership of more than 50%</td><td>2</td><td></td></tr>
<tr><td>Disability of more than 50% (Physically Impaired)</td><td>2</td><td></td></tr>
<tr><td>Youth (more than 50%)</td><td>2</td><td></td></tr>
<tr><td>Locality (Within SDM Jurisdiction)</td><td>2</td><td></td></tr>
<tr><td>TOTAL</td><td>20</td><td></td></tr>
</table>
</td></tr>
<tr><td></td><td>
3. Mandatory/Administrative Compliance-Phase 1

All bids duly lodged will be examined to determine compliance with bidding requirements and conditions. Bids with obvious deviations from the requirements/conditions, will be eliminated from further evaluation.
</td></tr>
</table>

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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 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 tenderer's financial offer after all tendered parameters that will affect the value of the financial offer have been taken into consideration in order to enable comparisons to be made between offers on a comparative basis.
c) **Corrupt practice** means the offering, giving, receiving or soliciting of anything of value to influence the action of the employer or his staff or agents in the tender process; and

d) **Fraudulent practice** means the misrepresentation of the facts in order to influence the tender process or the award of a contract arising from a tender offer to the detriment of the employer, including collusive practices intended to establish prices at artificial levels

e) **Organization** means a company, firm, enterprise, association or other legal entity, whether incorporated or not, or a public body

f) **Quality (functionality)** means the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs

F.1.4 Communication and employer's agent

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

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

F.1.5.1 The employer may accept or reject any variation, deviation, tender offer, or alternative tender offer, and may cancel the tender process and reject all tender offers at any time before the formation of a contract. The employer shall not accept or incur any liability to a tenderer for such cancellation and rejection, but will give written reasons for such action upon written request to do so.

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

F.1.6 Procurement procedures

F.1.6.1 General

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

F.1.6.2 Competitive negotiation procedure

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

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

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

F.1.6.2.4 The contract shall be awarded in accordance with the provisions of F.3.11 and F.3.13 after tenderers have

been requested to submit their best and final offer.

F.1.6.3 Proposal procedure using the two stage-system

F.1.6.3.1 Option 1

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

F.1.6.3.2 Option 2

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

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

F.2 Tenderer's obligations

F.2.1 Eligibility

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

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

F.2.2 Cost of tendering

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

F.2.3 Check documents

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

F.2.4 Confidentiality and copyright of documents

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

F.2.5 Reference documents

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

F.2.6 Acknowledge addenda

Acknowledge receipt of addenda to the tender documents, which the employer may issue, and if necessary

apply for an extension to the closing time stated in the tender data, in order to take the addenda into account.

F.2.7 Clarification meeting

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

F.2.8 Seek clarification

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

F.2.9 Insurance

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

F.2.10 Pricing the tender offer

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

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

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

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

F.2.11 Alterations to documents

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

F.2.12 Alternative tender offers

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

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

F.2.13 Submitting a tender offer

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

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

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

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

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

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

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

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

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

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

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

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

F.2.15 Closing time

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

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

F.2.16 Tender offer validity

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

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

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

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

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

F.2.21 Check final draft

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

F.2.22 Return of other tender documents

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

F.2.23 Certificates

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

F.3 The employer's undertakings

F.3.1 Respond to requests from the tenderer

F.3.1.1 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 as a whole, or any individual member of the joint venture fails to meet any of the collective or individual qualifying requirements;

b) the new partners to a joint venture were not prequalified in the first instance, either as individual firms or as another joint venture; or

c) in the opinion of the Employer, acceptance of the material change would compromise the outcome of the prequalification process.

F.3.2 Issue addenda

If necessary, issue addenda that may amend or amplify the tender documents to each tenderer during the period from the date that tender documents are available until 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, preferences claimed and time for completion for the main tender offer only.

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

F.3.5 Two-envelope system

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

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

F.3.6 Non-disclosure

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

F.3.7 Grounds for rejection and disqualification

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

F.3.8 Test for responsiveness

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

a) complies with the requirements of these Conditions of Tender,

b) has been properly and fully completed and signed, and

c) is responsive to the other requirements of the tender documents.

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

a) detrimentally affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,

b) significantly change the Employer's or the tenderer's risks and responsibilities under the contract, or

c) affect the competitive position of other tenderers presenting responsive tenders, if it were to be rectified.

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

F.3.9 Arithmetical errors, omissions and discrepancies

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

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

a) the gross misplacement of the decimal point in any unit rate;

b) omissions made in completing the pricing schedule or bills of quantities; or

c) arithmetic errors in:

i) line item totals resulting from the product of a unit rate and a quantity in bills of quantities or schedules of prices; or

ii) the summation of the prices.

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

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

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

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

F.3.10 Clarification of a tender offer

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

F.3.11 Evaluation of tender offers

F.3.11.1 General

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

F.3.11.2 Method 1: Financial offer

In the case of a financial offer:

a) Rank tender offers from the most favourable to the least favourable comparative offer.

b) Recommend the highest ranked tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.

c) Re-rank all tenderers should there be compelling and justifiable reasons not to recommend the highest ranked tenderer and recommend the highest ranked tenderer, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F.3.11.3 Method 2: Financial offer and preference

In the case of a financial offer and preferences:

a) Score each tender in respect of the financial offer made and preferences claimed, if any, in accordance with the provisions of F.3.11.7 and F.3.11.8.

b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_P$$

where N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;
N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.

c) Rank tender offers from the highest number of tender evaluation points to the lowest.

d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F.3.11.4 Method 3: Financial offer and quality

In the case of a financial offer and quality:

a) Score each tender in respect of the financial offer made and the quality offered in accordance with the provisions of F.3.11.7 and F.3.11.9, rejecting all tender offers that fail to score the minimum number of points for quality stated in the tender data, if any.

b) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_{FO} + N_Q$$

where N_{FO} is the number of tender evaluation points awarded for the financial offer made in accordance with F.3.11.7;
N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9.

c) Rank tender offers from the highest number of tender evaluation points to the lowest.

d) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

e) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

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

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

a) Calculate the total number of tender evaluation points (T_{EV}) in accordance with the following formula:

$$T_{EV} = N_P + N_Q$$

where N_P is the number of tender evaluation points awarded for preferences claimed in accordance with F.3.11.8.
N_Q is the number of tender evaluation points awarded for quality offered in accordance with F.3.11.9

b) Rank tender offers from the highest number of tender evaluation points to the lowest.

c) Recommend the tenderer with the highest number of tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.

d) Rescore and re-rank all tenderers should there be compelling and justifiable reasons not to recommend the tenderer with the highest number of tender evaluation points, and recommend the tenderer with the highest number of tender evaluation points, unless there are compelling and justifiable reasons not to do so and the process set out in this subclause is repeated.

F.3.11.6 Decimal places

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

F.3.11.7 F.3.11.8 Scoring preferences

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

F.3.11.9 Scoring quality

Score each of the criteria and sub criteria for quality in accordance with the provisions of the Tender Data.

Calculate the total number of tender evaluation points for quality using the following formula:

$$N_Q = W_2 \times {}^{S_O}\!/_{M_S}$$

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 unacceptable commercial risk and only if the tenderer:

a) is not under restrictions, or has principals who are under restrictions, preventing participating in the employer’s procurement,

b) can, as necessary and in relation to the proposed contract, demonstrate that he or she possesses the professional and technical qualifications, professional and technical competence, financial resources, equipment and other physical facilities, managerial capability, reliability, experience and reputation, expertise and the personnel, to perform the contract,

c) has the legal capacity to enter into the contract,

d) is not insolvent, in receivership, bankrupt or being wound up, has his affairs administered by a court or a judicial officer, has suspended his business activities, or is subject to legal proceedings in respect of any of the foregoing,

e) complies with the legal requirements, if any, stated in the tender data, and

f) is able, in the opinion of the employer, to perform the contract free of conflicts of interest.

F.3.14 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.

F3.16 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.

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PART T2: RETURNABLE DOCUMENTS

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T2. LIST OF RETURNABLE DOCUMENTS

The bidders must complete the returnable documents as listed.

Administrative Requirements	**Tick if Completed**
Certificate of Authority for Joint Venture *(Compulsory where applicable)*	
Original Certified Copy of Identity Documents for Directors not older than three months	
Copy of Company Registration Documents or CK1 for Close Corporations	
Valid Tax Clearance Certificate Issued by the South African Revenue Service*/ PIN issued by SARS*	
Compliant CSD Registration/CSD Summary Report	
Mandatory Requirements (Compulsory)	**Tick if Completed**
Invitation to Bid, Part A & B (MBD1)	
Declaration of Interest (MBD4)	
Bids less than R10 million **If the estimated value of the transaction is less than R10 million, the bid documentation must require the bidders to furnish:** • The Municipal rates for the bidder and its directors in respect of which payment is not overdue for more than 90 days or proof of lease agreement including rates for the landlord. In case where the Company or Director is registered in a rural area where the rates are not paid, please attach proof from Local Authority/ Municipality and Affidavit under oath; or proof that indicating that there are no municipal rates payable **Consent forms to verify outstanding municipal services** • It is the policy of Sekhukhune District Municipality that all bidders participating in the procurement process must complete and submit the consent form authorising the verification of any outstanding municipal services payments, including but not limited to water, electricity, and taxes prior to the awarding of the contract	
Bids exceeding R10 million **If the estimated value of the transaction exceeds R10 million, the bid documentation must require the bidders to furnish:** • if the bidder is required by law to prepare annual financial statements for auditing, their audited annual financial statements for the past three years, or • since their establishment if established during the past three years, • In terms of a Joint Venture, their Lead Partner audited annual financial statements for the past three years, • A certificate signed by the bidder certifying that the bidder and any of its directors 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. • The Municipal rates for the bidder and its directors in respect of which payment is not overdue for more than 90 days or proof of lease agreement including rates for the landlord. In case where the Company or Director is registered in a rural area where the rates are not paid, please attach proof from Local Authority, or Municipality and Affidavit under oath; or proof that indicating that there are no municipal rates payable	

• particulars of any contracts awarded to the bidder 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, and • 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 is expected to be transferred out of the Republic.	
Declaration For Procurement Above R10 Million (Vat Included) (MBD 5)	
Preference Points Claim Form in Terms of the Preferential Procurement Regulations 2022 (MBD 6.1)	
Contract Form - Rendering of Services (MBD 7.2)	
Declaration of Bidder's Past Supply Chain Management Practices (MBD8)	
Certificate of Independent Bid Determination (MBD9)	
Schedule 1A**:** Compulsory Enterprise Questionnaire	
Schedule 1B: Authority for Signatory / Letter of authorized signatories	
Form of offer to be properly signed	
Bidder Municipal Services Account Verification Consent Form	
CIDB Grading 7CE or Higher	
Registration on Central Supplier Database	
COIDA	

Note: *The meaning of the cursive type for each form is as follows:*

- ***Administrative Requirements:*** Bidders must submit administrative requirements for evaluation.
- It is the responsibility of the bidder to bind the bid document.

SCHEDULE 1

RESOLUTION OF BOARD OF DIRECTORS

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

	(Enterprise Name)
Held at	(place)
On	(date)

RESOLVED that:

1.	The enterprise submits a bid / tender to the Sekhukhune District Municipality in respect of the following project:	
	TENDER: SK8/3/1-08/2025/26 – REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS	
2.	Mr/Mrs/Ms	
	in his/her capacity a:	(Position in the Enterprise)
	and who will sign as follows:	(Authorized Signature)
	be, and is hereby, authorized to sign the bid / tender, and any and all other documents and/or correspondence in connection with and relating to the bid /tender, as well as to sign any contract, and any and all documentation, resulting from the award of the bid / tender to the enterprise mentioned above.	

Directors / Members / Partners of:

	Name	Capacity	Signature
1			
2			
3			

Note:

1. * *Delete which is not applicable*
2. ***NB**. This resolution must be signed by <u>all</u> the Directors / Members / Partners of the Bidding Enterprise*
2. *Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page*
3. *If no stamp the enterprise can sign on the stamp box*

ENTERPRISE STAMP

SCHEDULE 2

RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES

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

	(Enterprise Name)
Held at	(place)
On	(date)

RESOLVED that:

1.	The enterprise submits a bid / tender, in consortium / joint venture with the following enterprises:	
	(List all the legally correct full names and registration numbers, if applicable, of the enterprises forming the consortium / joint venture)	
	To the to the Sekhukhune District Municipality in respect of the following project	
	TENDER: SK8/3/1-08/2025/26 – REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS	
2.	Mr/Mrs/Ms	
	in his/her capacity as	(Position in the Enterprise)
	and who will sign as follows	(Authorized Signature)
2.1	be, and is hereby, authorized to sign a consortium / joint venture agreement with the parties listed under item 1 above, and any and all other documents and/or correspondence in connection with and relating to the consortium / joint venture, in respect of the project described under item 1 above.	
2.2	The enterprise accepts joint and several liability with the parties listed under item 2 above for the due fulfillment of the obligations of the joint venture deriving from, and in any way connected with, the contract to be entered into with the department in respect of the project described under item 1 above.	
2.3	The enterprise chooses as its *domicilium citandi et executandi* for all purposes arising from this joint venture agreement and the contract with the department in respect of the project under item 1 above	
	i) Physical address	
	ii) Postal address	
		(Code)
	iii) Telephone number	
	iv) Fax Number	

SCHEDULE 3

RESOLUTION OF BOARD OF DIRECTORS TO ENTER INTO CONSORTIA OR JOINT VENTURES

Directors / Members / Partners of:

	Name	Capacity	Signature
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Note:

1. *Delete which is not applicable*
2. ***NB**. This resolution must be signed by <u>all</u> the Directors / Members / Partners of the Bidding Enterprise*
3. *Should the number of Directors / Members / Partners exceed the space available above, additional names and signatures must be supplied on a separate page*

Enterprise Stamp

SCHEDULE 4

SCHEDULE OF PROPOSED SUB-CONTRACTORS

We notify you that it is our intention to employ the following sub-contractors for work in this contract. If we are awarded a contract we agree that this notification does not change the requirement for us to submit the names of proposed sub-consultants in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us. We agree we will not subcontract more than 25% of the value of the contract to a person who is not an HDI or does not qualify for such preference.

	Name and address of proposed sub-contractor	Nature and extent of work	Previous experience with sub-contractor
1			
2			
3			
4			
5			

NAME OF REPRESENTATIVE	**SIGNATURE**	**CAPACITY**	**DATE**

NAME OF ORGANIZATION	

SCHEDULE 5

COMMITMENTS OF TENDERER

Kindly provide particulars of commitments which the tenderer is presently engaged and/or involved with:

	Current Projects / Contract	Organization	Contact Person Name	Contact Tel. No.	Contract Amount	Contract Period	Date of Commence-ment	Scheduled Date of Completion
1.								
2.								
3.								
4.								
5.								

NAME OF REPRESENTATIVE	**SIGNATURE**	**DATE**

SCHEDULE 6

RECORD OF ADDENDA TO TENDER DOCUMENTS

I / we confirm that the following communications received from the Sekhukhune Municipality before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer: *(Attach additional pages if more space is required)*

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

I / we confirm that no communications were received from the Sekhukhune Municipality before the submission of this tender offer, amending the tender documents.

NAME OF REPRESENTATIVE	**SIGNATURE**	**DATE**

SCHEDULE 7

CLARIFICATION MEETING ATTENDANCE CERTIFICATE

Clarification meeting will be held at the **AB Skhosana Fire Station** located in **Groblersdal**.

Enquiries relating to the bid should be directed in writing to:

The Employer's Agent

Kutlo Consulting Engineers (Pty) Ltd

Email: admin@kutloconsulting.co.za

Tel: 014 312 0112

SCHEDULE 8
COMPULSORY ENTERPRISE QUESTIONNAIRE

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

Section 1: Name of enterprise	
Section 2: VAT registration number, if any	

Section 3: Particulars of sole proprietors and partners in partnerships

No	Name*	Identity Number*	Personal Income Tax Number*
3.1			
3.2			
3.3			

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

Section 4: Particulars of companies and close corporations

4.1	Company Registration number	
4.2	Close corporation number	
4.3	Tax reference number	

Section 5: Record in the service of the state

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

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

	Name of institution, public office, board or organ of state and position held	Status of service (tick appropriate column)

Name of sole proprietor, partner in a partnership or director, manager, principal shareholder or stakeholder		Current	Within last 12 months

Section 6: Records of spouses, children and parents in the service of the state

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

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

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

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

i) authorizes the Employer to obtain a tax clearance certificate from the South African Revenue Services that my / our tax matters are in order;

ii) confirms that the neither the name of the enterprise or the name of any partner, manager, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears on the Register of Tender Defaulters established in terms of the Prevention and Combating of Corrupt Activities Act of 2004.

iii) confirms that no partner, member, director or other person, who wholly or partly exercises, or may exercise, control over the enterprise appears, has within the last five years been convicted of frauds or corruption;

iv) confirms that I / we are not associated, linked or involved with any other tendering entities submitting tender offers and have no other relationship with any of the tenderers or those responsible for compiling the scope of work that could cause or be interpreted as a conflict of interest; and

v) confirms that the contents of this questionnaire are within my personal knowledge and are to the best of my belief both true and correct.

Note: insert separate page if necessary

NAME OF REPRESENTATIVE	AUTHORIZED SIGNATURE (UNDERSIGNED)
CAPACITY	**DATE**

SCHEDULE 9

CLEARANCE CERTIFICATE FOR WATER & LIGHTS

Section 45(1)(d) of Municipal Supply Chain Regulations requires that the municipality must reject a bidder whose municipal rates and taxes are in arrears for more than three months.

The purpose of this schedule is to obtain proof that municipal services, rates and taxes of the service provider are not in arrears for more than three months, with the relevant municipality / landlord in the municipal area where the service provider conduct his / her business.

Each bidder must complete the below checklist. Important: if you fail to complete this form, the bid will be non-responsive. (Please tick with **X** where appropriate):

	QUESTIONS	**YES**	**NO**
1.	Do you own a property?		
2.	Do you receive a municipal rates account?		
3.	Is your municipal rates and taxes account up to date / current (not in arrears for more than three months)?		
4.	If yes, provide the following details:		
4.1	▪ Municipality name		
4.2	▪ Municipal account number		
5.	**If yes, please attach proof in the form of the original or certified copy of the bidder's municipal rates and taxes account not older than 3 months**		
6.	Does the bidder lease / rent the property where the business is situated?		
7	If yes, provide the following details:		
7.1	▪ Landlord name		
7.2	▪ Address property is situated		
7.3	▪ Contact number of landlord		
8.	**Please attach the copy of the lease agreement signed by the landlord / lessor and the tenant / lessee as proof**		

I, (Insert full name)	
of (insert physical address)	
being a Director, Principal Shareholder, owner of company (Insert company name)	
Hereby confirms that, the information submitted in this form is accurate, to the best of my knowledge	
SIGNATURE	

*** IMPORTANT: IF YOU FAIL TO COMPLETE THIS FORM, PLEASE REGARD YOUR QUOTE OR TENDER AS NON RESPONSIVE**

SCHEDULE 10

NOTICE OF SUPPLY CHAIN MANAGEMENT
CENTRAL SUPPLIER DATABASE REGISTRATION

Par 14(1)(a) of the municipal supply chain management policy states that the municipality must keep a list of accredited prospective providers of goods and services that must be used for the procurement requirements.

The purpose of this notice is to obtain proof that the service provider is registered on the Central Supplier Database. **Registration is COMPULSORY in order to conduct business with Sekhukhune District Municipality**.
The database will be used to verify the accreditation of a supplier before an award can be made.

Each bidder must complete the below checklist (please tick with an X where appropriate).

	QUESTIONS	YES	NO
1.	Is your company registered on the Central Supplier Database?		
2.	If yes, provide the following details:		
2.1	▪ CSD registration number		
2.2	▪ Unique CSD number		
3.	Enquiries related to par. 2.1 and 2.2 can be made to		
4.	If no, please register on Central Supplier Database ,website,www.csd.gov.za, before submitting tender document		

I, (insert full name)	
of (insert physical address)	
being a Director, Principal Shareholder, owner of company (insert company name)	
hereby confirms that, the information submitted in this form is accurate, to the best of my knowledge	
SIGNATURE	

T2.2 COMPULSORY MUNICIPAL BID DOCUMENTS

1. TAX COMPLIANCE REQUIREMENTS

1. Bidders must ensure compliance with their tax obligations.
2. Bidders are required to submit their unique personal identification number(PIN) issued by SARS to enable Organ of state to view the taxpayer's profile and tax status.
3. Application for the tax compliance status (TCS) certificate or PIN may 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
4. Foreign suppliers have must complete the pre-award questionnaire in part 2.
5. Bidders may also submit a printed TCS certificate together with the bid.
6. In bids where Consortia / Joint Ventures / Sub-contractors are involved, each party must submit a separate TCS certificate / pin / CSD number.
7. Where no TCS is available but the bidder is registered on the Central Supplier Database (CSD), a CSD number must be provided.

2. QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS

1.	Is the entity a resident of the Republic of South Africa?	YES / NO
2.	Does the entity have a branch in the RSA?	YES / NO
3.	Does the entity have a permanent establishment in the RSA?	YES / NO
4.	Does the entity have any source of income in RSA?	YES / NO
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 SARS AND IF NOT REGISTER AS PER 1.3. ABOVE)

NB: Failure to provide any of the above particulars may render the bid invalid.

…… **……..**
Signature of Bidder **Date**

……..
Capacity under which this bid is signed

MBD 4

DECLARATION OF INTEREST

1. No bid will be accepted from persons in the service of the state[1].

2. Any person, having a kinship with persons in the service of the state, including a blood relationship, may make an offer or offers in terms of this invitation to bid. In view of possible allegations of favouritism, should the resulting bid, or part thereof, be awarded to persons connected with or related to persons in service of the state, it is required that the bidder or their authorised representative declare their position in relation to the evaluating/adjudicating authority.

3. In order to give effect to the above, the following questionnaire must be completed and submitted with the bid.

No.	Information	Please provide detail		
3.1	Full name of bidder or his or her representative			
3.2	Identity number			
3.3	Position occupied in the company (director, trustee, hareholder[2]			
3.4	Company registration number			
3.5	Tax reference number			
3.6	VAT registration number			
Note	*(The names of all directors / trustees / shareholders members, their individual identity numbers and state employee numbers must be indicated in paragraph 4 below.)*			
3.7	Are you presently in the service of the state?		Yes	No
	If yes, please furnish particulars :			
3.7.1	Name of director			
3.7.2	Service of state organization			

3.8	Have you been in the service of the state for the past twelve months?	Yes	No
	If yes, please furnish particulars :		
3.8.1	Name of director		
3.8.2	Service of state organization		
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
	If yes, please furnish particulars :		
3.9.1	Name of person in the service of state		
3.9.2	Relationship		
3.10	Are you, aware of any relationship (family, friend, other) between any other bidder and any persons in the service of the state who may be involved with the evaluation and or adjudication of this bid?	Yes	No
	If yes, please furnish particulars :		
3.10.1	Name of person in the service of state		
3.10.2	Relationship		
3.11	Are any of the company's directors, trustees, managers, principle shareholders or stakeholders in service of the state?	Yes	No
	If yes, please furnish particulars :		
3.11.1	Name of director		
3.11.2	Service of state organization		
3.12	Is any spouse, child or parent of the company's director trustees, managers, principle shareholders or stakeholders in service of the state?	Yes	No
	If yes, please furnish particulars:		
3.12.1	Name of director		
3.12.2	Name of relative		

3.12.3	Relationship			
3.13	Do you or any of the directors, trustees, managers, principle shareholders, or stakeholders of this company have any interest in any other related companies or business whether or not they are bidding for this contract?		Yes	No
	If yes, please furnish particulars:			
3.13.1	Name of director			
3.13.2	Related company			
Note:	SCM Regulations: "[1]In the service of the state" means to be – (a) a member of – (i) any municipal council; (ii) any provincial legislature; or (iii) the national Assembly or the national Council of provinces; (b) a member of the board of directors of any municipal entity; (c) an official of any municipality or municipal entity; (d) an employee of any national or provincial department, national or provincial public entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act No.1 of 1999); (e) a member of the accounting authority of any national or provincial public entity; or (f) an employee of Parliament or a provincial legislature. "[2] Shareholder" means a person who owns shares in the company and is actively involved in the management of the company or business and exercises control over the company.			

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

Full Name	Identity Number	State Employee Number

5. I, the undersigned 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.

NAME OF REPRESENTATIVE	**AUTHORIZED SIGNATURE (UNDERSIGNED)**
DATE	**CAPACITY**

MBD 5

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

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

1 Are you by law required to prepare annual financial statements for auditing? ***YES / NO**

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

……

……

2 Do you have any outstanding undisputed commitments for municipal services towards any municipality for more than three months or any other service provider in respect of which payment is overdue for more than 30 days? ***YES / NO**

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

2.2 If yes, provide particulars.

……

……

……

……..

* Delete if not applicable

3 Has any contract been awarded to you by an organ of state during the past five years, including particulars of any material non-compliance or dispute concerning the execution of such contract? ***YES / NO**

3.1 If yes, furnish particulars

……

……

4. Will any portion of goods or services be sourced from outside the Republic, and, if so, what portion and whether any portion of payment from the municipality / municipal entity is expected to be transferred out of the Republic? ***YES / NO**

4.1 If yes, furnish particulars

……

……

CERTIFICATION

I, THE UNDERSIGNED (NAME) ……

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

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

…….. ……..

Signature Date

……..... ……

Position Name of bidder

MBD 6.1

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

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT REGULATIONS, 2022

---

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

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

1.2 To be completed by the organ of state

a) The applicable preference point system for this tender is the 80/20 preference point system.

b) Either the 90/10 or 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

(a) Price; and

(b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	**80**
SPECIFIC GOALS	**20**
Total points for Price and SPECIFIC GOALS	**100**

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

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

2. DEFINITIONS

(a) **"tender"** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;

(b) **"price"** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;

(c) **"rand value"** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

(d) **"tender for income-generating contracts"** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and

(e) **"the Act"** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

80/20 **or** **90/10**

$$Ps = 80\left(1 - \frac{Pt - P\,min}{P\,min}\right) \text{ or } \quad Ps = 90\left(1 - \frac{Pt - P\,min}{P\,min}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

3.2.1. POINTS AWARDED FOR PRICE

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

80/20 **or** **90/10**

$$Ps = 80\left(1 + \frac{Pt - P\,max}{P\,max}\right) \text{ or } \quad Ps = 90\left(1 + \frac{Pt - P\,max}{Pmax}\right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:

4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—

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

(b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,

then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
HDI (Black, Indian, Coloureds)	12	
Woman Ownership of more than 50%	2	
Disability of more than 50% (Physically Impaired)	2	
Youth (more than 50%)	2	
Locality (Within SDM Jurisdiction)	2	

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm…….

4.4. Company registration number: ……...

4.5. TYPE OF COMPANY/ FIRM

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

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

i) The information furnished is true and correct;

ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;

iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;

iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

(a) disqualify the person from the tendering process;

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

(d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary.

…… **SIGNATURE(S) OF TENDERER(S)** **SURNAME AND NAME**: …… **DATE:** …… **ADDRESS**: …… …… …… ……

MBD 7.2

CONTRACT FORM - RENDERING OF SERVICES

THIS FORM MUST BE FILLED IN DUPLICATE BY BOTH THE SERVICE PROVIDER (PART 1) AND THE PURCHASER (PART 2). BOTH FORMS MUST BE SIGNED IN THE ORIGINAL SO THAT THE SERVICE PROVIDER AND THE PURCHASER WOULD BE IN POSSESSION OF ORIGINALLY SIGNED CONTRACTS FOR THEIR RESPECTIVE RECORDS.

PART 1 (TO BE FILLED IN BY THE SERVICE PROVIDER)

1. I hereby undertake to render services described in the attached bidding documents to (name of the institution)……. in accordance with the requirements and task directives / proposals specifications stipulated in Bid Number…….. at the price/s quoted. My offer/s remain binding upon me and open for acceptance by the Purchaser during the validity period indicated and calculated from the closing date of the bid.

2. The following documents shall be deemed to form and be read and construed as part of this agreement:

   (i) Bidding documents, *viz*
   - Invitation to bid;
   - Proof of tax compliance status;
   - Pricing schedule(s);
   - Filled in task directive/proposal;
   - Preference claim form for Preferential Procurement in terms of the Preferential Procurement Regulations;
   - Declaration of interest;
   - Declaration of Bidder's past SCM practices;
   - Certificate of Independent Bid Determination;
   - Special Conditions of Contract;

   (ii) General Conditions of Contract; and
   (iii) Other (specify)

3. I confirm that I have satisfied myself as to the correctness and validity of my bid; that the price(s) and rate(s) quoted cover all the services specified in the bidding documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

4. I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this agreement as the principal liable for the due fulfillment of this contract.

5. I declare that I have no participation in any collusive practices with any bidder or any other person regarding this or any other bid.

6. I confirm that I am duly authorised to sign this contract.

NAME (PRINT) …….

CAPACITY …….

SIGNATURE …….

NAME OF FIRM …….

DATE …….

WITNESSES

1 …….

2 …….

DATE: ……..

MBD 7.2

CONTRACT FORM - RENDERING OF SERVICES

PART 2 (TO BE FILLED IN BY THE PURCHASER)

1. I……. in my capacity as……...……
accept your bid under reference number ……dated……for the rendering of services indicated hereunder and/or further specified in the annexure(s).

2. An official order indicating service delivery instructions is forthcoming.

3. I undertake to make payment for the services rendered in accordance with the terms and conditions of the contract, within 30 (thirty) days after receipt of an invoice.

DESCRIPTION OF SERVICE	PRICE (ALL APPLICABLE TAXES INCLUDED)	COMPLETION DATE	TOTAL PREFERENCE POINTS CLAIMED	POINTS CLAIMED FOR EACH SPECIFIC GOAL

4. I confirm that I am duly authorised to sign this contract.

SIGNED AT …… ON ……..

NAME (PRINT) …….

SIGNATURE …….

OFFICIAL STAMP

WITNESSES

1 ……

2 ……

DATE: ……..

MBD 8

DECLARATION OF BIDDERS PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This municipal bidding document must form part of all bids invited.

2. It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are taken to combat the abuse of the supply chain management system.

3. The bid of any bidder may be rejected if that bidder, or any of its directors have:

   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 of Restricted Suppliers as companies or persons prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the accounting officer / authority of the institution that imposed the restriction after the *audi alteram partem* rule was applied). **The Database of Restricted Suppliers now resides on the National Treasury's website www.treasury.gov.za and can be accessed by clicking on its link at the bottom of the home page**	Yes	No
4.1.1	If so, furnish particulars:		
4.2	Is the bidder or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corrupt Activities Act (No. 12 of 2004)? **The Register for Tender Defaulters can be accessed on the National Treasury's website www.treasury.gov.za by clicking on its link at the bottom of the home page.**	Yes	No
4.2.1	If so, furnish particulars:		
4.3	Was the bidder or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?	Yes	No
4.3.1	If so, furnish particulars:		

Item	Question	Yes	No
4.4	Does the bidder or any of its directors owe any municipal rates and taxes or municipal charges to the municipality / municipal entity, or to any other municipality / municipal entity, that is in arrears for more than three months?	Yes	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 certify that the information furnished on this declaration form true and correct.

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

NAME OF REPRESENTATIVE	**AUTHORIZED SIGNATURE (UNDERSIGNED)**
DATE	**CAPACITY**

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

1 This municipal bidding document (MBD) must form part of all bids[1] invited.

2 Section 4(1)(b)(iii) of the Competition Act No. 89 of 1998, as amended, prohibits an agreement between, or concerted practice by, firms, or a decision by an association of firms, if it is between parties in a horizontal relationship and if it involves collusive bidding (or bid rigging). [2]Collusive bidding is a *pe se* prohibition meaning that it cannot be justified under any grounds.

3 Municipal Supply Regulation 38(1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:

3.1. take all reasonable steps to prevent such abuse;

3.2. 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

3.3. 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.

4 This MBD serves as a certificate of declaration that would be used by institutions to ensure that, when bids are considered, reasonable steps are taken to prevent any form of bid rigging.

5 In order to give effect to the above, the attached Certificate of Bid Determination (MBD 9) must be completed and submitted with the bid:

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

[2] **Bid rigging (or collusive bidding) occurs when businesses, that would otherwise be expected to compete, secretly conspire to raise prices or lower the quality of goods and / or services for purchasers who wish to acquire goods and / or services through a bidding process. Bid rigging is, therefore, an agreement between competitors not to compete.**

MBD 9

CERTIFICATE OF INDEPENDENT BID DETERMINATION

I, the undersigned, in submitting the accompanying bid:

TENDER: **SK8/3/1-08/2025/26 REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS**

in response to the invitation for the bid made by:

NAME OF MUNICIPALITY / MUNICIPAL ENTITY

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

I certify, on behalf of:

NAME OF REPRESENTATIVE

that:

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.

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[3] will not be construed as collusive bidding.

6. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:

   7.1 Prices;
   7.2 Geographical area where product or service will be rendered (market allocation);
   7.3 Methods, factors or formulas used to calculate prices;
   7.4 The intention or decision to submit or not to submit a bid;
   7.5 The submission of a bid which does not meet the specifications and conditions of the bid; or
   7.6 Bidding with the intention not to win the bid.

7. 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.

8. The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.

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

10. I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No. 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No. 12 of 2004 or any other applicable legislation.

NAME OF REPRESENTATIVE	AUTHORIZED SIGNATURE (UNDERSIGNED)
DATE	**CAPACITY**

FORM RD.B.1 PROOF OF REGISTRATION WITH THE CIDB

1. Attach original or certified copy of CIDB registration certificate to this page.

2. In the case of a joint venture / consortium (excluding consulting engineering partners) parties must each attach original or certified copy of their CIDB registration certificate.

Firm	**CRS Number**	**CIDB Grading**	**Lead Partner** (Indicate with X)
Combined CIDB Grading for Joint Venture / Consortium: (Calculator is available at https://registers.cidb.org.za/common/jvcalc.asp)			

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

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.B.2 COMPLIANCE WITH OHSA (ACT 85 OF 1993)

Tenderers are required to satisfy the employer and the engineer as to their ability and available resources to comply with the above by answering the following questions and providing the relevant information required below.

	(Tick applicable box)	
1. Are your company familiar with the OHSA (ACT 85 of 1993) and its Regulations?	**YES**	**NO**
2. Who will prepare your company's Health and Safety Plan? Provide a copy of the person/s curriculum vitae/s or company profile.		
3. Do your company have a health and safety policy? If **YES** provide a copy.	**YES**	**NO**
4. How is this policy communicated to your employees? Provide supporting documentation.	**YES**	**NO**
5. Do your company keep record of safety aspects of each site where work is performed? If **YES** what records are kept?	**YES**	**NO**
6. Do your company conduct monthly safety meetings? If **YES**, who is the chairperson of the meeting, and attend these meetings?	**YES**	**NO**
7. Do your company have a safety officer in its employment, responsible for overall safety of your company? If **YES**, explain his duties and provide a copy of his CV	**YES**	**NO**
8. Do your company have trained first aid employees? If **YES**, indicate who.	**YES**	**NO**
9. Do your company have a safety induction training programme in place? If **YES**, provide a copy.	**YES**	**NO**

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

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date: _____

FORM RD.B.3 RECORD OF SERVICES PROVIDED TO ORGANS OF STATE

Tenderers are required to complete this record in terms of the Supply Chain Management Regulations issued in terms of the Municipal Finance Management Act of 2003.

Include only those contracts where the tenderer identified in the signature block below was directly contracted by the employer. Tenderers must not include services provided in terms of a sub-contract agreement.

Where contracts were awarded in the name of a joint venture and the tenderer formed part of that joint venture, indicate in the column entitled "Title of the contract for the service" that was in joint venture and provide the name of the joint venture that contracted with the employer. In the column for the value of the contract for the service, record the value of the portion of the contract performed (or to be performed) by the tender.

Complete the record or attach the required information in the prescribed tabulation

	ALL SERVICES COMMENCED OR COMPLETED TO AN ORGAN OF STATE IN THE LAST FIVE YEARS			
	Organ of state, i.e. national or provincial department, public entity, municipality or municipal entity.	**Title of contract for the service**	**Value of contract for service incl. VAT (Rand)**	**Date completed (State current if not yet completed)**
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				

(Attach additional pages if more space is required.)

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

Person authorized to sign the tender:

Full name (in BLOCK letters):

Signature:

Date:

FORM RD.B.4 SCHEDULE OF PLANT AND EQUIPMENT

The following are lists of the major items of relevant equipment that I/we presently own/lease and will have available for this contract or will hire/acquire for this contract as proof of the requirements for Clause F.3.13 b) of the Conditions of Tender

Major equipment owned/leased that is immediately available for the execution of the works	
Quantity	**Description, size, capacity etc.**

(Attach additional pages if more space is required)

Major equipment that will be hired or acquired for the execution of the works	
Quantity	**Description, size, capacity etc.**

(Attach additional pages if more space is required)

FORM RD.B.5 SCHEDULE OF PROPOSED SUBCONTRACTORS

Note: The General Conditions of Contract prohibit the subcontracting of the whole contract.

	Name and address of proposed subcontractor	Nature and extent of work	Approximate percentage of contract value
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			

(Attach additional pages if more space is required)

FORM RD.B.6 EPWP STAFF FOR LABOUR INTENSIVE CONSTRUCTION WORKS

The tenderer shall, submit the names of all management, design and supervisory staff that will be employed to design and supervise the labour-intensive portion of the works together with satisfactory documentary evidence that such staff members satisfy the eligibility requirements.

CATEGORY OF EMPLOYEE	NAME OF EMPLOYEE	NQF LEVEL	LABOUR INTENSIVE SKILLS PROGRAM UNIT STANDARD TITLES	DATE COMPLETED	YEARS EXPERIENCE
Designer ***(NQF 7 Required)***					
Administrator/ Site supervisor ***(NQF 5 Required)***					
Site Agent/ Manager ***(NQF 5 Required)***					
Foreman/ Supervisor ***(NQF 4 Required)***					
Team leader/ Supervisor **(NQF 2 Required)**					

(Attach documentary proof to this page)

FORM RD.B.7 STATUS OF CONCERN SUBMITTING TENDER

1. General

State whether the tenderer is a company, a closed corporation, a partnership, a sole practitioner, a joint venture/consortium or a co-operative

Public Company	
Private Company	
Closed Corporation	
Partnership	
Sole Proprietary	
Joint Venture / Consortium	
Co-operative	

(Mark the appropriate option)

2. Information to be provided

If the Tendering Entity is a:		**Documentation to be submitted with the tender**
1	Closed Corporation, incorporated under the Close Corporation Act,1984, Act 69 of 1984	CIPRO CK1 or CK2 (Certified copies of the founding statement) and list of members
2	Private Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973 (Including Companies incorporated under Art 53 (b))	Certified copies of: a) CIPRO CM 1 - Certificate of Incorporation b) CIPRO CM 29 – Contents of Register of Directors, Auditors and Officers c) Shareholders Certificates of all Members of the Company, plus a signed statement of the Company's Auditor, certifying each Member's ownership/shareholding percentage relative to the total.
3	Private Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973 in which any, or all, shares are held by another Closed Corporation or company with, or without, share capital.	Certified copies of documents referred to in 1 and/or 2 above in respect of all such Closed Corporations and/or Companies
4	Public Company incorporated with share capital, under the companies Act, 1973, Act 61of 1973 (Including Companies incorporated under Art 21)	A signed statement of the Company's Secretary confirming that the Company is a public Company.
5	Sole Proprietary or a Partnership	Certified copy of the Identity Document of: a) such Sole Proprietary, or b) Each of the Partners in the Partnership

If the Tendering Entity is a:		**Documentation to be submitted with the tender**
		Certified copy of the Partnership agreement.
6	Co-operative	CIPRO CR2 - Certified copies of Company registration document.
7	Joint Venture / Consortium	All the documents (as described above) as applicable to each partner in the joint venture / consortium as well as a certified copy of the joint venture / consortium agreement.

Note:

1. If the shares are held in trust provide a copy of the Deed of Trust (only the front page and pages listing the trustees and beneficiaries are required) as well as the Letter of Authority as issued by the Master of the Supreme Court wherein trustees have been duly appointed and authorised
2. Include a certified copy of the Certificate of Change of Name (CM9) if applicable.

3. Registered for VAT proposes in terms of the Value-Added Tax Act (89 of 1991)

Yes ☐

No ☐

(Make an X in the appropriate space)

REGISTRATION NO: _____

FORM RD.B.8 CLASSIFICATION OF BUSINESS

1. The Small Businesses are defined in the National Small Business Act, 1996 (Act 102 of 1996).

2. Information furnished with regard to the classification of Small businesses

   (b.) Indicate whether the company/entity is defined as a small, medium or micro enterprise by the National Small Business Act.

YES	NO

   (Tick appropriate box)

   (c.) If the response to 2.(a.) is **YES**, the following must be completed:

   i. Sector/sub-sector in accordance with the Standard Industrial classification:

   ii. Size or class:

   iii. Total full-time equivalent of paid employees:

   iv. Total annual turnover:

   v. Total gross asset value (fixed property excluded):

   (A schedule indicating the different sectors is attached to this form.)

   (d.) The tenderer should substantiate the information provided by submitting the following documentation:

   i. A letter from the tenderer's auditor or an affidavit from the South African Police Services confirming the correctness of the abovementioned information,

   ii. Company profile indicating the tenderer's staff compliment, and

   iii. 3 year financial statement or since their establishment if established during the past 3 years.

SCHEDULE OF SECTORS

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

COMMUNITY, SOCIAL AND PERSONAL SERVICES			
Medium	200	R 13 mil	R 6 mil
Small	50	R 6 mil	R 3 mil
Very Small	20	R 1mil	R 600 000
Micro	5	R 200 000	R 100 000

FORM RD.B.10 LETTER OF INTENT TO PROVIDE A PERFORMANCE BOND

It is hereby agreed that a Performance Bond drafted exactly as set out in the attached examples (See Section C1.3:
Form of Guarantee) will be provided by the Surety named below:

Name of Surety (Bank or Insurer) _____

Address: _____

_____

_____

Signed:

_____

Name: _____

Capacity: _____

On behalf of Tenderer (name of tenderer) _____

Date: _____

CONFIRMED BY Surety's Authorised representative

Signature(s):

_____

Name (print): _____

Capacity _____

On behalf of Surety (Bank or Insurer)

_____

Date: _____

Note: Refer to Annexure to C1.3 Form of Guarantee for the List of Institutions from who Contract/Deposit Guarantees will be accepted.

FORM RD.B.11 BANK RATING REPORT

BANKING DETAILS:

Bank: _____

Branch: _____

Name of account: _____

Account number: _____

Type of account _____

The tenderer shall affix a Bank Rating Report for his/her tender value, stamped and verified by the bank, to this page.

FORM RD.B.12 ESTIMATED MONTHLY EXPENDITURE

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

Note: Tenderer must in his calculations take note that payment is usually done 30 (thirty) days after the date of submission of a payment certificate.

PAYMENT CERTIFICATE	AMOUNT			
	Payments Received (a)	**Expenditure** (b)	**Nett Cash Flow** (a-b)	**Cumulative Cash Flow**
1				
2				
3				
4				
5				
6				
7				
8				
Maximum negative cash flow: (Take the largest negative number in the last column and write it here)				
From what sources will you fund the above amount: (E.g. funds internally available, bank overdraft, loans etc.)				

FORM RD.C.1 SCHEDULE OF TENDERER'S EXPERIENCE

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

Employer, contact person and telephone number	Description of contract	Value of work	Date competed

(Attach additional pages if more space is required)

FORM RD.C.2 QUALITY MANAGEMENT PROCEDURES AND SYSTEMS

Briefly describe the construction quality systems incorporated by the tenderer in his organisation.

TYPE OF WORK	INTERNAL	EXTERNAL	NAME OF RESPONSIBLE COMPANY/PERSON (In case of a person provide qualifications and years' experience)
Survey: Setting out of the works and control			
Materials testing			
Additional quality systems			

FORM RD.C.3 KEY PERSONNEL

The tenderer shall list in the table below the key personnel to be engaged for this project.

Note: Form RD.D.9 must be complete for each person listed below.

	NAME	CATEGORY [4]	LOCAL / NON LOCAL
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

(Attach additional pages if more space is required)

[4] The Contractor shall fill in the various categories, e.g. Site, Agent, Foreman, Trainers, Plant Operators, Clerks, Technicians, Laboratory Assistants, etc as required.

FORM RD.C.4 CURRICULUM VITAE OF KEY PERSONNEL

Note: This form should be completed for each key person listed in Form RD.D.8

Name:	**Date of birth:**
Profession:	**Nationality:**
Qualifications	
Professional membership:	
Name of employer (firm):	
Current position:	**Years with firm:**
Employment record: (list in chronological order starting with earliest work experience)	
Experience record pertinent to required service:	
Certification: **I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.** _____ *(Signature of person named in schedule)* _____ Date:	

FORM RD.D.1 RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before submission of this tender, amending or amplifying the tender documents, have been taken in account in this tender offer:

	DATE	REFERENCE	TITLE
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

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

Person authorized to sign the tender:

Full name (in BLOCK letters): _____

Signature: _____

Date:

SEKHUKHUNE DISTRICT MUNICIPALITY

Bidder Municipal Services Account Verification Consent Form

Tender / Bid Number: _____
Bidder Name _____

In accordance with the SCM regulation 28 (1) C and 29 (5) A and the Sekhukhune District Municipality policy, all bidders must be in good standing with the municipality. This includes having no outstanding municipal charges or other municipal accounts.

To comply with this requirement, the municipality will verify the status of each bidder's municipal accounts.

_____
Consent for Verification of Municipal Accounts

I, the undersigned, acting as the authorized representative of the above-named bidder, hereby provide consent for Sekhukhune District Municipality to verify whether the bidder has any outstanding amounts owed to the municipality

I understand and agree that:
- The municipality may access internal records and systems to confirm the account status associated with the bidder's registered address(es) or properties.
- This verification applies to all accounts held in the name of the bidder or any related entities as may be relevant to the submission.
- Any outstanding municipal accounts may result in disqualification or further investigation, in accordance with applicable procurement laws and municipal policies.
- All information obtained during this verification process will be treated confidentially and used solely for purposes of assessing the bidder's compliance with bid requirements.

_____
Bidder Information

Registered Business Name: _____
Business Registration Number: _____
Primary Business Address: _____

Contact Person: _____
Phone Number: _____
Email Address: _____
_____
Authorized Signatory:
I hereby declare that I am duly authorized to sign this consent on behalf of the bidder.

Name: _____
Position / Title: _____
Signature: _____
Date: _____

SEKHUKHUNE DISTRICT MUNICIPALITY

Bidder Municipal Services Account Verification Consent Form

Tender / Bid Number: _____

Bidder Name _____

In accordance with the SCM regulation 28 (1) C and 29 (5) A and the Sekhukhune District Municipality policy, all bidders must be in good standing with the municipality. This includes having no outstanding municipal charges or other municipal accounts.

To comply with this requirement, the municipality will verify the status of each bidder's municipal accounts.

_____

Consent for Verification of Municipal Accounts

I, the undersigned, acting as the authorized representative of the above-named bidder, hereby provide consent for Sekhukhune District Municipality to verify whether the bidder has any outstanding amounts owed to the municipality

I understand and agree that:

- The municipality may access internal records and systems to confirm the account status associated with the bidder's registered address(es) or properties.
- This verification applies to all accounts held in the name of the bidder or any related entities as may be relevant to the submission.
- Any outstanding municipal accounts may result in disqualification or further investigation, in accordance with applicable procurement laws and municipal policies.
- All information obtained during this verification process will be treated confidentially and used solely for purposes of assessing the bidder's compliance with bid requirements.

_____

Bidder Information

Registered Business Name: _____

Business Registration Number: _____

Primary Business Address:

_____

_____

Contact Person: _____

Phone Number: _____

Email Address: _____

_____

Authorized Signatory:

I hereby declare that I am duly authorized to sign this consent on behalf of the bidder.

Name: _____

Position / Title: _____

Signature: _____

Date: _____

AUTHORITY OF SIGNATORY

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.

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	
Date Resolution was taken	

Full name and surname of ALL Director(s) / Member (s)							
1.		**2.**					
3.		**2.**					
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**	

Part C1 White pages X 24

PORTION 2:

PART C1: AGREEMENTS AND CONTRACT DATA

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C1.1 FORM OF OFFER AND ACCEPTANCE

STAMP

C.1.1.1 OFFER

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

TENDER REFERENCE NO.: SK8/3/1-08/2025/26 REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORK

The tenderer, identified in the offer signature block below, has examined the documents listed in the tender data and addenda thereto as listed in the returnable schedules, and by submitting this offer has accepted the conditions of tender.

By the representative of the tenderer, deemed to be duly authorised, signing this part of this form of offer and acceptance, the tenderer offers to perform all of the obligations and liabilities of the contractor under the contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the conditions of contract identified in the contract data.

THE OFFERED TOTAL OF PRICES <u>INCLUSIVE</u> OF VALUE ADDED TAX IS

_____

(in words)

This offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance and returning one copy of this document to the tenderer before the end of the period of validity stated in the tender data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract identified in the contract data.

<u>FOR AND ON BEHALF OF THE TENDERER:</u>

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

C.1.1.2 ACCEPTANCE

By signing this part of this form of offer and acceptance, the employer identified below accepts the tenderer's Offer. In consideration thereof, the employer shall pay the contractor the amount due in accordance with the, conditions of contract identified in the contract data. Acceptance of the tenderer's offer shall form an agreement, between the employer and the tenderer upon the terms and conditions contained in this agreement and in the, contract that is the subject of this agreement.

The terms of the contract, are contained in:

Part C1 Agreements and Contract Data
Part C2 Pricing Data
Part C3 Scope of Work

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

Deviations from and amendments to the documents listed in the tender data and any addenda thereto listed in the tender schedules as well as any changes to the terms of the offer agreed by the tenderer and the employer during this process of offer and acceptance, are contained in the schedule of deviations attached to and forming part of this agreement. No amendments to or deviations from said documents are valid unless contained in this schedule.

The tenderer shall within two weeks after receiving a letter of acceptance, contact the employer's agent (whose details are given in the contract data) to arrange the delivery of guarantees, proof of insurance and any other documentation to be provided in terms of the conditions of contract identified in the contract data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

FOR AND ON BEHALF OF THE EMPLOYER:

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

SCHEDULE OF DEVIATIONS

Notes:

1. The extent of deviations from the tender documents issued by the employer prior to the tender closing date is limited to those permitted in terms of the conditions of tender;

2. A tenderer's covering letter shall not be included in the final contract document. Should any matter in such, letter, which constitutes a deviation as aforesaid become the subject of agreements reached during the process of, offer and acceptance, the outcome of such agreement shall be recorded here;

3. Any other matter arising from the process of offer and acceptance either as a confirmation, clarification or change to the tender documents and which it is agreed by the parties becomes an obligation of the contract shall also be recorded here;

4. Any change or addition to the tender documents arising from the above agreements and recorded here shall also be incorporated into the final draft of the contract.

4.1 Subject: _____

Details: _____

4.2 Subject: _____

Details: _____

4.3 Subject: _____

Details: _____

4.4 Subject: _____

Details: _____

4.5 Subject: _____

Details: _____

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

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

FOR AND ON BEHALF OF THE TENDERER:

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

FOR AND ON BEHALF OF THE EMPLOYER:

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

C1.2 CONTRACT DATA

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C.1.2.1 GENERAL CONDITIONS OF CONTRACT

The general conditions of contract applicable to this contract shall be the General Conditions of Contract for Construction Works, Third Edition (2015) of the South African Institution of Civil Engineering (SAICE), read together with the Variations and Additions to the Conditions of Contract as well as the Data provided by employer.

Tenderers, contractors and subcontractors shall obtain their own copies of the document General Conditions of Contract for Construction Works, Third Edition (2015) for tendering purposes and for use for the duration of the contract from the Secretary of the South African Institution of Civil Engineering, Private Bag X200, Halfway House,
Midrand, 1685 and shall bear all expenses in this regard.

C1.2.2 VARIATIONS AND ADDITIONS TO THE CONDITIONS OF CONTRACT

The following variations and additions to the General Conditions of Contract for Construction Works, Third Edition (2015), shall apply to this contract:

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
1.1.1 Definitions	**Add** the following new paragraph to sub-clause 1.1.1.5: *The Commencement Date shall not be later than 14 days after the date of delivery of the Letter of Acceptance unless otherwise agree in terms of the Contract*
	Add the following new sub-clause: *1.1.34 "Letter of Acceptance" means the written communication by the Employer to the Contractor recording the acceptance by the Employer of the Contractor's Tender.*
1.2.1 Delivery of Notices	*1.2.1.3 Sent by facsimile, electronic or any like communication irrespective of it being during office hours or otherwise.* *1.2.1.4 Posted to the Contractor's address and delivered by the postal authorities.* *1.2.1.5 Delivered by a courier service and signed for by the recipient or his representative.*
1.2.3 Authority of representatives	**Add** the following to the clause: *1.2.3.1 The Employer has authorised the* **Director: Infrastructure and Water Services** *to act on his behalf in respect of this Contract, save for such duties or functions:* *1.2.3.1.1 which other holders of office ex officio execute on behalf of the Employer; or* *1.2.3.1.2 for which the* **Director: Infrastructure and Water Services** *has no authority and the Employer's approval is required before execution thereof.*
1.3 General Provisions	**Add** the following new sub-clause: *1.3.6.1 The Employer may, in his sole discretion, provide technical support services to the Contractor. The technical team providing such support services will be appointed and remunerated by the Employer. In the case of EPWP Contractor Learnership Programmes, support services may be provided by the Department of Public Works. The technical team will consist of the Engineer and a person or persons acting as Training, Construction and Materials Managers or Construction Mentor, depending on the services to be provided and the scope of the functions to be executed*

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
	1.3.6.1.1 In addition to his duties and functions in terms of 1.3.6.1, the Engineer will coordinate the work of the technical team providing the support services. *1.3.6.1.2 The Construction Manager acts as mentor to the Contractor in respect of the following functions, which are described fully in the CESA document, Guideline Contract Specific Data C4- Construction Management Services of the Form of Agreement for Consulting Services for Labour Intensive Construction Projects:* *i. Programming the execution of the works* *ii. Interpretation of drawings, specifications and related contractual matters.* *iii. Workforce structuring, employment and management.* *iv. Guidance to expedite work progress/ improve productivity.* *v. Setting out of works.* *vi. Safety measures and legislation requirements.* *vii. Materials handling.* *viii. Tools and equipment needs.* *ix. Financial matters.* *x. Training requirements.* *xi. Security aspects.* *xii. Quality control systems* *1.3.6.1.3 The Materials Manager is responsible for the following functions which are described fully in the CESA document, Guideline Contract Specific Data C5 – Materials Procurement Services of the Form of Agreement for Consulting Services for Labour-Intensive Construction Projects on the Contract:* *i. Establishment of stores.* *ii. Determination of store administration procedures.* *iii. Determination of requirements of store staff.* *iv. Employment of store staff.* *v. Staff guidance, supervision and training.* *vi. Acquisition of materials.* *vii. Issue of materials.* *viii. Upholding of assets register.* *ix. Insurance of assets.* *1.3.6.1.4 The main role of the Mentor is to support the Learner Contractor and to impart knowledge that will enable the Contractor to compete independently as soon as possible. The Mentor provides a wide range of support and advice functions,*

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
	including but not limited to advice with regard to: *i. Finance and dealing with banks.* *ii. Business management.* *iii. Contract management.* *iv. Procurement of materials and other required services.* *v. Technical and engineering.* *vi. Construction planning and management.* *vii. Fulfilling of statutory and tax obligations.* *viii. Labour and human resource guidance.*
4.3 Legal Provisions 4.3.1 Compliance with applicable laws	**Replace** the sub-clause with the following: *4.3.1.1 Wages and conditions of work:* *i. For conventional construction works the Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) shall apply and the minimum employment conditions which will apply shall be guided by the latest Sectorial Determination: Civil Engineering Sector published from time to time.* *ii. Basic Conditions of Employment Act of 1997 (Act No 75 of 1997) as per Government Notice R63 of 25 January 2002, shall apply to works described in the Scope of Work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.*
	4.3.1.2 The Contractor shall comply with the Occupational Health and Safety Specification prepared by the Employer in terms of the Construction Regulations, 2003 promulgated in terms of Section 43 of the Occupational Health and Safety Act (Act No. 85 of 1993). *Without limiting the Contractor's obligations in terms of the Contract, the Contractor shall before commencement of the Works or any part thereof, be in the possession of an approved Health and Safety Plan.* *4.3.1.3 Notwithstanding any actions which the Employer may take, the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 (Act 85 of 1993), and all its regulations, including the Construction Regulations, 2003, for which he is liable as mandatory. By entering into this Contract, it shall be deemed that the parties have agreed in writing to the above provisions in terms of Section 37(2) of the Act. The Contractor shall sign the Occupational Health and Safety Agreement for Contract Work in the Local Municipality of Sekhukhune included in section C1.5.* *4.3.1.4 The Employer retains an interest in all inquiries conducted under this Contract in terms of Section 31 and/or 32 of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and its Regulations following any incident involving the Contractor and/or Sub-Contractor and/or their employees. The Contractor shall notify the Employer in writing of all investigations, complaints or criminal charges which may arise pursuant to work performed under this Contract in terms of the Occupational Health*

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
	and Safety Act, 1993 (Act 85 of 1993) and Regulations. *4.3.1.5 Contractor's Designer* *The Contractor and his designer shall accept full responsibility and liability to comply with the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and the Construction Regulations, 2003 for the design of the Temporary Works and those part of the Permanent Works which the Contractor is responsible to design in terms of the Contract*
4.5 Notices and Fees	**Add** the following new sub-clauses: *4.5.5 On the request of the Contractor, the Employer may, in his sole discretion, provide a support service to the Contractor in the giving of notices and in obtaining requisite consents, permissions and permits.* *4.5.6 On the request of the Contractor and certified by the Engineer as payable by the Contractor, the Employer may, in his sole discretion, advance funds to the Contractor in the form of a cheque in favour of the relevant institution or body, to facilitate the Contractor in complying with the provisions of this Clause.* *The Contractor shall provide proof to the Engineer of all payments effected by him.* *The Employer will deduct the sums advanced by the Employer and adjusted in accordance with the Contract Price Adjustment Formula or other rise-and-fall provision applicable to the Contract, from future payment certificates of the Contractor, if such sums are payable by the Contractor in the ordinary course of his business.* *The Employer will not advance funds in respect of cyclic sums payable by the Contractor in the ordinary course of his business.*
4.11 Competent employees	**Add** the following new sub-clause: *4.11.3 Notwithstanding the wording of this Clause, on request of the Contractor the Employer may in his sole discretion, provide trade-skills training to the Contractor's employees to improve their competency and efficiency commensurate with the requirements of the Works.*
6.1 Payment to Contractor	**Add** the following new sub-clause: *6.1.2 Payment for works identified in the Scope of Work as being labour-intensive shall only be made in accordance with the provisions of the Contract if the works are constructed strictly in accordance with the provisions of the Scope of Work. Any non-payment for such works shall not relive the Contractor in any way of his obligations either in contract or in delict.*
6.2 Security	**Add** the following new sub-clause:

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
	6.2.4 As an alternative to a guarantee, the Contractor may deposit with the Employer a cash amount in a sum equal to the amount stated in the Data provided by Employer. All the provisions in respect of the guarantee apply mutatis mutandis to the cash deposit accept that the amount deposited will be repaid to the Contractor within 30 (thirty) days after the issue of the Certificate or Certificates of Completion in respect of the whole of the permanent works.
5.12	**Add** the following new sub-clause *5.12.2.5 Critical path provision* *A delay in so far as extension of time is concerned, will be regarded as a delay only if, on a claim by the Contractor in accordance with the General Conditions of Contract, the Engineer rules that all progress on an item or items of work on the critical path of the approved programme for the execution of the Works by the Contractor, has been brought to a halt. Delays on normal working days only, based on a working week, of five normal working days, will be taken in account for the extension of time.* *5.12.2.6 Extension of time due to abnormal rainfall* *Extension of time due to abnormal rainfall shall be determined by means of Method 1, if rainfall records and/or values derived from rainfall records are supplied in the Scope of Work, otherwise Method 2 shall apply.* *Method 1: Rainfall formula method* *The rainfall records and/or values derived from rainfall records from a suitable rainfall station near the Site, which are supplied in the Project Specifications, shall be considered suitable for the determination of extension of time due to abnormal rainfall in accordance with this method.* *Extension of time arising from abnormal rainfall, shall be calculated separately for each calendar month or part thereof for the full period of completion of the Contract, including any extension thereof, in accordance with the rainfall formula given below:* $V = (N_w - N_n) + \frac{(R_w - R_n)}{X}$ *If V is negative and its absolute value exceeds N_n, then V shall be equal to minus N_n.* *If V is positive and greater than the number of calendar days in the calendar month under consideration, V shall be taken as equal to the number of calendar days in the relevant calendar month.* *The symbols shall have the following meaning:*

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
	V = *Extension of time in calendar days in respect of the calendar month under consideration* N_w = *Actual number of days during the calendar month on which a rainfall of Y mm or more has been recorded.* R_w = *Actual rainfall in mm for the calendar month under consideration.* N_n = *Average number of days as derived from existing rainfall records, on which a rainfall or Y mm or more has been recorded for the calendar month. Rainfall records and/or the derived values of N_n will be provided in the Specifications.* R_n = *Average rainfall in mm for the calendar month, as derived from existing rainfall records. Rainfall records and/or the derived values of R_n will be provided in the Project Specifications.* X = *20 unless otherwise provided in the Project Specifications* Y = *10 unless otherwise provided in the Project Specifications* *The total extension of time shall be the algebraic sum of the monthly totals for the period under consideration. However, if the grand total is negative the time for completion shall not be reduced on account of abnormal rainfall. Extension of time for parts of a month shall be calculated by pro rata values of N_n and R_n being used.* *The factor $(N_w - N_n)$ shall be considered to represent a fair allowance for variations from the average number of days during which rainfall exceeds Y mm and wet conditions prevented or disrupted work.* *The factor $\frac{(R_w - R_n)}{X}$ shall be considered to represent a fair allowance for variations from the allowance for variations from the average number of days when wet conditions further to that allowed for the factor $(N_w - N_n)$, prevented or disrupted work during the calendar month.* *Accurate rain gauging shall be taken at a suitable point on Site and the Contractor shall, at his own expense, take all necessary precautions to ensure that the rain gauges cannot be interfered with.* *This formula does not take into account further on concurrent delays which could be caused by other abnormal climatic conditions such as floods, which have to be determined separately in accordance with Sub-Clause (42.5 Critical Plath Provision) hereof.* *<u>Method 2: Expected delay method</u>* *The Contractor shall make provision in his programme for the execution of the Works, for an expected delay of "n" normal working days (based on a working week of five normal working days) due to normal rainfall, for which he will not receive any extension of time.* *Unless otherwise provided in the Project Specifications, the value of "n" shall be taken as equal to the tendered time for completion of the Works in*

CLAUSE / SUB-CLAUSE	VARIATION / ADDITION
	months, rounded off to an integer. *Extension of time during normal working days will be granted to the degree to which actual delays as determined in accordance with Sub-Clause (42.5 Critical Path Provision) hereof, exceed the number of "n" normal working days.* *The value of "n" does not take into account further or concurrent delays which are caused by other abnormal climatic conditions such as floods, which have to be determined separately in accordance with Sub-Clause (42.5 Critical Path Provision) hereof.*
6.10 Payments	**Replace** the following wording in the sub-clause: *within 7 days* replace with *within 7 work days* *within 28 days* replace with *within 35 work days*
6.2.1 – 6.2.3	**Replace** the following in the sub-clauses: *Bank* replace with *Bank or Insurance Company*
6.1 Payment to contractor	**Add** the following new sub-clause *6.1.2 The Contractor shall be paid in the currency of the Republic of South Africa only at the Office of the Chief Financial Officer of the SEKHUKHUNE DISTRICT MUNICIPALITY, unless otherwise stated in the Data provided by Employer.*
9.2.1 Termination by the employer	**Replace** the sub-clause with the following: *9.2.1.3.7 The Contractor or anyone on his behalf or in his employ would pay, offer or offer as payment to any person in the employ of the Employer, or in the employ of the Engineer, a gratuity or reward or commission.*
CONTRACT PRICE ADJUSTMENT SCHEDULE	Not applicable to this contract

C1.2.3 DATA PROVIDED BY THE EMPLOYER

<table>
<tr><th colspan="2">CLAUSE/OPTION</th><th colspan="2">DATA</th></tr>
<tr><td>1.
1.1.1.15</td><td>Definitions, interpretations and general provisions</td><td colspan="2">The legal name of the Employer is Sekhukhune District Municipality</td></tr>
<tr><td>1.2.1.2</td><td></td><td>• Physical Address:</td><td>Sekhukhune District Municipality
3 West Street
Groblersdal
0470</td></tr>
<tr><td></td><td></td><td>• Postal Address:</td><td>The Municipal Manager
Sekhukhune District Municipality
Private Bag X861
Groblersdal
0470</td></tr>
<tr><td></td><td></td><td>• Facsimile:</td><td>013 262 3688</td></tr>
<tr><td></td><td></td><td>• E-Mail Address:</td><td>sekinfo@sekhukhune.gov.za</td></tr>
<tr><td>5.8.1</td><td></td><td colspan="2">• The special non-working days are:

▪ Annual builders’ holiday
▪ Statutory public holidays</td></tr>
<tr><td>3
3.1.3</td><td>Employer’s Agent</td><td colspan="2">• The Employer’s Agent is required to obtain approval of the Employer:

▪ for expenditure on the Contract to exceed the Contract Price;
▪ prior to the execution of any of the following duties of functions:

<table>
<tr><th>CLAUSE/OPTION</th><th>DUTY/FUNCTION</th></tr>
<tr><td>1.1.1.5</td><td>Delivery of the written notice to commence the execution of the works</td></tr>
<tr><td>3.2.1</td><td>Nomination of person as Engineer’s Representative</td></tr>
<tr><td>3.2.4</td><td>Authorization to Engineer’s Representative or any other person</td></tr>
<tr><td>5.6.3</td><td>Approval of programme of construction</td></tr>
</table></td></tr>
<tr><td colspan="2"></td><td colspan="2">
<table>
<tr><td>5.9.7</td><td>Approval of Contractor’s designs</td></tr>
<tr><td>4.10.1</td><td>Approval to use the Site for any other purpose such as housing</td></tr>
<tr><td>8.2.2</td><td>Order to repair and make good damage arising from any excepted risk</td></tr>
<tr><td>6.3</td><td>Variation Orders in respect of variations which are not small</td></tr>
<tr><td>5.8.1</td><td>Approval to work on special non-working days and between sunset and sunrise</td></tr>
</table></td></tr>
</table>

		5.11.2 Suspension of progress of the Works 5.7.2 Permission to carry out work by day and by night 5.13.2 Reduction of penalty for delay 6.6 Instruction to expend on Provisional and Prime Cost Sums 6.11 Adjustment of Preliminary and General allowances 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 7.8.1 Order to execute work of repair, etc, during the Defects Liability Period 7.8.2 Determination of value of repair work
6.2.	Guarantee	• The time to deliver the Deed of Guarantee is **14 (fourteen) days after receipt of the Letter of Acceptance**. • The liability of the guarantee shall be for **10 (ten) %** of the Contract Price, excluding contingencies and VAT.
5.3	Commencement of the works	• The Contractor shall commence executing the Works within **14 (fourteen) days** from the Commencement Date.
5.6	Program of the Works	• The Contractor shall deliver his programme of work within **14 (fourteen) days** from the Commencement Date.
8.6	Insurances	A Coupon **Policy** for Special Risks is to be issued. The limit of the liability insurance is R5, 000,000.00 (five million rand) for any single claim – the number of claims to be unlimited during the construction and Defects Liability period. (To be approved by the Employer's Claims Management Services Provider)
10.1	Period	• The appointment of the Contractor is valid for **TEN (10)** months period.
5.13	Penalty for delay	• The penalty for failing to complete the works within the time limit, plus approved extensions of time or conditional thereof is 1/30 percent of contract sum excluding VAT per calendar day.
6.10. 6.10.2 6.10.3	Interim payments	• The percentage advance on materials not yet built into the Permanent Works is ***80 (eighty) %***. • The percentage retention on amounts due to the Contractor is ***10 (ten) %*** exclusive of VAT.

	• The limit of retention money is ***10 (ten) % of the Contract Price excl. VAT***.
1.1.1.13 Defects	• The Defects Liability Period is ***12 months*** from the date of the Certificate of Completion.

C1.2.4 DATA PROVIDED BY THE CONTRACTOR

CLAUSE/OPTION	DATA	
1. Definitions, interpretations and general provisions 1.1.1.9	• The legal name of the Contractor is	
1.2.1.2	• Physical Address:	
	• Postal Address:	
	• Facsimile:	
	• E-Mail Address:	
6.3 Value of variations 6.5.1.2.3	• The percentage allowance to cover overhead charges is _____ %.	
6.8 Adjustment in prices 6.8.3	• The variation in cost of special materials is	

Type of material	Unit	Base Rate or Price

C1.3 FORM OF GUARANTEE

WHEREAS

SEKHUKHUNE DISTRICT MUNICIPALITY
(Hereinafter referred to as the "Council"),

enters into a CONTRACT NO: **SK8/3/1-08/2025/26 REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS**

with

_____
(Hereinafter referred to as the "Contractor")

for

_____

_____

AND WHEREAS in terms of the General Conditions of the Contract the Contractor is required to furnish an acceptable independent guarantee for the due and proper fulfilment by him of all his duties and obligations in terms of the said contract.

NOW THEREFORE we the undersigned _____

_____ (full names of authorized agent(s))

and acting in my/our capacity as_____

and _____

and as such duly authorized thereto, do hereby bind the said _____

(Hereinafter referred to as the "Guarantor") as surety and co-principal Debtor *in solidum* for the sum of

R _____ (_____)

for the due and proper fulfilment by the Contractor of all or any of his duties and obligations in terms of the said Contract. The guarantee shall not be interpreted as accessory to the contract between Council and the Contractor.

The Guarantor further undertakes, in the event of the Contractor failing duly and properly to fulfil any of his duties and obligations in terms of the said Contract, or if the Contractor is placed under provisional liquidation or in the event of termination of the Contract by the Council in terms of the General Conditions of Contract, to pay to the Council the said sum of

R _____ (_____)

or such portion thereof as may be required by the Council, immediately upon receiving written demand from the Council which written demand shall be addressed to the Guarantor at (*domicilium* address)

The Guarantor further hereby renounces the benefits of the legal exceptions:

Exception on numerate pecuniae

Exception non causa debiti

Beneficium de duobus vel pluribus reis debendi

Beneficium ordinis deu excussionis

Beneficium divisionis

and all other defence which could be pleaded against the validity of this guarantee, with the meaning and effect of which it declares itself to be fully acquainted.

This undertaking shall remain in full force and effect up to and including the date of issue of the Certificate of Completion, as provided for in the General Conditions of Contract, unless the Guarantor is advised in writing by the Council of his intention to institute claims, and the particulars thereof, in which event this guarantee shall remain in full force and effect until all such claims have been paid or liquidated. Notwithstanding the aforesaid, the Council may at its' sole discretion elect to have the amount provided for under this guarantee, paid out directly to it in the case of breach of contract by the Contractor by giving the Guarantor written notice to that effect, notwithstanding the fact that the Council may decide not to institute any further legal action against the Contractor.

This document is not negotiable or transferable.

FOR AND ON BEHALF OF THE BANKER/INSURER:

BANKER/INSURER: _____

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

NB: The performance guarantee shall be issued by an insurance company duly registered in terms of the Insurance Act (Long Term Insurance Act No 52 of 1998 or Short-Term Insurance Act No 53 of 1998) or by a bank duly registered in terms of the Banks Act (No 94 of 1990). A performance guarantee from one of the companies on the list at the following link will be accepted: https://www.resbank.co.za/en/home/what-we-do/Prudentialregulation/insurers-list
List of institutions from which contract /deposit guarantees can be accepted

C1.4 HEALTH AND SAFETY AGREEMENT

Article of Agreement in terms of Section 37(2) of the Occupational Safety Act, 1993 between

SEKHUKHUNE DISTRICT MUNICIPALITY
(Hereinafter referred to as the "EMPLOYER")

AND

_____

_____

_____

_____

Herein represented by _____ in his/her capacity as _____ duly authorised

by virtue of a resolution dated _____, attached hereto Annexure A, of the said

_____ (herein after referred to as the "CONTRACTOR")

WHEREAS the CONTRACTOR is the mandatory of the EMPLOYER as contemplated in an agreement in respect of

TENDER REFERENCE NO.: SK8/3/1-08/2025/26

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

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

NOW THEREFORE the parties agree as follows:

(a) The CONTRACTOR undertakes to acquaint the appropriate officials and employees of the CONTRACTOR with all relevant provisions of the ACT and the regulations promulgated in terms thereof.

(b) The CONTRACTOR undertakes that all relevant duties, obligations and prohibitions imposed in terms of the ACT and Regulations will be fully complied with. Provided that should the EMPLOYER prescribe certain arrangements and procedures, that same shall be observed and adhered to by the CONTRACTOR, his officials and employees. The CONTRACTOR shall bear the onus of acquainting himself/herself/itself with such arrangements and procedures.

(c) The CONTRACTOR hereby accepts sole liability for such due compliance with the relevant duties, obligations, prohibitions, arrangements and procedure, if any, imposed by the ACT and Regulations and the EMPLOYER expressly absolves the EMPLOYER from itself being obliged to comply with any of the aforesaid duties, obligations, prohibitions, arrangements and procedure as the case may be.

(d) The CONTRACTOR agrees that any duly authorised officials of the EMPLOYER shall be entitled, although not obliged, to take such steps as may be necessary to ensure that the CONTRACTOR has

complied with the undertakings as more fully set out in paragraphs 1 and 2 above, which steps may include, but shall not be limited to, the right to inspect any appropriate site or premises occupied by the CONTRACTOR,
or to inspect any appropriate records held by the CONTRACTOR or to take such steps it may deem necessary to remedy the default of the CONTRACTOR at the cost of the CONTRACTOR.

(e) The CONTRACTOR shall be obliged to report forthwith to the EMPLOYER any investigations, complaint or criminal charge which may arise as a consequence of the provisions of the ACT and Regulations, pursuant to work performed in terms of this agreement, and shall, on written demand, provide full details in writing of such an investigation, complaint or criminal charge as the case may be

FOR AND ON BEHALF OF THE CONTRACTOR:

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

FOR AND ON BEHALF OF THE EMPLOYER:

NAME:
(in BLOCK letters) _____

CAPACITY:
(of authorized agent) _____

SIGNATURE:
(of authorized agent) _____

SIGNED at _____ on this _____ day of _____

WITNESSES:
(Full name in BLOCK letters and signature)

1. _____ _____

2. _____ _____

C1.5 ADJUDICATOR'S AGREEMENT

This agreement is made on the _____ day of _____ between:

_____ *(name of company / organisation)*

of _____

_____ *(address)* and

_____ *(name of company / organisation*

of

_____

_____ *(address)* (the Parties) and

_____ *(name of Adjudicator)*

of _____

_____ *(address)* (the Adjudicator).

Disputes or differences may arise/have arisen[1] between the Parties under a Contract dated _____ and known as _____

and these disputes or differences shall be/have been[2] referred to adjudication in accordance with the CIDB Adjudication Procedure, (hereinafter called "the Procedure") and the Adjudicator may be or has been requested to act.

IT IS NOW AGREED as follows:

1 The rights and obligations of the Adjudicator and the Parties shall be as set out in the Procedure.
2 The Adjudicator hereby accepts the appointment and agrees to conduct the adjudication in accordance with the Procedure.
3 The Parties bind themselves jointly and severally to pay the Adjudicator's fees and expenses in accordance with the Procedure as set out in the Contract Data.
4 The Parties and the Adjudicator shall at all times maintain the confidentiality of the adjudication and shall endeavour to ensure that anyone acting on their behalf or through them will do likewise, save with the consent of the other Parties which consent shall not be unreasonably refused.
5 The Adjudicator shall inform the Parties if he intends to destroy the documents which have been sent to him in relation to the adjudication and he shall retain documents for a further period at the request of either Party.

[1] Delete as necessary
[2] Delete as necessary

SIGNED by: _____	SIGNED by: _____	SIGNED by: _____
Name: _____	Name: _____	Name: _____
who warrants that he / she is duly authorised to sign for and on behalf of the first Party in the presence of	who warrants that he / she is duly authorised to sign for and behalf of the second Party in the presence of	the Adjudicator in the presence of
Witness _____	Witness: _____	Witness: _____
Name: _____	Name _____	Name: _____
Address: _____	Address: _____	Address: _____
Date: _____	Date: _____	Date: _____

Contract Data

1	The Adjudicator shall be paid at the hourly rate of R _____ in respect of all time spent upon, or in connection with, the adjudication including time spent travelling.
2	The Adjudicator shall be reimbursed in respect of all disbursements properly made including, but not restricted to: (a) Printing, reproduction and purchase of documents, drawings, maps, records and photographs. (b) Telegrams, telex, faxes, and telephone calls. (c) Postage and similar delivery charges. (d) Travelling, hotel expenses and other similar disbursements. (e) Room charges. (f) Charges for legal or technical advice obtained in accordance with the Procedure.
3	The Adjudicator shall be paid an appointment fee of R _____ This fee shall become payable in equal amounts by each Party within 14 days of the appointment of the Adjudicator, subject to an Invoice being provided. This fee will be deducted from the final statement of any sums which shall become payable under item 1 and/or item 2 of the Contract Data. If the final statement is less than the appointment fee the balance shall be refunded to the Parties.
4	The Adjudicator is/is not[1] currently registered for VAT.
5	Where the Adjudicator is registered for VAT it shall be charged additionally in accordance with the rates current at the date of invoice.
6	All payments, other than the appointment fee (item 3) shall become due 7 days after receipt of invoice, thereafter interest shall be payable at 5% per annum above the Reserve Bank base rate for every day the amount remains outstanding.

[1] Delete as necessary

Part C2 Yellow pages X 24

PART C2 PRICING DATA

SEKHUKHUNE DISTRICT MUNICIPALITY

REFURBISHMENT OF DENNILTON

WASTE WATER TREATMENT WORKS

C2.1 PRICING INSTRUCTIONS

1 The General Conditions of Contract, the Contract Data, the Specifications (including the Project Specifications) and the Drawings shall be read in conjunction with the Bill of Quantities.

2 The Bill comprises items covering the Contractor's profit and costs of general liabilities and of the construction of Temporary and Permanent Works.

Although the Tenderer is at liberty to insert a rate of his own choosing for each item in the Bill, he should note the fact that the Contractor is entitled, under various circumstances, to payment for additional work carried out and that the Engineer is obliged to base his assessment of the rates to be paid for such additional work on the rates the Contractor inserted in the Bill.

Clause 8 of each Standardized Specification, and the measurement and payment clause of each Particular Specification, read together with the relevant clauses of the Project Specifications, all set out which ancillary or associated activities are included in the rates for the specified operations.

3 Descriptions in the Bill of Quantities are abbreviated and may differ from those in the Standardized and Scope of Work. No consideration will be given to any claim by the Contractor submitted on such a basis. The Bill has been drawn up generally in accordance with the latest issue of Civil Engineering Quantities[1]. Should any requirement of the measurement and payment clause of the appropriate Standardized or Project Specification(s) be contrary to the terms of the Bill or, when relevant, to the Civil Engineering Quantities, the requirement of the appropriate Standardized, Project, or Particular Specification as the case may be, shall prevail.

4 Unless stated to the contrary, items are measured net in accordance with the Drawings without any allowance having been made for waste.

5 The amounts and rates to be inserted in the Bill of Quantities shall be the full inclusive amounts to the Employer for the work described under the several items. Such amounts shall cover all the costs and expenses that may be required in and for the construction of the work described, and shall cover the costs of all general risks, profits, taxes (but excluding value-added tax), liabilities and obligations set forth or implied in the documents on which the Tender is based.

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

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

Should the Tenderer group a number of items together and tender one sum for such group of items, the single tendered sum shall apply to that group of items and not to each individual item, or should he indicate against any item that full compensation for such item has been included in another item, the rate for the item included in another item shall be deemed to be nil.

The tendered rates, prices and sums shall, subject only to the provisions of the Conditions of Contract, remain valid irrespective of any change in the quantities during the execution of the Contract.

7 The quantities of work as measured and accepted and certified for payment in accordance with the Conditions of Contract, and not the quantities stated in the Bill of Quantities, will be used to determine payments to the Contractor. The validity of the Contract shall in no way be affected by differences between the quantities in the Bill of Quantities and the quantities certified for payment.

Ordering of materials are not to be based on the Bill of Quantities, but only on information issued for construction purposes.

[1] The standard system of measurement of civil engineering quantities published by the South African Institution of Civil Engineers.

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

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

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

mm	=	millimetre
m	=	metre
km	=	kilometre
km-pass	=	kilometre-pass
m^2	=	square metre
m^2-pass	=	square metre-pass
ha	=	hectare
m^3	=	cubic metre
m^3-km	=	cubic metre-kilometre
kW	=	kilowatt
kN	=	kilonewton
kg	=	kilogram
t	=	ton (1 000 kg)
%	=	per cent
MN	=	meganewton
MN-m	=	meganewton-metre
PC Sum	=	Prime Cost Sum
Prov Sum	=	Provisional Sum
w/day	=	working day
Sum	=	lump sum
R/O	=	Rate only
h	=	hour
kℓ	=	kilolitre
kPa	=	kilopascal
MPa	=	megapascal

SEKHUKHUNE DISTRICT MUNICIPALITY

REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS

C2.2 BILL OF QUANTITIES

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
	SABS 1200A	**SECTION 1 : GENERAL**				
1.1	**8.3 and PSA 1.1**	**Fixed Charge Items**				
1.1.1	8.3.1	Contractual Requirements				
		a) Surety / guarantee for 10% of value of contract	sum	1		
		b) All Risks Insurance (Insurance of the Works and Plant)	sum	1		
	Clause 6 of Special Conditions	c) Public Liability Insurance (Third Party) - for Contract period plus 12 months	sum	1		
1.1.2	8.3.2	Establishment of Facilities on Site				
1.1.2.1	8.3.2.1	Facilities for Engineer				
	PSAB 1.2	a) Carports (2x)	Sum	1		
	PS 7	b) Construction nameboard (2x)	Sum	1		
1.1.2.2	8.3.2.2 &	Facilities for Contractor				
		a) Offices and storage facilities	sum	1		
		b) Workshops	sum	1		
		c) Ablution and latrine facilities	sum	1		
		d) Tools and equipment	sum	1		
		e) Water supply, electrical power and communications	sum	1		
		f) Dealing with water	sum	1		
		g) Access	sum	1		
1.1.3	8.3.3	Other fixed charge obligations. Tender items must be fully specified.				
		.....	sum			
		.....	sum			
1.1.4	8.3.4	Removal of Site Establishment on completion	sum	1		
TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
1.2		**Scheduled Time-Related Items**				
1.2.1	8.4.1	Contractual requirements	sum	1		
1.2.2	8.4.2	Operation and Maintenance of Facilities on Site	sum	1		
1.2.2.1	8.4.2.1	Facilities for Engineer				
		a) Carports (2x)	Sum	1		
		b) Construction nameboard (2x)	Sum	1		
1.2.2.2	8.4.2.2	Facilities for Contractor				
		a) Office and storage facilities	sum	1		
		b) Workshops	sum	1		
		c) Ablution and latrine facilities	sum	1		
		d) Tools and equipment	sum	1		
		e) Water supply, electrical power and communications	sum	1		
		f) Dealing with water	sum	1		
		g) Access	sum	1		
1.2.3	8.4.3	Supervision for Duration of the Contract	sum	1		
1.2.4	8.4.4	Company and Head Office Overhead Costs for Duration of the Contract	sum	1		
1.2.5	8.4.5	Other Time-Related Obligations - Tender items must be fully specified				
		.....	sum			
		.....	sum			
		.....	sum			
TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
1.3	**8.5b**	**Sums stated provisionally by Engineer**				
1.3.1		Contingency item for moving of any unknown existing services	sum	1	150,000.00	150,000.00
1.3.2		Specialist security doors for all pump stations, sliding door, reinforced concrete by specialist supplier, including installation.	sum	1	350,000.00	350,000.00
1.3.3		Mechanical grinder by specialist supplier, including installation.	sum	1	550,000.00	550,000.00
		Pressure testing of rising main, including allowance to repair	sum	1	600,000.00	600,000.00
1.3.4		Supply, delivery installation of all pumps required at pump station, discharge pump station and chlorine pump station, including commissioning and testing of all pumps.	sum	1	850,000.00	850,000.00
1.3.5		Upgrading of all electrics at pump station, and refurbishment of generator, by specialist supplier.	sum	1	300,000.00	300,000.00
1.3.6		Flow meters and hour meters for pumps by specialist supplier, including installation.	sum	1	100,000.00	100,000.00
1.3.7		Chlorination, including tank and mechanical equipment by specialist supplier, including installation.	sum	1	450,000.00	450,000.00
1.3.8		Overhead electrical line and connections to pump station at WWTW by specialist supplier, including installation.	sum	1	260,000.00	260,000.00
1.3.9		Enzymes for pump stations and WWTW.	sum	1	400,000.00	400,000.00
1.3.10		Complete set of as built drawings of all mechanical and electrical work.	sum	1	10,000.00	10,000.00
1.3.11		Complete set of operation and maintenance manuals with all the relevant information and project details and suppliers.	sum	1	5,000.00	5,000.00
1.3.12		Training of operational staff - 10 sessions of 2 hours each.	hours	10	500.00	5,000.00
1.3.13		Provision of 2 sets of tools, for maintenance use by the SDM maintenance department.	sum	1	5,000.00	5,000.00
1.3.14		Bulk water meters for WWTW, for monitoring water losses.	sum	1	600,000.00	600,000.00
1.3.15		Allowance for borehole drilling, for groundwater contamination monitoring, as required by DWS.	sum	1	650,000.00	650,000.00
TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
1.4	**8.6**	**Prime Cost Items**				
1.4.1		**Community Liaison Officer**				
		a) Prime cost item for employment of Community Liaison Officer for duration of Contract	Months	10	35,000.00	350,000.00
		b) Overheads, charges and profit on (a) above (% of R350,000.00)	%	350,000		
1.4.2		**Social Facilitation**				
		a) Prime cost item for Social Facilitation to assist the Contractor and with all community related issues as ordered by the Engineer	Months	10	60,000.00	600,000.00
		b) Overheads, charges and profit on (a) above (% of R600,000.00)	%	600,000		
1.4.3		**Municipal water connections**				
		a) Prime cost item for municipal water connection by District Municipality, as required for the contract.	Sum		20,000.00	20,000.00
		b) Overheads, charges and profit on (a) above (% of R20,000.00)	%	20,000		
1.4.4		**OH&S monitoring**				
		a) Prime cost item for OH&S monitoring, as required by SDM.	Months	10	50,000.00	500,000.00
		b) Overheads, charges and profit on (a) above (% of R500,000.00)	%	500,000		
1.4.5		**Temporary support of electrical and Telkom poles**				
		a) Prime cost item for temporary support of service poles, adjacent to open excavations	Sum			40,000.00
		b) Overheads, charges and profit on (a) above (% of R40,000.00)	%	40,000		
1.4.6		**Land survey and SG pegs**				
		a) Prime cost item for replacing of some SG pegs prior to and after bulk work	Sum	1		50,000.00
		b) Overheads, charges and portion on (a) above (% of R50,000.00)	%	50,000		
TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
1.4.7		**Registration of servitudes**				
		a) Registration of servitudes for pump station, rising main, WWTW, by registered professional Land Surveyor	Sum	1		100,000.00
		b) Overheads, charges and portion on (a) above (% of R100,000.00)	%	100,000		
1.5	**8.8**	**Temporary Works**				
1.5.1		**Surveyor**				
		a) Setting out of works, control of pipe and pond alignment and levels and GPS recording of all services, as built information, submission of dxf drawings.	Months	10		
1.5.2	8.8.3	**Protection of open excavations until construction in vicinity is complete**				
		As work is being done in residential and urban areas the Contractor is fully responsible for safeguarding all open excavations at all times, especially at night and over weekends and holidays.				
		Protection of all structures, works, open trenches, roads excavations, etc.	Sum	1		
TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
1.5.3		**OH&S, Construction Regulations**				
		Compliance with the Occupational Health & Safety Act (Act 85 of 1993) and all relevant and applicable regulations, especially the Construction Regulations, 2003 as promulgated on 18 July 2003 under Section 43 of the Occupational Health & Safety Act (Act 85 of 1993), including all amendments as amended from time to time, for the duration of the contract. Refer to Section 10.				
1.5.3.1		Provision of an OH&S Plan in terms of Clause 5 of the Schedule, to be evaluated and approved by the Engineer, prior to the commencement of work as well as a full consolidated copy of such plan at the completion of construction work inclusive of a record of all drawings, designs, copies of statutory appointments, material used and other similar information concerning the completed contract.	Sum	1		
1.5.3.2		Provision of a Risk Assessment in terms of Clause 7 of the Schedule for this contract, to be evaluated and approved by the Engineer.	Sum	1		
1.5.3.3		Implementation of approved OHS Plan for duration of contract, including daily / weekly inspections, monthly meetings, required audits, consolidated health and safety file, etc.	Sum	1		
1.5.3.4		Registration with Compensation Fund or approved / licensed compensation insurer.	Sum	1		
1.5.3.5		Safety Officer : Full time competent employee of the Contractor as construction supervisor and assistant construction supervisor/s for duration of contract.	Month	10		
1.5.3.6		Training requirements for all employees in terms of the Construction Regulations	Sum	1		
1.5.3.7		Provision of adequate OHS equipment for labour, site staff, visitors to site, etc.	Sum	1		
1.5.3.8		Allowance to protect and secure above equipment on site	Month	10		
TOTAL SECTION 1 - CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
	SABS 1200 C	**SECTION 2 : SITE CLEARANCE**				
2.1		**New Fencing**				
		a) Supply and erect new ClearVu perimeter fencing 2.4 m high with spikes, including all corner and support posts	m	1800		
		b) One vehicle gate, to suit	no	2		
		c) One pedestrian gate, to suit	no	2		
2.2		**New electric fence for new ClearVu fence**				
		a) 800 mm high angled fence	m	1800		
		b) 2 400 mm high vertical fence	m	1800		
2.2		**Excavation**				
		a) Excavation for fence posts	m^3	43		
		b) 25 MPa Concrete foundation	m^3	43		
2.3		**Detection and exposure of existing services**				
		a) 0 - 2.0m deep	no			Rate only
		b) 2,0m - 3,0m	no			Rate only
		c) 3,0m - 4,0m	no			Rate only
2.4		**Removal of rubbish on site**				
		Remove rubbish on site and spoil in approved dump. Dump to be found by Contractor	m^3	550		
2.5		**Existing fencing**				
		Remove existing fencing on site, store and reinstate	m	1243		
TOTAL SECTION 2 - CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		SECTION 3 : BULK EARTHWORKS				
	SABS 1200 DM	**Earthworks**				
3.1		**Clearing of all vegetation on the floor and the inside walls of the ponds**				
		a) Clearing of vegetation on the floor	m^2	11,990		
		b) Clearing of vegetation on the inside walls	m^2	1,496		
		Vegetation to be removed from the ponds and spread around the ponds.				
3.2		Cut to spoil, and spreading, of in situ material of pond floors.	m^3	19,680		
3.3		Roadbed type preparation of top layer to a depth of 100 mm on completion of the cut, and compaction of the insitu material to 93% mod AASHTO density for the floor of the ponds	m^3	1,199		
3.4		Finishing off of embankments, grading to smooth finish, final raking	m^2	2,140		
3.5	8.3.3	Working off of top level, to line and level, of top of embankment.	m	1,560		
TOTAL SECTION 3 - CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		SECTION 4 : ADDITIONAL ITEMS FOR EXISTING PONDS				
4.1		**Concrete floor (Pond 1 only)**				
		a) Excavation for concrete work	m^3	550		
		b) Formwork, 150 m high	m	250		
		c) Mesh 395 reinforcing	m^2	3666		
		d) 25 MPa/19 mm concrete for pond floor	m^3	625		
		e) Class U2 surface finish on concrete floor	m^2	3666		
4.4		**Lining of ponds - five ponds**				
		a) Supply and place 20 mm river sand in ponds to receive liner	m^3	4 398		
		b) Lining of ponds, using Aquatan or similar type lining, polyethylene 0.4 mm thick, including welding, sealing and testing of all joints;				
		(i) Floor	m^2	16 990		
		(ii) Walls	m^2	5 968		
		c) Anchoring of liner in cut off trench, on top of embankment including excavations, installation of liner and backfilling	m	3 485		
TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		SECTION 5 : PIPES AND FITTINGS FOR WWTW				
	SABS 1200 DB	**Earthworks (Pipe Trenches)**				
5.1	**8.3.2(a) & PSDB 3.5**	Excavation in all material, shoring where necessary, backfilling to whaleback finish, compaction, compaction tests, and spoiling of surplus material, including restricted excavation				
		Pipes up to 200 mm diam				
		a) 0 - 1.5 m	m^3	450		
5.2	**8.2.1**	**Supply material as per specification from trench excavations and install**				
5.2.1		Selected granular bedding material for 150 mm bedding	m^3	300		
5.2.2		Selected backfill material 300 mm above pipe crown	m^3	375		
	SABS 1200 L	**Medium Pressure Pipelines**				
5.3	**8.2.1**	**Supply material, deliver to site, distribute, bed on Class B bedding, connect, cut, sterilise and test**				
5.3.1		Class 12 uPVC pipes with rubber ring joints to SABS 966, 1998, Part 1 in standard lengths complete with one connection collar (outside diameter)				
		a) 90 mm diam	m	20		
		b) 110 mm diam	m	150		
		c) 160 mm diam	m	200		
		d) 200 mm diam	m	250		
TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
5.4	**8.2.2**	**Extra over 5.3.1 for the supply laying and bedding of special sections complete with couplings**				
5.4.1		Class 12, uPVC bends with rubber ring joints to SABS 966, 1998, each bend with spigot and socket				
		a) 90 mm diam x 45 degree bend	no	2		
		b) 90 mm diam x 22 degree bend	no	2		
		c) 110 mm diam x 45 degree bend	no	3		
		d) 110 mm diam x 22 degree bend	no	4		
		e) 160 mm diam x 45 degree bend	no	6		
		f) 160 mm diam x 22 degree bend	no	7		
		g) 160 mm diam x 11 degree bend	no	3		
		h) 200 mm diam x 22 degree bend	no	5		
		i) 200 mm diam x 45 degree bend	no	6		
		j) 200 mm diam x 11 degree bend	no	4		
5.4.2		Cast iron or SG iron fittings for use with uPVC piping, grade 14 cast iron wall thickness to SABS 546, bitumen dipped, sockets to SABS 966 with rubber rings, working pressure 1,6 Mpa				
		a) 90 mm diam				
		flange adaptor	no	2		
		b) 110 mm diam				
		flange adaptor	no	4		
		c) 160 mm diam				
		flange adaptor	no	10		
		d) 200 mm diam				
		flange adaptor	no	9		
5.5	**8.2.3**	**Extra over 5.3.1 for the supply and installation of valves**				
		Waterworks resiliant seal gate valve to SABS 664, class 16 with cap top, non-rising spindle, closing clockwise flanged and drilled to SABS 1123 Table 16, including one flange adaptor pipe coupling (Klamflex or similar) per valve. Other flange adaptors measured elsewhere				
		a) 100 mm diam	no	2		
		b) 160 mm diam	no	5		
		c) 200 mm diam	no	4		

TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
5.6		**Pressure testing of existing 160 mm ø rising main**				
		a) Exposure of both ends	sum			
		b) Pressure test for 4 hours, to 10 bar pressure	sum			
5.7		**Repairs to existing pipe**				
		a) Excavate and expose damaged sections	no	3		
		b) Cut out and remove damaged sections	no	3		
		c) Replace with new pipe section to match, repair coupling and 2 flange adaptors, per damaged section.	no	3		
TOTAL SECTION 5 - CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		SECTION 6 : NEW OUTFALL SEWER PIPE FOR PHOOKO PUMP STATION				
6.1		**Earthworks (Pipe Trenches)**				
		Excavation in all material, shoring where necessary, backfilling to whaleback finish, compaction, compaction tests and spoiling of surplus material:				
		Pipes up to 350 mm diam				
		a) 0 - 1.5m	m^3	1 450		
		Extra over item 4.1 for hard rock excavation	m^3	500		
6.2		**Bedding (Pipes)**				
	6.2.1	Supply material as per specification from trench excavations and install				
		a) Selected granular bedding material for 150 mm bedding	m^3			Rate only
		b) Selected backfill material 300 mm above pipe crown	m^3			Rate only
	6.2.2	Supply material from commercial sources or elsewhere on site and install:				
		a) Selected granular bedding material for 150 mm bedding	m^3	150		
		b) Selected backfill material 300 mm above pipe crown	m^3	300		
6.3		Supply material, deliver to site, distribute, **bed on Class B bedding, connect, cut,** sterilise and test				
		Class 12 uPVC pipes with rubber ring joints to SABS 966, 1998, Part 1 in standard lengths complete with one connection collar (outside diameter)				
		a) 315 mm diam	m	200		
6.40		Cast iron or SG iron fittings for use with uPVC piping, grade 14 cast iron wall thickness to SABS 546, bitumen dipped, sockets to SABS 966 with rubber rings, working pressure 1,6 Mpa				
		b) 315 mm diam	No	17		
6.50		**Manholes**				
		a) Supply material precast manholes as per specification and install	no	5		
		b) Concrete benching	m3	3		
TOTAL SECTION 6 - CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		SECTION 7 : NEW DISCHARGE PIPELINE FROM DENNILTON WWTW TO MOSES RIVER				
7.1		**Earthworks (Pipe Trenches)**				
		Excavation in all material, shoring where necessary, backfilling to whaleback finish, compaction, compaction tests and spoiling of surplus material:				
		Pipes up to 200 mm diam				
		a) 0 - 1.5 m	m^3	2,491		
		a) 1.5 - 2.5 m	m^3	2,000		
		a) 2.5 - 3.5 m	m^3	52		
		Extra over item 4.1 for hard rock excavation	m^3	454		
7.2		**Bedding (Pipes)**				
	7.2.1	Supply material as per specification from trench excavations and install				
		a) Selected granular bedding material for 100 mm bedding	m^3			Rate only
		b) Selected backfill material 300 mm above pipe crown	m^3			Rate only
		c) General backfill material	m^3	1,786		
	7.2.2	Supply material from commercial sources or elsewhere on site and install:				
		a) Selected granular bedding material for 100 mm bedding	m^3	748		
		b) Selected backfill material 300mm above pipe crown	m^3	415		
7.3		Supply material, deliver to site, distribute, **bed on Class B bedding, connect, cut,** sterilise and test				
		Class 12 uPVC pipes with rubber ring joints to SABS 966, 1998, Part 1 in standard lengths complete with one connection collar (outside diameter)				
		a) 200 mm diam	m	2,592		
TOTAL SECTION 7 - CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
7.4		**Cast iron or SG iron fittings for use with uPVC piping, grade 14 cast iron wall thickness to SABS 546, bitumen dipped,** sockets to SABS 966 with rubber rings, working pressure 1,6 Mpa				
		b) 200 mm diam	No	30		
7.5		**Manholes**				
		a) Supply material precast manholes as per specification and install	no	36.0		
		b) Concrete benching	m^3	108		
TOTAL SECTION 7 - CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		SECTION 8 : GUARD HOUSE, LABORATORY BUILDING AND SEPTIC TANK				
8.1		**New guard house for Dennilton WWTW**				
	8.1.1	**Site clearance**				
		a) Removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m²	20		
		b) Rip and scarify ground level to a depth of 150mm and compact to 90% mod. AASHTO density	m²	20		
	8.1.2	**Excavation**				
		a) Excavation in trench not exceeding 2 m	m^3	12		
		b) Soil poisining	m²	20		
	8.1.3	**Foundation**				
		a) 25MPa/19mm concrete strip footing	m^3	10		
	8.1.4	**Reinforced concrete slab**				
		30MPa/19mm concrete a) Concrete floor slab cast on waterproofing	m^3	4		
		b) Ref 193 reforcing mesh wire 2400 x 6000 x 5.6 mm	m²	16		
		DAMP-PROOFING OF WALLS AND FLOORS				
		One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course				
		a) In walls	m	18		
		One layer of 250 micron "Consol Plastic USB Green waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"				
		a) Under surfacebeds	m²	20		
TOTAL SECTION 8 - CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
	8.1.5	**Brickwork of NFP bricks in class II mortar**				
		a) Double brickwall	m²	76		
		Roofing				
		a) 30MPa/ 19 mm concrete roof slab	m^3	4		
		One layer of 250 micron "Consol Plastic USB Green waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"	m²	20		
		b) Ref 193 reforcing mesh wire 2400 x 6000 x 5.6 mm	m²	16		
		Doors, windows, fascia boards e.t.c				
		Provisional sum	sum			
8.2		**Laboratory building**				
		Site clearance				
		a) Removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m²	24		
		b) Rip and scarify ground level to a depth of 150mm and compact to 90% mod. AASHTO density	m²	24		
TOTAL CARRIED FORWARD						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
	8.2.1	**Excavation**				
		a) Excavation in trench not exceeding 2 m	m^3	14		
		b) Soil poisining	m^2	24		
	8.2.2	**Foundation**				
		a) 25MPa/19mm concrete strip footing	m^3	8		
	8.2.3	**Reinforced concrete slab**				
		30MPa/19mm concrete a) Concrete floor slab cast on waterproofing	m^3	5		
		b) Ref 193 reforcing mesh wire 2400 x 6000 x 5.6 mm	m^2	15		
		DAMP-PROOFING OF WALLS AND FLOORS				
		One layer of 375 micron Consol Plastic Brikgrip DPC" embossed damp proof course				
		a) In walls	m	20		
		One layer of 250 micron "Consol Plastic USB Green waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"				
		a) Under surfacebeds	m^2	24		
TOTAL CARRY FORWARD TO SUMMARY						

ITEM No.	PAYMENT	DESCRIPTION	UNIT	BILL QTY	RATE	BILL AMOUNT
		BROUGHT FORWARD				
	8.2.4	**Brickwork of NFP bricks in class II mortar**				
		a) Double brickwall	m²	116		
		Roofing				
		a) 30MPa/ 19 mm concrete roof slab	m^3	5		
		One layer of 250 micron "Consol Plastic USB Green waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape"	m²	20		
		b) Ref 193 reforcing mesh wire 2400 x 6000 x 5.6 mm	m²	18		
		Doors, windows, fascia boards e.t.c				
		Provisional sum	sum			
8.3		**Septic tank**				
	8.3.1	Excavation				
		a) Excavation in trench not exceeding 2 m	m^3	180		
	8.3.2	Brick work				
		a) Double brickwall	m²	240		
		Provisional sum	sum			
TOTAL CARRIED FORWARD						

SEKHUKHUNE DISTRICT MUNICIPALITY

UPGRADING OF DENNILTON WWTW

CONTRACT NO : SK8/1-08/2025/26

SUMMARY OF SCHEDULE OF QUANTITIES

SECTION	DESCRIPTION	BILL AMOUNT
Section 1	General	
Section 2	Site clearance	
Section 3	Bulk earthworks	
Section 4	Additional items for ponds	
Section 5	Pipes and fittings	
Section 6	New Outfall sewer for Phooko pump station	
Section 7	New Discharge pipeline from Dennilton WWTW	
Section 8	Guard house, laboratory building and septic tank	
Preliminary Total 1		
Contingencies (10 % allowed for)		
Preliminary Total 2		
VAT 15.5 %		
Preliminary Total 3		
TOTAL AMOUNT DUE, INCLUDING VAT		

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PART C3: SCOPE OF WORK

C3.1 DESCRIPTION OF THE WORKS

C3.1.1 Employers objectives

The employer's objectives are to deliver public infrastructure using labour intensive methods. The works in this contract are to be executed by using both conventional construction and labour-intensive construction methods according to the Special Public Works Programme (SPWP).

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

C3.1.2 Overview of the works

The project entails the **REFURBISHMENT OF DENNILTON WASTE WATER TREATMENT WORKS** in Dennilton, Sekhukhune District Municipality, Limpopo Province.

C3.1.3 Extent of the works

The works to be carried out by the Contractor under this Contract comprises of the following:

a) Work contained in the Bill of quantities

1. Phooko Pump Station – Civil Works

- Re-construction of new incoming outfall sewer pipeline, from blocked manhole to Phooko Pump Station
- Unblocking of existing blocked manholes for existing outfall sewer pipeline
- Unblock existing inlet works and check incoming outfall sewer pipe
- Check and service existing pumps, allow to replace pump if required
- Refurbish all the pipe work, and repaint
- De-sludge the existing sumps or add enzymes to the pump station, with constant dosing.
- Pressure test the existing rising main to ponds, and repair where required.

2. Phooko Pump Station – Mechanical and Electrical Works

- Refurbish the electrical control and panels.
- Refurbish the generator, controls and service.
- Install flow meters and hour meters for the pumps.
- Supply and install new grinder at inlet works.

3. Dennilton Wastewater Treatment Works Ponds – Civil Works

- Draining and emptying of existing ponds.
- Removal of existing sludge on all ponds.
- Earthworks and compaction for floors on Pond 1 to 4.
- Install new bulk water meter at inlet works and outlet pipeline of ponds.
- New sewage grinder to be installed at inlet works.

- All ponds to be cleaned out and re-shaped to suit
- New concrete floor slab for pond 1 only
- Pond 1 to 4 to be lined with 0,4 mm thick HDPE liner.
- Construction of new discharge pipeline, from Pond 4 to Moses River.
- Drilling of new borehole, for groundwater monitor, as required by Department of Water and Sanitation.

4. Dennilton Wastewater Treatment Works Ponds – Mechanical and Electrical Works

- Recycle pump station to be constructed, to recycle the treated effluent from Pond 4 to Pond 1
- Chlorination pump station to be refurbished and automated dosing to be implemented and tank constructed should it be decided to return the treated effluent to the natural water course and the Moses River.
- Discharge pump station and pipeline to be constructed, for the treated effluent to be discharged to the adjacent natural water course and the Moses River.
- Install new bulk water meter on discharge pipeline, downstream of ponds, to record and monitor discharge of WWTW.
- Marking of sampling points, upstream of and downstream discharge outlet.

5. Dennilton Waste Water Treatment Works – Building Works

- Construction of new entrance guard house.
- Construction of new septic tank, for use by honey-suckers for domestic sewage disposal.
- Construction of new laboratory building, for required on-site laboratory sampling and testing.

b) Correction of defects in the works in accordance with the requirements specified in the Contract Document.

This description of the Works is not necessarily complete and shall not limit the work to be carried out by the Contractor under this Contract.

The EPWP principles shall only be applicable to appropriate sections of the works where labour intensive construction methods can be used.

Approximate quantities of each type of work are given in the Bill of Quantities.

C3.1.4 Location of the works

The refurbishment of the Waste Water Treatment Works is in Dennilton, Sekhukhune District Municipality, Limpopo Province.

Dennilton WWTW	S	25º 15’ 41.50”
	E	29º 09’ 18.54”

C3.1.5 Temporary works

The contractor must get prior approval from the engineer for all temporary works. The contractor is to set up a site office for his and the Engineer's use. The contractor shall submit proposals relating to the site offices and infrastructure to the Engineer for approval. The site must have sanitation that meet all requirements.

C3.2.1 Design services and activity matrix

Works designed by, per design stage:

Concept, feasibility and overall process	Employer
Basic engineering and detail layouts to bid stage	Employer's Agent/Engineer
Final design to be approved for construction stage	Employer's Agent/Engineer
Temporary works	Contractor
Preparation of as-built drawings	Employer's Agent/Engineer

(a) The Employer is responsible for the design of the permanent Works as reflected in the Contract Documents unless otherwise stated.
(b) The Contractor is responsible for the design of the temporary Works and their compatibility with the permanent Works.
(c) The Contractor shall supply all details necessary to assist the Engineer in the compilation of the as-built drawings and records.
(d) The design of the works has been completed by the employer's agent and the contractor shall be supplied with three sets of the drawings. The contractor's further obligations are but not limited to the following:

- Search for and locate erf pegs or on instruction of the engineer appoint a registered land surveyor to re-establish erf pegs to use for setting out purposes.
- Determine and survey the exact position of any existing services identified or indicated on the way-leave issued or as instructed by the engineer.
- Determine, in consultation with the engineer, a detailed construction methodology indicating the plant to be used and present to the engineer for acceptance.
- Determine the exact positions of existing infrastructure and prepare dimensioned details of each node and/or chamber. The engineer or his authorized representative will work in conjunction with the contractor.
- Determine, in consultation with the engineer, any amendments to the drawings and/or temporary works that need to be implemented to construct the works as planned.
- Certain fittings may have to measured and/or manufactured on site.
- The contractor shall keep accurate records for the compilation of as-build drawings which he will make available to the engineer as required.

C3.2.2 Employer's design

Not applicable

C3.2.3 Design brief

Engineer will be responsible for the design of the project. Contractor will be responsible for the temporary works.

C3.2.4 Drawings

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

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

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

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

List of drawings

DRAWING NO.	DESCRIPTION
K1004 – 501	LOCALITY PLAN – SEKHUKHUNE DISTRICT MUNICIPALITY
K1004 – 502	LOCALITY PLAN – ELIAS MOTSOALEDI LOCAL MUNICIPALITY
K1004 – 503	TOPOGRAPHICAL MAP – DENNILTON, PHOOKO, AND ELADSDORING
K1004 – 504	EXISTING WASTE WATER TREATMENT PLANT & PHOOKO PUMP STATION
K1004 – 505	DENNILTON WASTE WATER TREATMENT WORKS & PHOOKO BOOSTER PUMP STATION
K1004 – 506	ELANDSDORING TOWNSHIP 2 152 HOUSEHOLDS
K1004 - 507	PHILADELPHIA MISSION HOSPITAL & SAPS DENNILTON
K1004 - 508	KEY PLAN
K1004 – 509	EXISTING OUTFALL SEWER TO PHOOKO PUMP STATION
K1004 – 510	EXISTING PHOOKO PUMP STATION
K1004 – 511	EXISTING RISING MAIN WWTW
K1004 – 512	EXISTING DENNILTON WWTW
K1004 – 513	EXISTING PIPELINES TO WWTW
K1004 – 514	EXISTING POND LINING BULK EARTHWORKS – POND LINER DETAILS
K1004 – 515	ANAEROBIC AND AEROBIC PONDS CROSS SECTION

DRAWING NO.	DESCRIPTION
K1004 – 516	ANAEROBIC AND AEROBIC PONDS DETAILS OF CONCRETE FLOW CHANNEL
K1004 – 517	OUTFALL SEWER FROM PHILADEPHIA HOSPITAL
K1004 – 518	DETAILS FOR CONNECTION FROM RISING MAIN
K1004 – 519	DETAILS OF CASTING CONCRETE FLOOR SLAB

C3.3 PROCUREMENT

C3.3.1 Preferential procurement procedures

C3.3.1.1 Requirements

C3.3.1.1.1 Employment of unskilled and semi-skilled labour in Labour Intensive Construction works

1. Requirements for the sourcing and engagement of labour

1.1 Unskilled and semi-skilled labour require for the execution of all labour-intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

1.2 The rate of pay set for the project is in accordance with the government Notice ***"R.757 Basic Conditions of Employment Act (75/1997): Amendment of Sectoral Determination 2: Civil Engineering Sector, South Africa, Page No. 3, Gazette No. 33505"***

Table 1: Minimum wages for all employees in the Civil Engineering

Task Grade	01/09/2011 To 31/08/2012	01/09/2012 To 31/08/2013
Task 1	18.97∗	20.50∗
Task 2	19.07	Wage increases to be negotiated
Task 3	19.60	
Task 4	20.27	
Task 5	24.25	
Task 6	27.54	
Task 7	31.54	
Task 8	35.36	
Task 9	39.96	

The CPI (excluding owners' equivalent rent) utilized to determine minimum wage increases applicable from 1 September 2011 to 31 August 2012 is the rate that was available 6 weeks prior to the increase becoming effective, which is the June 2011 CPI (excluding owners' equivalent rent) rate of 5% as published by Statistic South Africa on 20 July 2011. The Sectoral Determination stipulates that the wage increase for Task 2 to Task 9 will be determined by utilizing the CPI + 3% or 8% (whichever is greater). Therefore, in terms of percentage increase, the new minimum wage as from 1 September 2011 will be 8% higher than the current minimum wage.

∗As published on Government Gazette No 33505 of 27 August 2010

1.3 Tasks by the Contractor must be such that:

(a) the average worker completes 5 tasks per week in 40 hours or less; and
(b) the weakest worker completes 5 tasks per week in 55 hours or less.

1.4 The Contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.3.

1.5 The Contractor shall, through all available community structures, inform the local community of the labour-intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:

(a) where the head of the household has less than a primary school education;
(b) that have less than one full time person earning an income;
(c) where subsistence agriculture is the source of income;
(d) those who are not in receipt of any social security pension income.

1.6 The Contractor shall endeavour to ensure that the expenditure on the employment of temporary workers is in the following proportions:

(a) **55%** women;
(b) **55%** youth who are between the ages of 18 and 35; and
(c) **2%** persons with disabilities.

2. SPECIFIC PROVISIONS PERTAINING TO SANS 1914-5

2.1 Definitions

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

2.2 Contract participation goals

2.2.1 There is no specified contract participation goal for the contract. The contract participation goal shall be measured in the performance of the contract to enable the employment provided to targeted labour to be quantified.

2.2.2 The wages and allowances used to calculate the contract participation goal shall, with respect to both time-related and task rated workers, comprise all wages paid and any training allowance paid in respect of agreed training programmes.

2.3 Terms and conditions for the engagement of targeted labour

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

2.4 Variations to SANS 1914-5

2.4.1 The definition for net amount shall be amended as follow:

Financial value of the contract upon completion, exclusive of any value added tax or sales tax which the law requires the employer to pay the contractor.

2.4.2 The schedule referred to in Clause 5.2 of SANS 1914-5 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of formal training provided to targeted labour.

3. TRAINING OF TARGETED LABOUR

3.1 The Contractor shall provide all the necessary on-the-job training to targeted labour to enable such labour to master the basic work techniques required to undertake the work in accordance with the requirements of the contract in a manner that does not compromise worker health and safety.

3.2 The cost of the formal training of targeted labour must be included on the total of the Prices.

3.3 The Contractor shall do nothing to dissuade targeted labour from participating in training programmes and shall take all reasonable steps to ensure that each beneficiary is provided with two days of formal training for every 22 days worked.

3.4 An allowance equal to 100 % of the task rate or daily rate shall be paid by the contractor to workers who attend formal training, in terms of 3.3 above.

3.5 Proof of compliance with the requirements of 3.2 to 3.4 must be provided by the Contractor to the Employer prior to submission of the final payment certificate.

4. JOB CREATION REPORTING FOR EPWP

In order to assist the Employer in complying with the goals of creating EPWP job opportunities, the Contractor must provide the following information for reporting purposes:

4.1 Type of project data required per project

Every EPWP project shall collect and keep specific project data for the purpose of EPWP progress reporting. ***The data that is required to be kept and maintained for each project includes:***

4.1.1 Beneficiary data

A beneficiary list must be maintained for every project. The data required in this beneficiary list is indicated below. This data shall be recorded, checked and signed off by the Contractor on a weekly basis, and shall be submitted to the Employer at each monthly site meeting. The beneficiary list shall contain the following data and shall be kept and maintained on site for audit purposes:

(a) Beneficiary identity – name, surname, initials, date of birth and identity number (or other unique identifier) plus certified copy of ID book (or other unique identifier).

(b) Beneficiary profiles – nationality, gender, age, education level and disability status.

(c) Monthly work data for beneficiaries – daily wage to be received, number of calendar days training attended and number of calendar days worked.

4.1.2 Project work data

This generally seeks to confirm the number of people at work daily on the project. The following data must be recorded and maintained on site by the Contractor, in order that it can be provided by the Employer to the National Department of Public Works upon request when the latter is undertaking sample auditing. The documentation that should be kept includes:

(a) Daily attendance register – register for each day showing all the workers that were registered as being at work on that day. Attendance registers shall be completed on site on a daily basis and signed off by the Contractor on a weekly basis.

(b) Summary of monthly attendance.

4.1.3 Project payment data

This generally seeks to confirm what was paid, for how much work and to whom. It is required that the Contractor adopt one of the following methods as standard procedure for recording and maintaining this information:

(a) Payment register – this is a list of the workers showing the wages paid to each worker, and signed off by each worker as proof of receipt and acceptance of payment. Information on this register must include the name of the worker, either an identity number or other unique identifier,

the number of calendar days that the pay period covers, the wage rate and the total wages paid.

Alternatively,

(b) Bank records showing the transfers to each worker account, signed off by the Contractor as proof of payment – these bank records must specifically show the name of the worker, either an identity number or other unique identifier, the period which the pay covers and the total wages paid.

The project payment data, as recorded and maintained by the Contractor in terms of either (a) or (b) above, must be available and applicable for the entire period for which the Employer claims an incentive reward for person-days of work created in terms of the project.

4.1.4 Employment output data

The Contractor shall submit to the Employer at each monthly site meeting the data necessary to enable the Employer to calculate the following employment output data:

(a) Number of work opportunities created (where one work opportunity = paid work created for one individual on an EPWP project, for any period of time).

(b) Number of person-days of work created (where one person-day = one day of work carried out by one individual). The total number of person-days of work created on a particular EPWP project shall be obtained by summing the total number of person-days worked by each individual employed during the course of that EPWP project.

(c) Number of Full Time Equivalents (FTEs) created (= total number of person-days of work created on the EPWP project divided by 230 working days). In terms of EPWP policy, one year of work created for one individual is assumed to comprise a total of 230 days of paid work carried out by that individual.

(d) Average duration of work opportunities created (= total number of person-days of work created on the EPWP project divided by the number of work opportunities created on that EPWP project).

(e) Average daily wage rates paid (= accumulated total of the wages paid to all individuals employed on an EPWP project divided by the total number of person-days of work created on that EPWP project).

5. Personal And Other Protective Equipment (Sections 8/15/23 or the OHS Act)

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

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

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

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

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

The Contractor may not charge any fee for protective equipment prescribed by him/her but may charge for equipment under the following conditions:

- Where the employee requests additional issue in excess of what is prescribed
- Where the employee has patently abused or neglected the equipment leading to early failure
- Where the employee has lost the equipment

All employees shall, as a minimum, be required to wear the following PPE on all projects:

- Protective overalls
- Protective footwear
- Protective headwear
- Eye/face protection

All PPE provided to local labour working on the Expanded Public Works Programme shall be branded in accordance with the EPWP CI Manual. Typical elements which shall be branded include:

- Protective overalls
- Reflective vests
- Protective headwear

C3.3.1.1.2 Appointment of Community Liaison Officer

1. A community liaison officer (CLO) will be appointed from the local community. The liaison office will, amongst other duties, be responsible for the liaison with the beneficiary community.

2. Provision for the payment of the CLO has been made in the Pricing Data.

3. The successful tenderer shall enter into an agreement with the Ward Councillor/Ward Committee whereby the Ward Councillor shall provide to the Contractor with a Community Liaison Officer (CLO) for liaison with the recipient community.

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

5. The agreement shall make provision for the payment by the Contractor to the CLO a maximum amount calculated as follows:

   Wage per month = ***R6000.00 per month (including Telephone cost of R250/ month)***

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

7. Notwithstanding the above, if the vastness of the project requires the use of more than one CLO, this will be permitted provided that the total monthly sum paid to all CLO's shall not exceed the amount allowed for as set out above.
8. Should the Contractor experience any difficulties with the community, these difficulties shall immediately be brought to the attention of the Department/Project Manager who shall arrange a meeting with the relevant Ward Councillor(s) and the CLO to resolve such difficulties.

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

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

C3.3.1.2 Resource standard pertaining to targeted procurement

State the number, title, part, and edition of SANS 1914 targeted procurement applicable to the contract and all data, variations and definitions required e.g. definitions of target groups, weighting factors, etc. (Refer to SANS 10396 for specific guidance)

C3.3.2 Subcontracting

C3.3.2.1 Scope of mandatory subcontract works

A minimum of **20%** of the contract value (VAT inclusive) shall be towards the employment of local labour, subcontractors and suppliers.

The Contractor can use his/her own discretion to determine where and how the specified minimum percentage as stipulated is achieved and shall provide documentary proof to substantiate his/her claim.

The Contractor will be required to submit a statement with each payment certificate indicating where and how this requirement has been met. Sanctions will be imposed on the contractor in the form of a financial penalty equal to the difference between the actual and minimum percentage.

Preference will be given to contractors and suppliers located within the boundaries of Sekhukhune, preferable Dennilton. The following activities are deemed suitable for the employment of local labour and/or sub-contractors:

(i) Clearing and grubbing of the Site;
(ii) Search and expose of existing services.
(iii) Mixing, transporting, placing and finishing of small concrete works;
(iv) Excavation up to 1.5m deep in soft and intermediate materials.
(v) Backfilling of pipe trenches.
(vi) Construction of brick manholes and the like.
(vii) Finishing off borrow areas
(viii) Cleaning and tidying up of the Site.

Expenditure which is claimable is:

- Payments for the contract which is made to labourers, sub-contractors, material suppliers, fuel suppliers, training providers, caterers, transport services, plant hire, laboratory services, surveyors and the like which are wholly or partially owned by one or more historically disadvantaged individuals (HDI).

For payments made to service providers which are not 100% HDI owned, only the amount of the payment as a proportion of the percentage HDI ownership shall be claimable as community retailed earnings.

If, at the completion of the project, the contractor has not yet shown that he/she has complied with this condition then the shortfall of the specified minimum percentage shall be withheld from the final payment due to the contractor.

C3.3.2.2 Preferred subcontractors/suppliers

Not applicable

C3.3.2.3 Subcontracting procedures

The contractor shall provide enterprise declarations for each sub-contractor employed on site and shall provide documentary proof of all payments made to subcontractors to substantiate any claims. Preference shall be given to sub-contractors residing in the immediate project area.

C3.3.2.4 Attendance on subcontractors

The contractor shall provide on-site assistance and support to local sub-contractors as appropriate

C3.3.3 Local Labour and Training

The contractor shall limit the utilisation of his permanent employed personnel to key personnel such as contracts mangers, site agents, foremen, supervisors, plant operators, materials & survey technicians, trainers, buyers, store men and the like should such expertise not be available from the local area. The contractor shall make maximum use of human resources existing in the local community/area. The bidder shall apply to the employment labour desk, conveyed by the ward committee for details of those labourers who are available in the area of work and shall provide preference to those labourers identified.

The contractor shall comply with the relevant laws governing the employment, accommodation and transport of labour. All matters affecting the contractor's labour force shall be the sole responsibility of the contractor.

Formal structured training of labour in certain fields has to be undertaken, preferable in the first two months of the project. The training requirements/needs will be determined by the contractor in consultation with the engineer, employer and CLO.
The contractor shall utilise trained labour in all instances. The employment of labour from outside the local area will only be considered and permitted by the Engineer in the event of:

a) the unavailability of sufficient numbers of local labourers to execute the work;

b) the unavailability within the local community of the required skills necessary for the execution of specific portion of work, and where the completion period does not permit the creation of the necessary skills through training.

In both cases the contractor shall prove to the satisfaction of the Engineer that he has exercised his best endeavours and taken all reasonable actions to recruit local labour.

The contractor shall maintain accurate and comprehensive daily records of all labour engaged on the bid and shall submit to the Engineer at two weekly intervals detailed labour returns substantiating the actual numbers of labourers employed, the amounts actually paid in respect thereof, and details of the various activities undertaken by the labourers.

The employment of casual labour will be done in co-operation with community leaders and local structures. The bidder shall ensure that all remuneration paid to employees is in line with the relevant sectorial determination in terms of the Basic Conditions of Employment Act, No 75 of 1997, as determined by the Department of Labour.

C3.3.3.1 C3.3.4 COMMUNITY LIAISON OFFICER (CLO)

a) Appointment

The Contractor shall if instructed to do so appoint a Liaison Officer or Officers after consultation with the local community, the Engineer and the Employer. The Liaison Officer(s) shall be appointed as a member of the Contractor's management personnel and the Contractor's normal employment conditions shall be applicable to the appointment. The Contractor shall disclose his normal employment conditions to the Engineer when called upon to do so.

b) Duties for the Liaison Officer

The Liaison Officer(s) shall

(i) be available on Site daily between the hours agreed on by the Contractor, the Employer and the Engineer from time to time;

(ii) determine, in consultation with the Contractor, the needs of the temporary Labourers for relevant skills Training. He is responsible for the identification of suitable trainees and shall attend one of each of the training sessions;
(iii) communicate with the Contractor and the Engineer to determine the labour requirements with regard to numbers and skills;
(iv) assist in maintaining relations, and when applicable partake in labourer grievance and dispute procedures;
(v) assist in and facilitate the recruitment of suitable temporary labour and the establishment of the Labour Register;
(vi) attend all meetings in which the local community and/or labourers are present or are required to be represented;
(vii) assist in the identification, and screening of labourers from the local community in accordance with the Contractor's requirements;
(viii) inform temporary labourers of their conditions of temporary employment, and inform temporary labourers as early as possible when their period of employment will be terminated;
(ix) attend disciplinary proceedings to ensure that hearings are fair and reasonable;
(x) keep a daily written record of his interviews and community liaison activities;
(xi) carry out specific tasks ordered by the Engineer;
(xii) perform such other duties as required and agreed upon between all parties concerned.

C3.3.5 LABOUR REGULATIONS

C3.3.5.1 Payment for the Labour-Intensive Component of the Works:

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

C3.3.5.2 Applicable Labour Law

The Ministerial Determination 4: Expanded Public Works Programmes, issued in terms of the Basic Conditions of Employment act of 1997 by the Minister of Labour in Government Notice NR347 of 4 May 2012, as reproduced below, shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers. An EPWP contract shall be signed between the contractor and the EPWP participant using the template appended. The contracts shall expire on earlier of (i) 31 March, (ii) at the end of the project; or (iii) completion of the works allocated.

C3.3.5.3 Introduction

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

In this document –
(a) *"department"* means any department of the State, implementing agent or contractor;

(b) "employer" means any department, implementing agency or contractor that hires workers to work in elementary occupations on a EPWP;
(c) "worker" means any person working in an elementary occupation on a EPWP;
(d) "elementary occupation" means any occupation involving unskilled or semi- skilled work;
(e) "management" means any person employed by a department or implementing agency to administer or execute an EPWP;
(f) "task" means a fixed quantity of work;
(g) "task-based work" means work in which a worker is paid a fixed rate for performing a task;
(h) "task-rated worker" means a worker paid on the basis of the number of tasks completed;
(i) "time-rated worker" means a worker paid on the basis of the length of time worked.

C3.3.5.4 Terms of Work

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

C3.3.5.5 Normal Hours of Work

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

C3.3.5.6 Meal Breaks

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

C3.3.5.7 Special Conditions for Security Guards

(a) A security guard may work up to 55 hours per week and up to eleven hours per day.
(b) A security guard who works more than ten hours per day must have a meal break of at least one hour or two breaks of at least 30 minutes each.

C3.3.5.8 Daily Rest Period

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

C3.3.5.9 Weekly Rest Period

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

C3.3.5.10 Sick Leave

(a) Only workers who work for more than 24 hours have the right to claim sick-pay in terms of this clause
(b) A worker who is unable to work on account of illness or injury is entitled to claim one day's paid sick leave for every full month that the worker has worked in terms of a contract.
(c) A worker may accumulate a maximum of twelve days' sick leave in a year
(d) Accumulated sick-leave may not be transferred from one contract to another contract.
(e) An employer must pay a task-rated worker the worker's daily task rate for a day's sick leave.
(f) An employer must pay a time-rated worker the worker's daily rate of pay for a day's sick leave.
(g) An employer must pay a worker sick pay on the worker's usual payday.
(h) Before paying sick-pay, an employer may require a worker to produce a certificate stating that the worker was unable to work on account of sickness or injury if the worker is –
(i) absent from work for more than two consecutive days; or
(j) absent from work on more than two occasions in any eight-week period.
(k) A medical certificate must be issued and signed by a medical practitioner, a qualified nurse or a clinic staff member authorised to issue medical certificates indicating the duration and reason for incapacity.
(l) A worker is not entitled to paid sick-leave for a work-related injury or occupational disease for which the worker can claim compensation under the Compensation for Occupational Injuries and Diseases Act.

C3.3.5.11 Maternity Leave

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

C3.3.5.12 Family responsibility leave

Workers, who work for at least four days per week, are entitled to three days paid family responsibility leave each year in the following circumstances -

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

C3.1.7.13 Statement of Conditions

An employer must give a worker a statement containing the following details at the start of employment –

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

C3.3.5.14 Keeping Records

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

(a) the worker's name and position;
(b) Certified ID copies of all locally employed labour
(c) Signed Contracts between the employer and the EPWP Participants
(d) Attendance Registers for the EPWP Participants
(e) Monthly Reporting Template as per EPWP requirements
(f) in the case of a task-rated worker, the number of tasks completed by the worker;
(g) in the case of a time-rated worker, the time worked by the worker;
(h) Proof of payments made to each worker.
(i) The employer must keep this record for a period of at least three years after the completion of the EPWP.

C3.3.5.15 Payment

(a) An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
(b) A worker may not be paid less than the minimum EPWP wage rate of **R150.00** per day or per task. This will be adjusted annually on the 1st of November in-line with inflation (available CPI as provided by Stats SA six (6) weeks before implementation).
(c) A task-rated worker will only be paid for tasks that have been completed.
(d) An employer must pay a task-rated worker within five weeks of the work being completed and the work having been approved by the manager or the contractor having submitted an invoice to the employer.
(e) A time-rated worker will be paid at the end of each month.
(f) Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.

(g) Payment in cash or by cheque must take place –
   a. at the workplace or at a place agreed to by the worker;
   b. during the worker's working hours or within fifteen minutes of the start or finish of work;
   c. in a sealed envelope which becomes the property of the worker.

(h) An employer must give a worker the following information in writing –
   a. the period for which payment is made;
   b. the numbers of tasks completed or hours worked;
   c. the worker's earnings;
   d. any money deducted from the payment;
   e. the actual amount paid to the worker.

(i) If the worker is paid in cash or by cheque, this information must be recorded on the envelope and the worker must acknowledge receipt of payment by signing for it.

(j) If a worker's employment is terminated, the employer must pay all monies owing to that worker within one month of the termination of employment.

C3.3.5.16 Deductions

(a) An employer may not deduct money from a worker's payment unless the deduction is required in terms of a law.

(b) An employer must deduct and pay to the SA Revenue Services any income tax that the worker is required to pay.

(c) An employer who deducts money from a worker's pay for payment to another person must pay the money to that person within the time period and other requirements specified in the agreement law, court order or arbitration award concerned.

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

C3.3.5.17 Health and Safety

(a) Employers must take all reasonable steps to ensure that the working environment is healthy and safe.

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

C3.3.5.18 Compensation for Injuries and Diseases

(a) It is the responsibility of the employers (other than a contractor) to arrange for all persons employed on an EPWP to be covered in terms of the Compensation for Occupational Injuries and Diseases Act, 130 of 1993.

(b) A worker must report any work-related injury or occupational disease to their employer or manager.
(c) The employer must report the accident or disease to the Compensation Commissioner.
(d) An employer must pay a worker who is unable to work because of an injury caused by an accident at work 75% of their earnings for up to three months. The employer will be refunded this amount by the Compensation Commissioner. This does NOT apply to injuries caused by accidents outside the workplace such as road accidents or accidents at home.

C3.3.5.19 Termination

(a) The employer may terminate the employment of a worker for good cause after following a fair procedure.
(b) A worker will not receive severance pay on termination.
(c) A worker is not required to give notice to terminate employment. However, a worker who wishes to resign should advise the employer in advance to allow the employer to find a replacement.
(d) A worker who is absent for more than three consecutive days without informing the employer of an intention to return to work will have terminated the contract. However, the worker may be re-engaged if a position becomes available.
(e) A worker who does not attend required training events, without good reason, will have terminated the contract. However, the worker may be re-engaged if a position becomes available.

C3.3.5.20 Certificate of Service

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

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

C3.3.5.21 Contractor's default in payment to Labourers and Employees

(a) Any dispute between the Contractor and labourers, regarding delayed payment or default in payment of fair wages, if not resolved immediately may compel the Employer to intervene.
(b) The Employer may, upon the Contractor defaulting payment, pay the moneys due to the workers not honoured in time, out of any moneys due or which may become due to the Contractor under the Contract.

C3.3.5.22 Provision of Handtools

(a) The Contractor shall provide his labour force with hand tools of adequate quality, sufficient in numbers and make the necessary provisions to maintain the tools in good and safe working conditions

C3.3.5.23 Reporting

The Contractor shall submit monthly returns/reports as specified below:

(a) Signed Master rolls/pay sheets of temporary workers and permanent staff detailing the number, category, gender, rate of pay and daily attendance.
(b) Certified ID copies of all locally employed labour
(c) Signed Contracts between the employer and the EPWP Participants
(d) Attendance Registers for the EPWP Participants
(e) Monthly Reporting Template as per EPWP requirements
(f) Plant utilization returns
Progress report detailing production output compared to the programme of works

C.3.3.6 UNEMPLOYMENT INSURANCE FUND

The contractor will be responsible for payment or contribution of UIF for all labour employed under the project. Proof of payment of UIF shall be available upon request.

C.3.3.7 WORKMEN'S COMPENSATION ACT

All labour employed on the site shall be covered by the Workmen's Compensation Act. The contractor shall pay in full, including the payment of the necessary levies, such amounts, as are due in terms of the Act. The contractor at the commencement of the contract shall resolve the manner in which Workmen's Compensation will be handled. Amounts paid by the contractor shall not be included in the wage rates but shall be an extra payment allowed for by the contractor.

C.3.3.8 LABOUR-INTENSIVE CONSTRUCTION METHODS

Labour-intensive construction shall mean the economically efficient employment of as great a portion of labour as is technically feasible to produce a standard of construction as demanded by the specifications with completion by the Due Completion Date, thus bringing about the effective substitution of labour for plant and equipment.

Appropriate portions of the Works included in the Contract shall be executed using labour-intensive construction methods.
Except where the use of plant is essential in order, in the opinion of the Engineer, to meet the specified requirements by the Due Completion Date, or where the use of plant is essential as a result of occupational health and safety considerations, the Contractor shall use only hand tools and equipment in the construction of those portions of the Works that are required in terms of these Project Specifications to be constructed using labour-intensive construction methods.

These portions of the Works shall be constructed utilizing only locally employed labour and/or the labour of local subcontractors, supplemented by the Contractor's key personnel to the extent necessary and unavoidable, unless otherwise instructed by the Engineer and in accordance with the further provisions of the relevant sections of Portion of the Project Specifications.

Subject to considerations of occupational health and safety, the portions of the Works to be executed using labour-intensive construction methods are:

- Clearing and grubbing of the Site;

- Excavation up to 1,5 m deep;
- Bedding, selected fill, backfilling and compaction of all pipe trenches irrespective of depth, but assisted by mechanical compaction equipment in order to achieve the specified densities;
- Transportation and spoiling of all trench materials, where the disposal site is located within 20 metres of the source;
- Dismantling and re-erection of fences;
- Mixing and placing of concrete;
- Construction of all brickwork required for structures; and
- Cleaning and tidying up of the Site.

C.3.3.8.1 Material

Where possible, the contractor shall source material from within **1.0km** of the site utilizing local labour.

C.3.3.8.2 Task Based Activities

Labour Intensive activities are to be planned as task based works where required. Task based refers to a specific amount of work to be performed which is clearly defined by a quantity and quality. Typically, a particular task can be completed within a working day.

C.3.3.9 REQUIREMENTS OF EXPANDED PUBLIC WORKS PROGRAMME

EPWP Project Specification

As much as is economically feasible, all work shall be implemented by employing Labour Intensive Construction methods. Over and above the normal Building and Allied works to be implemented by employing skilled and unskilled labour the works specified in the "Guidelines for the Implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP)" shall be undertaken using Labour Intensive Construction methods.

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

Requirements for the sourcing and engagement of labour.

C.1.1. Unskilled and semi-skilled labour required for the execution of all labour intensive works shall be engaged strictly in accordance with prevailing legislation and SANS 1914-5, Participation of Targeted Labour.

C.1.2. The rate of pay set for the EPWP is R …….. per task or per day.(To be confirmed)

C.1.3. Tasks established by the contractor must be such that:

(a) the average worker completes 5 tasks per week in 40 hours or less; and
(b) the weakest worker completes 5 tasks per week in 55 hours or less.

C.1.4. The contractor must revise the time taken to complete a task whenever it is established that the time taken to complete a weekly task is not within the requirements of 1.1.3.

C.1.5. The Contractor shall, through all available community structures, inform the local community of the labour intensive works and the employment opportunities presented thereby. Preference must be given to people with previous practical experience in construction and / or who come from households:

(a) where the head of the household has less than a primary school education;
(b) that have less than one full time person earning an income;
(c) where subsistence agriculture is the source of income.
(d) those who are not in receipt of any social security pension income

C.1.6. The Contractor shall endeavor to ensure that the expenditure on the employment of temporary workers is in the following proportions:

(a) 55 % women;
(b) 55% youth who are between the ages of 18 and 35; and
(c) 2% on persons with disabilities.

C.3.3.10 CONSTRUCTION METHODS

Add the following:

The Contractor shall allow reasonable time in his programme for the Engineer to carry out testing and inspection of the Goods and materials. To this end the Contractor shall provide to the Engineer a schedule indicating hold points in the manufacturing process when inspections are required. Requests for work done inspections should be made in writing to the Engineer at least 24 hours before such

inspections are required.

If the Engineer 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 Engineer.

The Contractor shall review his progress each month and should progress lag behind the latest accepted programme by more than 1 week, he shall submit a revised programme and method statement of how he proposes making up lost time. If, in the opinion of the Engineer, such revised programme will not make up lost time, the Engineer 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.

SCOPE

This specification establishes general requirements for activities which are to be executed by hand involving the following:

a. Trenches having a depth of less than 1.5metres
b. Pipe laying
c. Construction of manholes
d. Installation of pipe fittings

PRECEDENCE

Where this specification is in conflict with any other standard or specification referred to in the scope of works to this contract, the requirements of this specification shall prevail.

HAND EXCAVATEABLE MATERIAL

Hand excavateable material is material:

a. granular materials:

   i. whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dense, or dense; or

   ii. where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a dynamic cone penetrometer is required to penetrate 100mm;

b. cohesive materials:

   i. whose consistency when profiled may in terms of table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or

   ii. where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a dynamic cone penetrometer is required to penetrate 100mm;

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		BIDDER	WITNESS	EMPLOYER	WITNESS

C3.4 CONSTRUCTION

C3.4.1 Works specifications

C3.4.1.1 Applicable standards

SANS 1200 A : General
SANS 1200 L : Medium-pressure Pipelines
SANS 966 Part 1: Unplasticised Poly Vinyl Chloride (PVC-U) Pressure Pipe Systems
SANS 966 Part 1: (PVC-U)
SANS 4427: Plastics piping systems – Polyethylene (PE) pipes and fittings for water supply –Part 1: General
SANS 1921: 2004 Construction and Management Requirements for Works Contracts, Part 1: General Engineering and Construction Works

C3.4.1.2 Applicable national and international standards
none

C3.4.1.3 Particular/generic specifications
C3.4.1.3.1 Generic Labour Specification

01 Scope

This specification establishes general requirements for activities which are to be executed by hand involving the following:
a) trenches having a depth of less than 1.5 metres
b) Pipe laying
c) Construction of manholes

02 Precedence

Where this specification is in conflict with any other standard or specification referred to in the Scope of Works to this Contract, the requirements of this Contract, the requirements of this specification shall prevail.

03 Hand excavate-able material

Hand excavate-able material is material:

a) granular materials:

i) whose consistency when profiled may in terms of table 1 be classified as very loose, loose, medium dens, or dense; or
ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 15 blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm;

b) cohesive materials:

i) whose consistency when profiled may in terms of Table 1 be classified as very soft, soft, firm, stiff and stiff / very stiff; or
ii) where the material is a gravel having a maximum particle size of 10mm and contains no cobbles or isolated boulders, no more than 8 blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm;

NOTE:

1) A boulder, a cobble and gravel is material with a particle size greater than 200mm, between 60 and 200mm.
2) A Dynamic Cone Penetrometer (DCP) is an instrument used to measure the in-situ shear resistance of a soil comprising a drop weight of approximately 10 kg which falls through a height of 400mm and drives a cone having a maximum diameter of 20mm (cone angle of 60˚ with respect to the horizontal) into the material being used.

Table 1: Consistency of materials when profiled

GRANULAR MATERIALS		**COHESIVE MATERIALS**	
CONSISTENCY	DESCRIPTION	CONSISTENCY	DESCRIPTION
Very loose	Crumbles very easily when scraped with a geological pick	Very soft	Geological pick head can easily be pushed in as far as the shaft of the handle
Loose	Small resistance to penetration by sharp end of a geological pick	Soft	Easily dented by thumb; sharp end of a geological pick can be pushed in 30-40mm; can be moulded by fingers with some pressure
Medium dense	Considerable resistance to penetration by sharp end of a geological pick	Firm	Indented by thumb with effort; sharp end of geological pick can be pushed in up to 10mm; very difficult to mould with fingers; can just be penetrated with an ordinary hand spade
Dense	Very high resistance to penetration by the sharp end of geological pick; requires many blows for excavation	Stiff	Can be indented by thumb-nail; slight indentation produced by pushing geological pick point into soil; cannot be moulded by fingers
Very dense	High resistance to repeated blows of a geological pick	Very stiff	Indented by thumb-nail with difficulty; slight indentation produced by blow of a geological pick point

04 Trench excavation

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

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

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

a) To 90% Proctor density;
b) such that in excess of 5 blows of a Dynamic Cone Penetrometer (DCP) is required to penetrate 100mm of the backfill, provided that backfill does not comprise more than 10% gravel of size less than 10mm and contains no isolated boulders, or
c) such that the density of the compacted trench backfill is not less than that of the surrounding undisturbed soil when tested comparatively with a DCP.

06 Excavation

All hand excavate-able material including topsoil classified as hand excavate-able shall be excavated by hand. Harder material may be loosened by mechanical means prior to excavation by hand.

The excavation of any material which presents the possibility of danger or injury to workers shall not be excavated by hand.

07 Clearing and grubbing

Grass and small bushes shall be cleared by hand.

08 Shaping

All shaping shall be undertaken by hand.

09 Loading

All loading shall be done by hand, regardless of the method of haulage.

10 Haul

Excavation material shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

11 Offloading

All material, however transported, is to be off-loaded by hand, unless tipper-trucks are utilized for haulage.

12 Spreading

All material shall be spread by hand.

13 Compaction

Small areas may be compacted by hand provided that the specified compaction is achieved.

14 Grassing

All grassing shall be undertaking by sprigging, sodding, or seeding by hand.

15 Concrete masonry

Concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand.

Sand and stone shall be hauled to its point of placement by means of wheelbarrows where the haul distance is not greater than 150m.

Grout shall be mixed and placed by hand.

16 Manufactured Elements

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, pre-cast concrete planks and pipes, masonry unit, have a mass of more than 320kg. In addition, the items shall be large enough so that eight workers can conveniently and simultaneously acquire a proper hand hold on them.

C3.4.1.3.2 Labour intensive competencies for supervisory and management staff

Personnel	**NQF level**	**Unit standard titles**	**Skills programme description**
Team leader/ supervisor	2	Apply Labour Intensive Construction Systems and Techniques to Work Activities	This unit standard must be completed, and
		Use Labour Intensive Construction Methods to Construct and Maintain Bulk Water.	any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Foreman/ supervisor	4	Implement labour intensive Construction Systems and Techniques	This unit standard must be completed, and
		Use Labour Intensive Construction Methods to Construct and Maintain Bulk water	any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures	
Site Agent/ Manager (i.e. the contractor's most senior representative that is resident on the site.	5	Manage Labour Intensive Construction Processes	Skills Programme against this single unit standard

Established contractors shall only engage supervisory and management staff in labour intensive works that have either completed, or for the period 1 April 2004 to 30 June 2005, is registered for training towards, the skills programme outlined in Table 1.

Emerging contractors shall have personally completed, or for the period 1 April 2004 to 30 June 2005 be registered on a skills programme for the NQF level 2-unit standard. All other site supervisory staff in the employ of emerging contractors must have completed, or for the period 1 April to 2004 to 30 June 2005 be registered on a skills programme for, the NQF level 2-unit standards or NQF level 4 unit standards.

TABLE 1: Skills Programme for Supervisory and Management Staff
Details of these skills programmes may be obtained from the CETA ETQA manager (e-mail: gerard@ceta.co.za, tel: 011-265-5900)

C3.4.1.4 Certification by recognized bodies
The contractor must be registered with CIDB and have a minimum grading of 7CE.

C3.4.1.5 Certificates
Monthly statements and payment certificates

The statement to be submitted by the Contractor in terms of Clause 6.10 of the Conditions of Contract shall be prepared by the Contractor at his own cost, strictly in accordance with the standard payment certificate prescribed by the Engineer, in digital electronic computer format. The Contractor shall, together with a copy of the digital electronic computer file of the statement, submit two (2) A4 size paper copies of the statement.

For the purposes of the Engineer's payment certificate, the Contractor shall subsequently be responsible, at his own cost, for making such adjustments to his statement as may be required by the Engineer for the purposes of accurately reflecting the actual quantities and amounts which the Engineer deems to be due and payable to the Contractor in the payment certificate.
The Contractor shall, at his own cost, make the said adjustments to the statement and return it to the Engineer within three (3) normal workings days from the date on which the Engineer communicated to the Contractor the adjustments required. The Contractor shall submit to the Engineer three (3) sets of A4 size paper copies of such adjusted statement, together with a copy of the electronic digital computer file thereof.

Any delay by the Contractor in making the said adjustments and submitting to the Engineer the requisite copies of the adjusted statement for the purposes of the Engineer's payment certificate will be added to the times allowed to the Engineer in terms of Subclause 6.10.1.4 of the Conditions of Contract to submit the signed payment certificate to the Employer and the Contractor. Any such delay will also be added to the period in which the Employer is required to make payment to the Contractor.

C3.4.2 Plant and materials
C3.4.2.1 Plant and materials supplied by the employer
Not applicable.

C3.4.2.2 Materials, samples and shop drawings

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 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 Engineer for his approval.

C3.4.3 Construction equipment

C3.4.3.1 Requirements for equipment

The construction methods adopted and plant and equipment used shall be at the discretion of the Contractor, provided always that the construction methods adopted and Plant used by the Contractor are appropriate in respect to the nature of the Works to be executed and the standards to be achieved in the Contract. The contractor is to provide equipment as necessary to successfully complete the works as issued under the letter of acceptance and letters of instruction to proceed as detailed in the document.

C3.4.3.2 Equipment provided by the employer

The Employer shall not supply any equipment.

C3.4.4 Existing services

C3.4.4.1 Known services

The Contractor should consult the relevant municipal departments in order to obtain information as to the location of known services. There are no guarantees provided as to accuracy of information provided by the relevant services providers and the contractor accepts the risk associated therewith.

C3.4.4.2 Treatment of existing services

The location, protection and relocation of existing services form an integral part of this contract.

No guarantee as to the accuracy of the information can be given and the responsibility lies with the contractor to determine the exact positions of all existing services shown on the wayleaves.
Before any work can commence, the Contractor shall contact all private or public authorities controlling services so that they may either protect, move or relocate any services as required, or confirm that all such work has been completed.

C3.4.4.3 Use of detection equipment for the location of underground services

The engineer may order the contractor to appoint a specialist service provider that uses specialized detecting methods.

C3.4.4.4 Damage to services

Any damage to a known service or a service indicated on a wayleave caused as a result of acts by the contractor, his sub-contractors or their respective employees, shall be repaired at the contractor's expense.

C3.4.4.5 Reinstatement of services and structures damaged during construction

Wherever, for the proper construction of the works, any telephone or electricity line or poles, or any water supply pipes, conduits electric cables, sewers, drains or any other services are required to be removed or relocated, or where any of these services requires to be repaired as a result of damage by the or otherwise, the contractor shall immediately advise the Engineer thereof, and further notify the responsible authorities concerned in order that such work as is necessary be undertaken by such authorities. The Engineer will also decide the extent of work, if any to be undertaken by the contractor in removing, relocating or repairing such services.

C3.4.5 Site establishment

C3.4.5.1 Services and facilities provided by the employer

(a) Water sources

No reticulated potable water supply is available in the vicinity of the Site.

The responsible water supply authority in the area of the Site is the District Municipality of Sekhukhune.

Should the Contractor, in complying with his obligations in terms of subclause C3.4.5.2(b): Water, wish to utilise such water supply, he shall himself be responsible for making his own arrangements with the responsible water supply authority for the supply of all water that he may require from such reticulation network for construction purposes as well as for domestic consumption.
If so required by the responsible water supply authority, the Contractor shall further be responsible, at his own cost, for making or otherwise providing metered connections to the available services at the positions specified by the water authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available reticulated water supply will necessarily be adequate for the Contractor's purposes nor that such supply is in any way guaranteed.

All charges as may be levied by the responsible water supply authority in respect of water consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of subclause C3.4.5.2(b), be deemed to be included in the sums bidded by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities, as well as in the rates bidded by the Contractor for the various other items listed in the Schedule of Quantities which require the consumption of water.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible water authority have been promptly paid in full.

(b) Electricity supply

Reticulated electrical power supply is available in the vicinity of the Site.

The responsible electricity supply authority in the area of the Site is District Municipality of Sekhukhune.

Should the Contractor, in complying with his obligations in terms of subclause C3.4.5.2(c): Electricity, wish to avail himself of such supply, he shall, in accordance with the provisions of subclause C3.4.5.2(c), and at his own cost, be responsible for making his own arrangements with the responsible electricity supply authority for the supply of all electrical power he may require from such reticulation network for construction purposes as well as for domestic consumption.

If so required by the responsible electricity supply authority, the Contractor shall, at his own cost, be responsible for making metered connections to the available services at the positions specified by the electricity supply authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available reticulated electrical power supply will necessarily be adequate for the Contractor's purposes nor that its supply is in any way guaranteed.
All charges as may be levied by the responsible electricity supply authority in respect of electrical power consumed by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of subclause C3.4.5.2(c), be deemed to be included in the sums bidded by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities, as well as in the rates bidded by the Contractor for the various other items listed in the Schedule of Quantities which require the consumption of electricity.
The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts as may have become due and payable by the Contractor to the responsible electricity supply authority have been promptly paid in full.

(c) Excrement disposal

A reticulated water-borne sewage disposal system exists in the vicinity of the Site.

The responsible sewage disposal authority is District Municipality of Sekhukhune.

Should the Contractor, in complying with his obligations in terms of subclause C3.4.5.2(d): Excrement disposal, wish to avail himself of such facility, he shall, in accordance with the provisions of subclause C3.4.5.2(d), and at his own cost, be responsible for making his own arrangements with the responsible disposal authority, and for making such connections he may require to the available services.

If so required by the responsible sewage disposal authority, the Contractor shall, at his own cost, be responsible for making connections to the available services at the positions specified by the sewage disposal authority, as well as for the removal of such connections on completion of the Contract.

No warranty is offered or given by the Employer that the existing available reticulated water-borne sewage disposal will necessarily be adequate for the Contractor's purposes nor that its operation is in any way guaranteed.

All charges as may be levied by the responsible sewage disposal authority in respect of the disposal of sewage generated by the Contractor shall be for the Contractor's account and payment to the Contractor in respect thereof shall, in accordance with the provisions of subclause C3.4.2.2(d), be deemed to be included in the sums bidded by the Contractor for the various Preliminary and General items listed in the Schedule of Quantities.

The Contractor shall, when reasonably required by the Engineer, produce documentary proof that all amounts that may have become due and payable by the Contractor to the responsible sewage disposal authority have been promptly paid in full.

(d) Area for contractor's site establishment

A specific area in close proximity to, or on the Site of the Works, will not be made available by the Employer to the Contractor for the Contractor's site establishment. The specific area for the Contractor's site establishment will be identified by the Contractor by the Local Authority and the Contractor shall have sole use of such area, with cost, for the duration of the Contract. The Contractor shall use this area only for the purposes of erecting his site offices, workshops, stores and other facilities required for the execution of the Contract. The Contractor shall not use the area nor allow it to be used for any purposes not directly associated with the execution of the Contract.

The Contractor shall be responsible for arranging, at his own cost, for the provision of all services he may require in the area, as well as elsewhere on the Site.
Should the Contractor deem the area indicated by local community to be inadequate or unsuitable for the Contractor's particular needs, then the Contractor shall be at liberty to again make his own arrangements with the owners of other sites which he considers are better suited to his needs; provided always that the use by the Contractor of any area other than that made available to him by the Employer shall be subject to the prior written approval of the Engineer, which approval shall not be unreasonably withheld; and provided further that the Contractor shall have no claim against the Employer in respect of any costs incurred by him, either directly or indirectly in consequence of utilising any area other than that made available to him by local community, and which costs exceed those costs allowed for by the Contractor in his Bid.

C3.4.5.2 Facilities provided by the contractor

(a) Facilities for the Engineer

The Contractor shall provide on the Site, for the duration of the Contract and for the exclusive use of the Engineer and/or his Representative (as applicable), the various facilities described hereunder. All such facilities shall be provided promptly on the commencement of the Contract and failure on the part of the Contractor to provide any facility required in terms of this specification shall constitute grounds for the Engineer to withhold payment of the Contractor's bidded Preliminary and General items until the facility has been provided or restored as the case may be.

(i) Site Office accommodation
The contractor shall provide on the site, within his site establishment facility one office for the engineer. The office for the engineer must be a pre-fabricated building 6m x 3,5m in size, painted with two coats of paint, white interior and yellow exterior, two windows and one lockable steel door. Furniture must consist of two neat wooden desks ± 1,2m x 0,6m with 6 chairs and two lockable steel cabinets. The office must be supplied with two wall sockets and fluorescent lighting (two 1,2m lights). (Corrugated iron containers are not acceptable)

(ii) Carports
The Contractor shall provide on Site for the duration of the Contract, two carports for the exclusive use of the Engineer. Each carport shall be constructed so that the vehicle parked under it is always protected against the direct rays of the sun. The carport area shall at least be 20m2 and the floor shall be covered with a layer of crushed stone to alleviate dusty and muddy conditions. The carport(s) shall be placed so as to provide easy and convenient access to the Engineer's office.

(iii) Contract name boards
The Contractor shall provide, erect and maintain one contract name board at such positions and locations as are directed by the Engineer.

The Contractor shall before ordering or manufacturing any such contract name boards, obtain the Engineer's written approval in respect of all names and wording to appear on the contract name boards.

(iv) Survey equipment and assistants
(a) Survey equipment
Whenever reasonably required by the Engineer, the Contractor shall make available to the Engineer or his representative, the following additional survey equipment:
- 1 upright reading automatic level with tripod;
- 1 metric levelling staff with protective cover bag;

- 6 ranging rods;
- 1 100 metre Stilon tape measure;
- 1 ± 2 kg hammer.

Whenever reasonably required by the Engineer, the Contractor shall make available to the Engineer or his representative, the following additional survey equipment:

- 1 tacheometer with tripod;
- 1 survey staff for tacheometer;
- 1 Distomat, complete with tripod and fully charged battery.

All such survey equipment provided by the Contractor shall be in good condition, properly calibrated and fit for the purpose and shall be kept fully serviceable at all times by the Contractor at his own cost. The Contractor shall have any defective equipment repaired or replaced at his own cost within 12 hours after notification by the Engineer's staff.

Where required by the Engineer, the Contractor shall at his own cost, promptly arrange for the recalibration of survey equipment provided.

(b) Survey assistants

The Contractor shall, in accordance with the requirements of the project specifications of this Contract, make available to the Engineer, two (2) survey assistants upon request by the engineer.

(v) Telephone, fax and e-mail facilities

The Contractor shall provide on Site for the duration of the Contract, the following telephone facilities for the use of the Engineer and his Representative:

- One (1) Cellphone handset.
- No Telkom lines are required.
- Vodafone (or similar) Mobile connect modem with initial 500Mb prepaid data.

(vi) Computer facilities

The Contractor shall, for the duration of the Contract, provide the computer equipment together with the software specified hereunder, for the exclusive use of the Engineer and his staff:

- 1 i7 laptop Computer
- 1 colour printer, scanner and copier multi function device - **Samsung**

The computers shall comply with the following minimum specifications:

All computer hardware shall be provided complete with the requisite connecting cables and all interfacing devices and software necessary for its efficient operation as an integral system.

The following software shall be properly installed on the computer, and the original licence agreements and disks shall be provided to the Engineer for safekeeping:

(a) Microsoft Windows 10
(b) Microsoft Office Professional

All computer equipment provided shall be kept fully serviceable at all times by the Contractor. The Contractor shall have any defective equipment repaired or

replaced at his own cost within 12 hours after notification by the Engineer's staff. The Contractor shall further provide at his own cost, all paper and ink cartridges and other consumables reasonably required by the Engineer.

(b) Water

The Contractor shall, at his own expense, be responsible for obtaining and distributing all water as may be required for the purposes of executing the Contract, including water for both construction purposes and domestic use, as well as for making all arrangements in connection therewith. The Contractor shall further, at his own expense, be responsible for providing all necessaries for procuring, storing, transporting and applying water required for the execution of the Contract, including but not limited to all piping, valves, tanks, pumps, meters and other plant and equipment, as well as for all work and superintendence associated therewith.
The sources of all water utilised for the purposes of the Contract shall be subject to the prior approval of the Engineer, which approval shall not be unreasonably withheld.

The Contractor shall comply with all prevailing legislation in respect of drawing water from natural and other sources and shall, when required by the Engineer, produce proof of such compliance. The distribution of water shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

All water provided by the Contractor for construction purposes shall be clean, free from undesirable concentrations of deleterious salts and other materials and shall comply with any further relevant specifications of the Contract. The Contractor shall, whenever reasonably required by the Engineer, produce test results demonstrating such compliance. Water provided by the Contractor for human consumption shall be healthy and potable to the satisfaction of the health authorities in the area of the Site.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of water, the costs of which will be deemed to be included in the Contractor's bidded rates.

(c) Electricity

The Contractor shall, at his own expense, be responsible for obtaining and distributing all electricity as he may require for the purposes of executing the Contract, including electricity for both construction purposes and domestic use, as well as for making all arrangements in connection therewith.

The distribution of electricity shall be carried out by the Contractor strictly in accordance with the applicable laws and regulations.

No separate payment will be made to the Contractor for the obtainment, distribution and consumption of electricity, the costs of which will be deemed to be in the Contractor's bidded rates and prices.

(d) Excrement disposal

The Contractor shall, at his own expense, be responsible for safely and hygienically dealing with and disposing of all human excrement and similar matter generated on the Site during the course of the Contract, to the satisfaction of the responsible health authorities in the area of the Site and the Engineer. All such excrement shall be removed from the Site and shall not be disposed of by the Contractor on the Site.

The Contractor shall further comply with any other requirements in this regard as may be stated in the Contract.

No separate payment will be made to the Contractor in respect of discharging his obligations in terms of this subclause and the costs thereof shall be deemed to be included within the Contractor's bidded Preliminary and General items.

C3.4.5.3 Storage and laboratory facilities

(a) Site maintenance

During progress of the work and upon completion thereof, the Site of the Works shall be kept and left in a clean and orderly condition. The Contractor shall store materials and equipment for which he is responsible in an orderly manner, and shall keep the Site free from debris and obstructions.

(b) Testing and quality control

(i) Contractor to engage services of an independent laboratory

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

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

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

(ii) Additional testing required by the Engineer

In addition to the provisions of subclause C3.4.2.4(b)(i): Contractor to engage services of an independent laboratory, the Engineer shall be entitled at times during the Contract to require that the Contractor arrange with the independent laboratory to carry out any such tests, additional to those described in subclause C3.4.2.4(b)(i), at such times and at such locations in the Works as the Engineer shall prescribe. The Contractor shall promptly and without delay arrange with the independent laboratory for carrying out all such additional testing as required by the Engineer, and copies of the test results shall be promptly submitted to the Engineer.

(iii) Costs of testing

(a) <u>Tests in terms of subclause C3.4.2.4(c)(i)</u>

The costs of all testing carried out by the independent laboratory in accordance with the requirements of subclause C3.4.2.4(c)(i), above shall be borne by the Contractor and shall be deemed to be included in the bidden rates and prices for the respective items of work as listed in the Schedule of Quantities and which require testing in terms of the Specifications. No separate payments will be made by the Employer to the Contractor in respect of any testing carried out in terms of subclause C3.4.2.4(c)(i).

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

(b) Additional tests required by the Engineer

The costs of any additional tests required by the Engineer in terms of subclause C3.4.2.4(b)(i): Additional testing required by the Engineer, shall be reimbursed to the Contractor against substitution of the Provisional Sum allowed therefore in the Schedule of Quantities; provided always that the costs of any such additional tests ordered by the Engineer, the results of which indicate that the quality of the materials utilised and/or the standard of workmanship achieved are/is not in accordance with the specifications, shall not be reimbursable to the Contractor.

C3.4.5.4 Other facilities and services

The Contractor shall be responsible for the security of his personnel and Constructional Plant on and around the Site of the Works and for the security of his camp, and no claims in this regard will be considered by the Employer. The Contractor shall fence the area around his offices, stores and sheds (i.e. the "camp") with adequate security fences to ensure that unauthorised persons do not enter the "Camp" area. The rate must include all costs for the installation, maintenance and removal of the fencing in addition to all other facilities as required by the Contractor for his own purposes and as specified.

C3.4.5.5 Vehicles and equipment

As details in section C3.4.5.2 of this document

C3.4.5.6 Advertising rights

All notices, signs and barricades, as well as advertisements, may be used only if approved by the Engineer. The Contractor shall be responsible for their supply, erection, maintenance and ultimate removal and shall make provision for this in his bidden rates.

The Engineer shall have the right to instruct the Contractor to move any sign, notice or advertisement to another position, or to remove it from the Site of the Works if in his opinion it is unsatisfactory, inconvenient or dangerous.

C3.4.5.7 Notice boards

Two notice boards will be supplied by the Contractor which will be erected at the construction site as per instruction of the Engineer.

As details in section C3.4.5.2 of this document

C3.4.6 Site usage

No labourers will be allowed to reside at the site camp except for security personnel (maximum of 2).

C3.4.7 Permits and way leaves

The Contractor shall if required, be responsible to obtain all the wayleave required for this Contract.

C3.4.8 Alterations, additions, extensions and modifications to existing works

None

C3.4.9 Properties

C3.4.9.1 Inspection of adjoining properties

The Contractor shall organise the work to cause the least possible inconvenience to the public and to the property owners adjacent to or affected by the work, and except as hereunder provided, shall at all times provide and allow pedestrian and vehicular access to properties within or adjoining or affected by the area in which he is working. In this respect the Contractor's attention is drawn to Clause 8.1.2 of the Conditions of Contract.

If, as a result of restricted road reserve widths and the nature of the work, the construction of bypasses is not feasible, construction shall be carried out under traffic conditions to provide access to erven and properties.
Notwithstanding the a foregoing, the Contractor may, with the prior approval of the Engineer (which approval shall not be unreasonably withheld), make arrangements with and obtain the acceptance of the occupiers of erven and properties to close off part of a street, road, footpath or entrance temporarily, provided that the Contractor duly notifies the occupiers of the intended closure and its probable duration, and reopens the route as punctually as possible. Where possible, such streets, roads, footpaths and entrances shall be made safe and reopened to traffic overnight. Such closure shall not absolve the Contractor from his obligations under the Contract to provide access at all times. Barricades, traffic signs, drums and other safety measures appropriate to the circumstances shall be provided by the Contractor to suit the specific conditions.

C3.4.9.2 Existing residential areas

Electricity and water supply interruptions in existing residential areas shall be kept to a minimum. The Engineer's approval shall be obtained prior to such interruptions and residents shall be notified in writing at least 24 hours but not more than 48 hours in advance. Supplies shall be normalised by 16:00 on the same day.

C3.4.10 Water for construction purposes

Water shall be provide by the contractor as per engineer requirements

C3.4.11 Survey control and setting out of the works

The Contractor shall check the line and the level of the pipeline at least once during the installation of each pipe length and shall take such corrective action as may be necessary. A copy of the results of all checks and a statement of any corrective measures taken shall be available for inspection on the Site, and a copy shall be given to the Engineer on the same day.

C3.4.12 Subcontractors

All matters pertaining to subcontractors (including Nominated Subcontractors) and the work executed by them shall be dealt with directly between the Engineer and the Contractor in the context of all subcontract work being an integral part of the Works for which the Contractor is responsible.

The Engineer will not liaise directly with any subcontractors nor will he issue instructions concerning the subcontract works directly to any subcontractor.

All matters arising from the subcontract agreements shall be dealt with directly between the Contractor and the subcontractors and the Engineer will not become involved.

C3.4.13 Construction in restricted areas

Working space in areas may be restricted. The construction method used in these restricted areas largely depends on the Contractor's Plant. Notwithstanding, measurement and payment will be strictly according to the specified cross-sections and dimensions irrespective of the method used, and the rates and prices bidden will be deemed to include full compensation for any difficulties encountered by the Contractor while working in restricted areas. Neither extra payment nor any claim for payment due to these difficulties will be considered unless otherwise scheduled.

C3.4.14 Workmanship and quality control

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

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

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

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

C3.4.15 Spoil Area

The Engineer will instruct the Contractor if material is to be spoiled in any place except the approved site as presented by the contractor on site. No indiscriminate spoiling will be allowed. All spoil must be neatly levelled as the contract progresses.

C3.4.16 Blasting

The Contractor must adhere to all Safety Regulations to prevent damage to properties.

Should rock be encountered it will be removed by controlled blasting methods as approved by the engineer.

The contractor will submit full details of his intended rock excavation method for approval by the Engineer.

C3.4.17 Supervision and Control

The Contractor must provide competent supervising personnel with all transport, instruments, tools etc to do their own quality control. It is not the duty of the Engineer's representative to act as foreman or surveyor on site and he may elect to do his own control testing when he wishes to do so.

C3.4.18 PROJECT SPECIFICATION AMENDMENTS TO THE STANDARD SPECIFICATIONS

B1 PROJECT SPECIFICATIONS REFERRING TO THE STANDARD SPECIFICATIONS AND ADDITIONAL SPECIFICATIONS

In certain clauses the Standard Specifications allow a choice to be specified in the Project Specifications between alternative materials or construction methods, and for additional requirements to be specified to suit a particular contract. Details of such alternatives or additional requirements applicable to this Contract are contained in this part of the Project Specifications. It also contains some additional specifications required for this particular Contract.

The number of each clause and each payment item in this part of the Project Specifications consists of the prefix B followed by a number corresponding to the number of the relevant clause or payment item in the Standard Specifications. The number of a new clause or a new payment item that does not form part of a clause or a payment item in the Standard Specifications and is included here, is also prefixed by B followed by a new number. The new numbers follow on the last clause or item number used in the relevant section of the Standard Specifications.

B2 SECTION 1100: DEFINITIONS AND TERMS

B 1115 GENERAL CONDITIONS OF CONTRACT

REPLACE "for National and Provincial Road and Bridge Works", *IN THE SECOND AND THIRD LINES WITH* "for Road and Bridge Works for State Road Authority".

`*ADD THE FOLLOWING CLAUSE:*

"B 1156 LABOUR-OPTIMISING CONSTRUCTION

The cost effective employment of as great a portion of labour as is practically and technically feasible to produce a standard of construction as required by the Specifications, thus the economic substitution of plant and mechanical equipment in favour of available labour using hand tools, on condition that this method is not more expensive than the conventional construction practices."

B3 SECTION B1200: GENERAL REQUIREMENTS AND PROVISIONS

B 1202 SERVICES

Add the following:

"Information regarding known services is shown on the drawings.

The information shown on the schedule of services is based on the best available information. No guarantee as to the accuracy of the information can be given and the schedule should, therefore, be used as a guide only.
Before work commences, the Contractor shall contact all private owners or public authorities controlling services to allow them to protect, move or relocate a service as required, or to confirm that all such work has been completed.

The relocation and protection of services shall be carried out in conjunction with the service owners and in compliance with the Machinery and Occupational Safety Act 6 of 1983.

Where protective measures involve the construction of permanent work, payment as specified in the order given by the engineer, shall be either at contract rates, where these are applicable, or where no contract rates are applicable, in accordance with the provisions of Clause 6.4 of the General Conditions of Contract.
No payment will be made for inconvenience to the Contractor due to services crossing the Site or any authority working on such services, nor will delays caused by such workings be accepted as a basis for claiming an extension of time for completing the Works."

B 1204 PROGRAMME OF WORK

Insert the following before the first paragraph:

"A bar-chart programme shall be provided showing the various activities in such detail as may be required by the engineer. The programme shall be updated monthly in accordance with the progress made by the contractor. The critical path of the programme of work shall also be indicated.

In compiling the programme of work, the contractor shall incorporate the following important factors specified in these specifications:

- The specified contract period
- Percentage of work to be done by Black Economic Empowered Enterprises and labour-intensive work including a breakdown of the labour intensive work.
- Weather limitations regarding the application of bituminous products as specified in sections 4100, and 4500 of the standard specifications.
- The relocation and protection of services.
- Accommodation of traffic proposals.
- Phase construction detail relating to the relocation and protection of services, accommodation of traffic and weather limitations.

The contractor shall take note of various factors contained in these specifications which will have a significant influence on the compilation of the programme of work."

B1205 WORKMANSHIP AND QUALITY CONTROL

Add the following after the title:

"The contractor shall implement a quality assurance system in accordance with ISO 9002 and appoint a quality manager who shall ensure that members of the contractor's staff comply with the requirements of the quality system. The quality system and the methods used to implement it shall be described in a quality plan produced by the contractor.
The quality manager shall be resident on site full time. No construction activities shall take place on site before the engineer approves the quality plan".

Delete the second, third, fourth and fifth paragraphs and replace with the following:
"The contractor shall submit the quality assurance system he proposes using to the engineer, for his approval, within two weeks of the site handover. Once accepted by the engineer the contractor shall not deviate from it unless written notification of proposed changes have similarly been submitted and approved. The system shall record the lines and levels of responsibility and indicate the method by which testing procedures will be conducted."

B1209 PAYMENT

(a) Contract rates

Add the following:

"In the event of items not listed in any schedule of the Pricing Schedule, the rates tendered for similar items in other schedules shall apply for payment of similar work, if ordered.
A further requirement of this contract is that the contractor provides a breakdown of all rates of all schedules in the pricing schedule within 14 days after the award of the contract. The breakdown of rates required are for labour, plant and transport, fuel, material, sub-contractors provisional sums, others and mark-up."
(b) Rates to be inclusive

Add the following to the first paragraph:

"VAT shall be excluded from the rates."

c) The meanings of certain phrases in payment clauses

Procuring and furnishing...(material)

Add the following:

"Payment for procuring and furnishing material from commercial sources shall include all transport costs, irrespective of distance hauled".

(e) Materials on the site

Replace "clause 52" in the first line with "subclause 14.5"

Add the following subclauses:

"(g) Work in confined areas

Except where provided for in the specifications and pricing schedule no extra payment shall be made nor shall any claim for additional payment be considered for

construction in confined areas. The omission of standard pay items from the schedule of quantities shall be taken to be deliberate and any additional costs incurred shall be included in the bulk rate.

(h) Rates to remain unchanged when scope of work changes

Dependent on the rates and prices offered in the Pricing Schedule, the employer intends to increase or reduce the scope of work to match the budget allowed for this project. The value of such increase or reduction in the scope of works shall not give cause for the contractor to vary the offered rates and prices, which shall remain final and binding for the duration of the contract, excluding items under section 1300 of the pricing schedule, provided that:

(i) Notification of the change to the scope of work is given in writing in the Appendix to the Form of Acceptance.

(ii) The value of the increase or reduction in the scope of work does not alter the tendered sum, excluding all provisional sums, by more than 20%,

The employer reserves the right to negotiate with the contractor rates and prices for items under section 1300, as provided for in this clause."

B1210 CERTIFICATE OF PRACTICAL COMPLETION OF THE WORKS

Add the following at the end of the clause:

"In addition to the listed specified items of work and regardless of the degree of beneficial occupation by the employer, no sections of the works, individually or collectively, shall be considered for practical completion unless the following criteria also have been met:

(i) In the case of partial completion, the estimated cost to complete the outstanding work is less than 2% of the estimated cost to construct the whole section or sections.

(ii) In the case of the whole works, the estimated cost to complete the outstanding work is less than 2% of the tendered value of work plus the cost of any variation or extra work orders, but excluding CPA and VAT.

(iii) The written list of outstanding items of work can be completed within 28 days of the list having been accepted in writing by the contractor."

B1213 VARIATION FROM SPECIFIED NOMINAL RATES OF APPLICATION OR NOMINAL MIX PROPORTIONS

Add the following to the first paragraph:

"Tenderers shall, for the purpose of calculating tender rates, take note that the nominal rates of application and/or nominal mix proportions of a number of products are amended in these project specifications."

B 1217 PROTECTION OF THE WORKS AND REQUIREMENTS TO BE MET BEFORE CONSTRUCTION OF NEW WORK ON TOP OF COMPLETED WORK IS COMMENCED

Add the following clauses:

"(h) Prior to the start of any excavation in the existing bulk Pipeline on any part of the works, the contractor shall submit to the engineer for approval a method statement for the execution of that part of the work. The contractor is responsible for the protection of the underlying pipeline and the drying out and/or keeping dry of such excavations. The contractor's programme shall make provision for the speedy backfilling of the excavations and the drainage thereof if inundation cannot be prevented.

The contractor shall, at his own cost, be responsible for the repair of pipe which have been damaged due to his own works or his neglect to submit his planning to the engineer for approval or to adhere to approved precautionary measures.

B1224 THE HANDING OVER OF THE ROAD RESERVE

Add the following paragraphs:

"The road reserve within the defined limits of the contract falls within the limits of another contract that has already been let to a routine maintenance contractor who is obliged to conduct regular maintenance on the route on which this contract is sited. For the duration of this contract, the routine maintenance contractor will carry out the following duties in accordance with his contract with SANRAL:

i) Drainage maintenance
- Repair and maintenance of inlet and outlet structures not damaged by the main contractor
- Subsoil drain maintenance
- Cleaning of waterway structures
- Cleaning of prefabricated culverts not blocked by the main contractor
- Cleaning of concrete drains and channels not soiled by the main contractor
- Cleaning and maintenance of existing earth channels
- Edge build-up removal not caused by the main contractor
- Maintenance of existing channels

ii) Road side maintenance
- Fencing maintenance not damaged by the main contractor
- Collection and removal of debris and litter
- Shoulder repairs

iii) Road traffic signs and road side furniture
- Repair of permanent road traffic signs
- Road sign cleaning and removal of illegal signs
- Roadstuds maintenance
- Guard-rail erection and maintenance
- Road markings but excluding those applied by the main contractor
- Maintenance of existing wire ropes

iv) Protection work
- General erosion protection
- Gabion protection

v) Vegetation maintenance

- Controlling vegetation growth: Mowing and cutting
- Chemical control of vegetation and eradication of undesirable vegetation

- Removal of undesirable vegetation: Physical eradication
- Establishment of grass

vi) Emergency assistance

- Emergency assistance to the main contractor
- All-emergency normalisation
- Cleaning of chemical spillage

vii) Structure repair

- Cleaning of culverts, side drains, channels blocked by his activities
- Arrange for the removal of broken down vehicles or vehicles involved in an accident off the road

The costs for the listed maintenance activities will be deemed to be included in the contractor's rates under section 1300.

B1229 SABS CEMENT SPECIFICATIONS

Add the following to this clause:

"Where reference is made in this specification or the standard specifications to the cement specifications, e.g. SABS 471: Portland cement and rapid hardening Portland cement, it shall be replaced with the new specification:

SANS 50197-1:2000 "Cement compositions, specifications and conformity criteria Part 1: Common cements.

Add the following clauses:

"B 1230 MATERIALS

The contractor, when using materials that are required to comply with any standard specification, shall, if so ordered, furnish the engineer with certificates showing that the materials do so comply.
Where so specified, materials shall bear the official mark of the appropriate authority. Samples ordered or specified shall be delivered to the engineer's office on the site free of charge.

Where materials are specified under trade names tenders must be based on these materials. Alternative materials may be submitted as alternative tenders and the engineer may, after receipt of tenders, approve the use of equivalent materials. The tender must be clearly marked as an alternative tender, failing which the tender may be rejected.

Unless otherwise specified, all proprietary materials shall be used and placed in strict accordance with the relevant manufacturer's current published instructions.

Unless anything to the contrary is specified, all manufactured articles or materials supplied by the contractor for the permanent works shall be unused.

Earth, stone, gravel, sand, and all other materials excavated or present on the site or within the road reserve, or in borrow areas shall not become the property of the contractor, but will be at his disposal only in so far as they are approved for use on the contract.

Existing structures on the site shall remain the property of the employer and except as and to the extent required elsewhere in the contract, shall not be interfered with by the contractor in any way.
Materials to be included in the works shall not be damaged in any way and, should they be damaged on delivery or by the contractor during handling, transportation, storage, installation or testing they shall be replaced by the contractor at his own expense.
All places where materials are being manufactured or obtained for use in the works, and all the processes in their entirety connected therewith shall be open to inspection by the engineer (or other persons authorised by the engineer) at all reasonable times, and the engineer shall be at liberty to suspend any portion of work which is not being executed in conformity with these specifications.

The contractor shall satisfy himself that any quarry selected for use provides the necessary mined material in accordance with the specification.

B1234 WORKMEN'S COMPENSATION ACT

All labour employed on the site shall be covered by the Workmen's Compensation Act. The contractor shall pay in full, including the payment of the necessary levies, such amounts, as are due in terms of the Act. The contractor at the commencement of the contract shall resolve the manner in which Workmen's Compensation will be handled. Amounts paid by the contractor shall not be included in the wage rates but shall be an extra payment allowed for by the contractor.

B1235 EPWP SIGNBOARD

The Contractor will be required to erect a signboard displaying the EPWP logo, indicating that this project is part of the EPWP. All costs related to the provision, erection and subsequent removal of the signboard shall be refunded to the Contractor through the provisional sum included in the Schedule of Quantities for this purpose.

B1236 COMMUNITY PARTICIPATION.

1. Purpose

In order to give effect to the need for participation and transparency in the process of appointing labour, the community should participate in the decision-making process throughout the life of a project. This shall be achieved through structured engagement between those responsible for the delivery of the project and the community.

2. Structure and Composition

A Project Liaison Committee (PLC) may be formed from representatives of the Employer, the Engineer, the Contractor and the Community if the project is such that a specific community can be identified.

3. Procedures

3.1 The PLC deals with labour and SMME involvement on the project and shall meet at least once every month until such time as it is of the opinion that it could fulfil its tasks by meeting less frequently.

3.2 The PLC shall make recommendations by consensus. If consensus cannot be reached, the decision of the Employer will be final in cases that have no

financial implications for the Contractor or where payment is to be made from PC items. Where the financial responsibility for the successful completion of the works rests with the Contractor, the Contractor's decision shall be final. In fulfilling its tasks, the PLC shall be guided by the relevant sections of this specification and the supplementary documents.

4. Tasks of the PLC

4.1 To assist with community liaison and resolution of disputes.
4.2 To devise fair and transparent procedures that will assist the Contractor in the engagement of labour and the award of sub-contracts to SMME's.
4.3 To advise on and monitor labour issues.
4.4 To assist in resolving labour disputes.

5. Assistance to the PLC

5.1 The Employer may appoint a competent local person as a Community Liaison Officer to assist the Engineer and the Contractor in the day to day liaison with the communities directly affected by the project.

B 1237 MEASUREMENT AND PAYMENT

Item **Unit**

B12.02 Excavation for services:

(a) Excavation in search of existing services in soft material situated within the following depth ranges below the surface level;
(i) 0m to 2m: ..... cubic metre (m^3)

(b) Extra over item B12.02 a) for excavation in hard material in the close vicinity of services using jackhammers, power tools, etc where no blasting or machine excavation is permitted: cubic metre (m^3)

Item **Unit**

B12.03: Relocation and protection of existing services:

(a) Relocation, including lowering or raising, protection and/or repair of existing services which are not allowed for under items in the schedule of quantities PC Sum
(b) Handling cost and profit in respect of subitem 12.03 (a) ..... %

Item **Unit**

B12.04: Provision of Community Liaison Officer

(a) Community liaison officer ..... PC Sum
(b) Handling cost and profit in respect of subitem 12.04 (a) ..... %

Item **Unit**

B12.05: Community participation

(a) Cost of community participation and PSC support..... PC Sum
(b) Handling cost and profit in respect of subitem 12.05 (a) ..... %

B12.06 Supply, Transport and Erect Contract Sign Board

Item	Unit
Supply, transport and erect contract sign board	No

B4 SECTION 1300: CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL OBLIGATIONS

B 1302 GENERAL REQUIREMENTS

(a) Camps, construction plant and testing facilities

Add the following:

"There is no area available within the road reserve for the establishment of the contractor's organization, camp and constructional plant on site.

The contractor shall make his own arrangements regarding the establishment of a camp site and housing for his construction personnel. No personnel will be allowed to reside on the site. Only night-watchmen may be on the site after hours.

The contractor shall be responsible for the security of his personnel, construction plant on and around the site of the works, and of his camp. The cost of this will be deemed to be included in item B13.01.

"The contractor's offices, laboratory and stores shall, unless otherwise agreed, be erected in close proximity to the engineer's offices and laboratory. The entire area shall be fenced with a minimum of 1,8m height razor taped mesh. The contractor's offices, laboratory and stores and engineer's offices and laboratory shall be provided with sufficient perimeter lighting.

The contractor shall provide security guards from a reputable security company for protection of the engineer's offices and laboratory. The security guards must be provided with a two way radio and be in constant contact with the control room of the security company and an armed response unit. The security guards must be armed and accompanied by trained guard dogs. Payment for the above shall be included in item B13.01."

"The contractor shall provide at each work site at least one portable chemical latrine unit per 10 workers for use by construction workers employed on the project. The latrine units shall be serviced daily and kept in a hygienic and orderly state to the satisfaction of the engineer. The contractor shall move them to the required positions, and finally remove them, on completion of the works, all to the satisfaction of the Health Department of the relevant authority. Toilets must be screened from public view and their use shall be enforced. No separate payment shall be made for this requirement and payment shall be deemed to be included in the rates tendered for the contractor's time-related obligations."

B1303 PAYMENT

Item Unit

B13.01 Contractor's general obligations

Add the following after (c) Time-related obligations:

(c) Contractor's time related obligations in respect of the Occupational Health and Safety Act and Construction Regulations.
(d) Contractor's time related obligations in respect of the Environmental management plan

Add the following after the fifth paragraph:

"The combined total tendered for sub-items (a), (b) and (c) shall **not exceed 15% of the tender amount of that particular phase of the contract**, excluding VAT and contingencies.

Should the contractor be of the opinion that 15% is inadequate to cover his costs in terms of section 1300, he shall indicate separately with his tender where such costs have been allowed for in his tender. If no such indication is given, the contractor shall not at any stage during the contract for any reason whatsoever claim additional compensation under this item."

B5 SECTION B1400: HOUSING, OFFICES AND LABORATORIES FOR THE ENGINEER'S SITE PERSONNEL

B1402: OFFICES AND LABORATORIES

(a) General

Add the following:

"It is a requirement of the contract that the offices for the engineer's supervisory staff shall be supplied with approved burglar proofing, the cost of which shall be included in the relevant tendered rates."

(b) Offices

Replace subclause (xii) with the following:

"A complete cell phone service together with data equipment shall be provided. The cost of cell phone calls and data are included in the prime cost sum for the provision of the telephone service.

The following list is indicative of the number and sizes of offices and other accommodation that will be required:

Description	**Area**
• Office for the engineer's personnel	4 x12m²

(g) Ablution units

Add the following:

"Ablution unit is required on site. Unit shall contain at least a wash-hand basin, flush toilet, urinal, shower unit and the necessary accessories.

Ablution unit shall be provided with hot and cold water.

The towels shall be replaced with clean towels every second day and soap supplied as necessary.

Unit shall contain a lockable clothing cupboard for at least four employees

The ablution units shall each have an interior floor area of at least 10m² and a 1,5m wide veranda on one side with a 100mm concrete floor.

The tendered rate under Item B14.01(e) shall include full compensation for the supply, erection and maintenance of the complete units as specified."

Add the following new subclause:

"(i) Kitchen units

The contractor shall provide a kitchen unit with minimum interior floor area of 12m², a 1,5m wide veranda on one side with a 100 mm thick concrete floor in the vicinity of the offices.

Each unit shall contain at least two opening windows, a lockable door, a two-plate electrical stove without oven, a steel framed formica topped table (0,6 m x 1,2 m), four steel framed bar or kitchen stools, a lockable refrigerator of one hundred and fifty litres capacity, a kitchen sink supplied with clean hot and cold potable water, a drain board coupled to a suitable drainage system and a lockable steel grocery cupboard."

B1403: HOUSING

(c) Rented accommodation

Add the following:

"The engineer may arrange for the obtaining of rented accommodation for his supervisory personnel on site. Payment of such rent shall be made under the provisional sum in subitem 14.07(a) and shall be expended on a monthly basis by the contractor as ordered by the engineer."

B1404 SERVICES

(b) Water electricity and gas

Add the following:

"The supply of electricity and water to the offices and laboratories of the engineer's supervisory staff shall be maintained 24 hours per day. The power supply shall be regulated by a suitable voltage regulator in order to maintain a constant current and voltage level at all times to prevent damage to the office and laboratory equipment and related machinery during power surges. Payment for the voltage regulator shall be deemed to be included in the rates tendered for the supply of power. In the event of damage to the office and laboratory equipment and related machinery because of a faulty voltage regulator, the contractor shall be liable for payment of all repair or replacement costs of such damaged items.

A diesel driven generator plant must be provided to the site that must automatically engage in the event of a power failure to ensure an uninterrupted electric supply to the offices and the laboratory. The cost of this plant shall be included in rates tendered for supply of services to the offices and laboratory."

B1406: MEASUREMENT AND PAYMENT

*Change the unit of measurement of Item 14.01(e) to "*number*" and renumber as follows:*

Item			**Unit**
B14.01	**(e)**	**Ablution units**	number (No.)

Add the following subitem to item 14.01:

The unit of measurement and payment shall be the authorized number of units erected, complete and in accordance with the specifications, together with all items as specified in Clause B1402.

The tendered rate shall include full compensation for the supply and erection of units, accessories, furniture, etc. as specified and for the proper maintenance, cleaning and provision of daily requirements.

B6 SECTION 1500: ACCOMMODATION OF TRAFFIC

B1501 SCOPE

Add the following:

"It is a condition of this contract that traffic is accommodated in accordance with the provisions of the latest edition of the South African Road Traffic Signs Manual (SARTSM). The latest version for use in the accommodation of traffic is Volume 2, Chapter 13 of the June 1999 edition. Copies of this publication are available from the South African National Roads Agency Limited, P.O. Box 415, Pretoria, 0001."

B 1502 GENERAL REQUIREMENTS

(a) Safety

Add the following:

"The Contractor shall take all precautions necessary to programme and conduct his construction operations in such a manner that inconvenience and annoyance to public traffic, property owners and road users is kept to a minimum. The Contractor shall also ensure that safety requirements are strictly enforced at all times.

The Contractor shall be responsible for maintaining the existing road surface within the site of the Works in a safe and trafficable condition for the duration of the contract.

The Contractor, before starting work on any part of the site or at any position, shall submit to the Engineer his method statement and programme for accommodating traffic on that section."

(e) Access to properties

Add the following:

"Where the alignment of the new road coincides with the alignment of the existing road, a number of accesses to private properties will have to be operational and maintained during the constructional period. No separate payment will be made for providing acceptable and safe access across the new road at all times during construction of the road."

(i) Traffic safety officer

Add the following to the second paragraph:

"The Contractor shall submit a CV of the candidate to the engineer for approval before the Traffic Safety Officer is appointed. The Traffic Safety Officer shall be available to discuss road safety and traffic accommodation matters whenever required by the engineer."

Replace subsubclauses (ii) and (iii) with the following:

"(ii) Record on neat and dimensioned sketches and submit to the engineer the position and sign reference number where applicable of each sign, barricade, delineator, cone, amber flicker light, guardrail and permanent or temporary painted road marking feature. The position of each shall be adequately referenced from identifiable permanent features or survey points located on the site of the works.
These records shall also show the date and time at which the recorded traffic accommodation features are certified correct by the Traffic Safety Officer, and shall be signed by the Traffic Safety Officer before being submitted to the engineer.

The records shall be amended whenever changes are made in the field and the revised detailed sketches shall be submitted to the engineer. Such changes shall include the recording of the position of flagmen and STOP/GO control men and their associated traffic accommodation equipment wherever used.

(iii) Personally inspect the position and condition of each traffic accommodation feature on the entire site of works twice each day before 09:30 and at 16:30, to record all irregularities discovered and the remedial action taken, and to sign off as correct and submit to the engineer such record sheets by midday of the next working day. The Traffic Safety Officer shall keep a duplicate book for this specific purpose.

The Traffic Safety Officer shall also submit with this report to the engineer the daily labour returns of flagmen, STOP/GO and traffic signal control men employed."

Add the following new subsubclauses:

(ix) The Traffic Safety Officer shall be equipped with a cellular telephone and shall have a vehicle and 3 labourers at his disposal 24 hours a day and he shall be directly answerable to the Contractor's Site Agent. The Traffic Safety vehicle shall be a truck with a capacity of 3 tons and shall be equipped with a high visibility rear panel in accordance with the requirements of Volume 2 Chapter 13 of the South African Road Traffic Signs Manual. The words "TRAFFIC CONTROL" shall be written on the high visibility panel in highly legible letters not less than 140mm high.

The Traffic Safety Officer shall have a direct line of communication at all times with the police and traffic officers responsible for the area within limits of the contract.

The provision of the Traffic Safety Officer, the Traffic Safety vehicle, the driver and three labourers and the cost of the cellular telephone shall be deemed to be included in the rate tendered for Pay Item B15.01: Accommodation of traffic and maintaining temporary deviations.

(x) Ensure that all obstructions related to the contractor's activities be removed before nightfall where applicable and as instructed by the engineer and that the roads are safe for night traffic.

(xi) Be responsible for removal of broken down vehicles off the roadway and implementing actions requested by the traffic authorities with regard to the work to be carried out and be responsible for the erection and maintenance of all traffic signs necessary for the accommodation of traffic.

(xii) In the event of an accident, record details of the accident in a written report, to a format agreed with the engineer accompanied by photographs and a neat sketch plan on which is shown identifiable permanent features, relevant dimensions and the position of all temporary traffic control facilities or other devices used for traffic accommodation."
Add the following new subclauses:

"**(j) Overnight parking of plant**

During non-working hours, all plant and traffic hazards shall be removed from the road and all signs no longer applicable to the situation shall be removed or effectively covered. No plant shall be left adjacent to the road during overnight parking.

Plant which is impractical to be parked at the contractor's camp may be parked at the construction site, provided it is parked at least 5 m from the edge of the road surface.

(k) Use of reflective safety jackets

The Contractor shall ensure that all site personnel, excluding those who are permanently office bound, are equipped with reflective safety jackets and that these are worn at all times when working on or in proximity of the travelled way. The safety jackets shall be of an approved Level 2 type, bright/fluorescent orange, red-orange or yellow in colour with retro-reflective strips as indicated in Chapter 13 of Volume 2 of the South African Road Traffic Signs Manual (SARTSM), Figure 13.30 (Detail 13.30.2). Any person found not wearing a reflective safety jacket under these circumstances shall be removed from the site until such time as he/she is in possession of and wearing a reflective jacket. Reflective safety jackets shall be kept in good condition and any jackets that are, in the opinion of the engineer, ineffective shall be immediately replaced by the contractor.

The provision of these safety jackets shall be deemed to be included in the rate tendered for item B15.01: Accommodation of traffic and maintaining temporary deviations.

(l) Failure to comply with provisions

Failure or refusal on the part of the contractor to take the necessary steps to ensure the safety and convenience of the traveling public, accommodation of traffic, and the provision of plant and personnel in accordance with these specifications or as required by statutory authorities or ordered by the engineer, shall be sufficient cause for the engineer to impose penalties as follows:

-A fixed penalty of R5 000-00 per occurrence shall be deducted for each and every occurrence of non-compliance with any of the requirements of section 1500 of the standard specifications and section B1500 of the project specifications.

-In addition a time-related penalty of R500-00 per hour over and above the fixed penalty shall be deducted for non-compliance to rectify any defects in the accommodation of traffic within the allowable time after the engineer has given an instruction to this effect. The engineer=s instruction shall state the allowable time, which shall be the time in hours for reinstatement of the defects. Should the contractor fail to adhere to this instruction, the time-related penalty shall be applied from the time the instruction was given."

(m) Handing over the site

The total extent of the site between the limits of construction as described in this document and indicated on the drawings will be handed over to the contractor at the commencement of the contract period. The engineer however reserves the right to adjust this arrangement should progress or safe passage of traffic warrant such a change.

(n) Use of explosives in close proximity of temporary deviations

The contractor shall arrange all necessary traffic control and other requirements to safeguard the traffic on temporary deviations during blasting operations.

(o) Land taken up for deviations

Negotiations with landowners to obtain the land taken up by temporary deviations will be undertaken by the employer. A prime cost sum is allowed in the bill of quantities for payment of compensation to affected landowners. All other negotiations regarding temporary access to properties, land-use, fencing requirements etc. shall be dealt with by the contractor in conjunction with the engineer and be confirmed in writing and be kept on record by the contractor.

B 1503 TEMPORARY TRAFFIC-CONTROL FACILITIES

Replace the first sentence of the first paragraph with the following:

The contractor shall provide, erect and maintain the necessary traffic-control devices, road signs, channelization devices, barricades, warning devices and road markings (hereinafter referred to as traffic-control devices) in accordance with the project specifications, the South African Road Traffic Signs Manual (SARTSM) and as shown on the drawings and remove them when no longer required. It shall be incumbent upon the contractor to ensure that the abovementioned traffic-control devices are present where required at all times and are functioning properly.@

Replace the third paragraph with the following:

“The type of construction, spacing and placement of traffic-control devices shall be in accordance with the SARTSM. The recommended arrangements of the traffic control devices illustrated and/or drawings issued by the engineer shall not be departed from without prior approval of the engineer. The arrangements expected to be most commonly used in the contract are given on the tender drawings.

The details shown for spacing and placement of traffic-control facilities may however, be revised at the discretion of the engineer where deemed necessary to accommodate local site geometry and traffic conditions.

(b) Road signs and barricades

Add the following:

“The contractor shall be responsible for the protection and maintenance of all signs, and shall at his own cost replace any that have been damaged, lost, or stolen.

All temporary road signs required to be moved often shall be mounted on portable supports for the easy moving of signs to temporary positions. The only permitted method of ballasting the sign supports shall consist of durable sandbags filled with

sand of adequate mass to prevent signs from being blown over by wind. The cost of the sandbags shall be included in the tendered rates for the various types of temporary road signs.

The covering of permanent road signs, if applicable, shall be by utilizing a hessian bag that shall be pulled over the sign in the form of a hood and fastened to the signposts. Plastic bags or other materials and fastened by means of adhesive tape shall not be permitted. The cost of covering of permanent road signs shall be included in the tendered rates of items B15.01 and B15.10."

(d) Channelization devices and barricades

Add the following:

"The use of drums as channelisation devices shall not be permitted. Drums may however be used to set up barriers as provided for in sub clause 1503(d).

Delineators shall:
(i) comply with the manufacturing and reflective requirements of the SARTSM and the blades shall be reversible with dimensions as indicated on the drawings;
(ii) have smooth and round edges and be mounted on a post and base. All components shall be of durable plastic material;
(iii) have the lower edge of the reflective part of the delineator mounted not lower than 250mm above the road surface;
(iv) be capable of withstanding the movement of passing vehicles and gusting winds up to 60 km/h in typical working conditions without falling over. To achieve this, the base shall be at least 0,18 m^2 and ballasted by sandbags with sand;
(v) together with its mounting be designed such that it will collapse in a safe manner under traffic impact.

Traffic cones manufactured in a fluorescent red-orange or red plastic material may be used only at short term lane deviations during daylight. Cones shall not be used on their own, but shall be interspersed with delineators at a ratio not exceeding 3:1. Cones used on all deviations shall be 750 mm high. Lane closures which continue into the night time shall be demarcated by delineators only."

(e) Warning devices

All construction vehicles utilized on site shall be equipped with visible rotating amber warning lights and these shall be operational at all times when travelling on site or when vehicles are stationary in construction areas. The contractor shall also provide the engineer's site personnel with warning lights for their vehicles (maximum of two (2) lights required).
All construction vehicles shall clearly display an identification sign(s) with the legend "CONSTRUCTION VEHICLE" visible from the front and back of the vehicles.

No separate payment shall be made for the provision of warning lights or identification signs for construction vehicles and shall be deemed to be included in the tendered rate for Pay Item B15.01.

Add the following new subclauses:

(g) Maintenance

All temporary traffic control facilities shall be kept clean and maintained in good order at all times.

If the coefficient of retro-reflection of any of the Contractor's signs falls below 80% of the value given in Table 1 of CKS 191 - 1987 (observation angle 0,33, entrance angle 5,0) for the grade and colour of the material used the sign shall be considered defective and shall either be rectified or removed and replaced.

(h) Sufficiency

The Contractor shall determine, from his proposed programme, the number of temporary traffic-control facilities required and shall not commence with any accommodation of traffic before sufficient traffic-control facilities have been delivered to the site.

The Contractor shall keep sufficient surplus barricades, signs and delineators on or around the site to allow for the replacement of damaged or missing items within a period of two (2) hours of the deficiency being discovered.

The Contractor shall allow in his tendered rates for the replacement of five (5) percent of the traffic-control facilities scheduled. This percentage is to allow for the replacement of traffic-control facilities which become unserviceable or damaged by public traffic or stolen and is beyond the Contractor's control and not the result of his actions or omissions during the period of accommodation of traffic on the site. The replacement of traffic control facilities over and above this five (5) percent of the scheduled items damaged by public traffic or stolen shall be payable at tendered rates."

B1504 WIDTH AND LENGTH OF TEMPORARY DEVIATIONS

Replace the second paragraph with the following:

"Where the existing road is repaired, resurfaced or reconstructed in half widths, the roadway width for accommodating one-way traffic shall be at least 3,9 m wide. The length of the half-width construction shall not exceed 500 m."

B 1518 ADDITIONAL REQUIREMENTS

The following additional requirements shall apply:

- The contractor's tendered rates for the relevant items in the schedule of quantities shall include full compensation for all possible additional costs which may arise from the above, and no claims for extra payment due to inconvenience as a result of the modus operandi will be considered.

- No section of the road shall be closed to traffic during the construction works and at least one lane in each direction shall be open to traffic at all times.

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

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

- The contractor may not commence construction activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual.
- The contractor shall submit proposals for each traffic accommodation in connection with directional signs to the engineer for approval.

B7 SECTION 1600: OVERHAUL

B 1602 DEFINITIONS

(a) Overhaul

Add the following:

Overhaul shall not be payable on materials transported from commercial sources. Payment shall only be made for material hauled in excess of 1 kilometre. Overhaul shall be measured as the product of the volume of material hauled and the overhauled distance.

(b) Free-haul distance

Replace the last sentence with:

"This distance shall be 1 kilometre in the case of all overhaul materials"

Add the following subclause:

"(f) Cleaning of public roads

Where material is spoiled on public roads during the haul of material, the road shall be cleaned immediately. Claims by the public for any damages to vehicles whatsoever will not be accepted by the employer and shall be the responsibility of the contractor."

B8 SECTION 1700: CLEARING AND GRUBBING

B1702 DESCRIPTION OF WORK

(a) Clearing

Add the following:

"Clearing shall include the removal of material to a thickness of up to 150mm in-situ material as ordered by the engineer. No payment shall be made for temporary stockpiling of topsoil material in the case where this material is applied as topsoil after completion of road side slopes.

Should the required depth exceed 150mm, the total volume of material removed shall either be classified as "temporary stockpiling of topsoil" or "unsuitable roadbed material" or "cut to spoil" whichever is applicable as allowed for in the standard specifications. In these cases no payment shall be made for clearing and grubbing.

Clearing as described shall in all cases be undertaken in such a manner that the topsoil is preserved and not contaminated with other debris or rubbish. Cross-sections for the determination of earthworks quantities shall be taken after clearing (topsoil or unsuitable roadbed material) and roadbed preparation if applicable.

The payment for the clearing of concrete structures which cannot be cleared by means of a bulldozer as described under clause 1702(a), shall be made according to item B17.08."

Add the following subclauses:

(e) Existing roads

Where new construction work extends over existing roads, the existing road surface shall be ripped and removed if so directed by the engineer. The work as described above will be paid for under item B17.01.

(e) Removal of trees

Only trees identified and marked by the engineer shall be removed."

B 1703 EXECUTION OF THE WORK

(a) Areas to be cleared and grubbed

Add the following:
"Apart from normal clearing and grubbing, the fill embankments of the existing roads are also to be cleared and grubbed over the areas where the new horizontal alignment coincides with the alignment of the existing road, or where repairs are required to the fill embankments of the approaches of bridges. Provision is made for separate payment for clearing and grubbing of the existing fill embankments where conventional machinery might be suitable to undertake the work due to the steep side slopes of the embankments. An additional pay-item is allowed for in the bill of quantities for this type of clearing and grubbing which may have to be undertaken by hand or similar manner.

(c) Disposal of material

Add the following:

"(i) Non toxic waste (trees, tree stumps, plain and reinforced concrete, rubble, etc.)

All surplus or unsuitable material (non-toxic waste) shall be disposed of at an approved dumping site. The local authority within whose boundaries the site is located, must approve such site, and the dumping must comply with all statutory and municipal regulations. Rates tendered shall include an unlimited free haul distance to the approved dumping site.

B9 SECTION 2100: DRAINS

B2104 SUBSOIL DRAINAGE

(a) Materials

(i) Pipes

Pipes for subsoil drainage can be of internal diameter less than 100 mm, when used in composite in-plane (geocomposite) drainage systems.

High-density polyethylene (HDPE) drainage pipes with lattice wall construction.

(i) Synthetic-fibre filter fabric (Geotextile)

The geotextile shall be manufactured for civil engineering purposes by a manufacturer recognised by the Geosynthetic Interest Group of South Africa (GIGSA). It shall be manufactured from any suitable synthetic polymer, excepting polyamide, into a homogeneous sheet exhibiting uniform properties. These properties shall not be subject to a degradation of more than 10 % during the design life of the structure by the chemicals and organisms encountered in normal soils. Immersion in fresh or sea water during its design life shall not alter the specified qualities of the geotextile.

When used for filtration, drainage or separation the filter properties of the geotextile/soil interface shall not develop a permeability lower than that of the surrounding soil during the design life of the structure. The geotextile shall have an initial permeability not less than ten times the permeability of the surrounding soil which property the fabric shall maintain for the design life of the structure.

In order to ensure that the geotextile performs properly and survives the construction process, the grade of the geotextile to be used shall be specified according to the minimum index strength properties corresponding to the severity of the installation as given by the mechanical properties in tables 2104/1 and 2104/2.

TABLE 2104/1: CONSTRUCTION SURVIVABILITY-STRENGTH REQUIREMENTS

PROPERTY			**GRADE**					**TEST METHOD**
Trapezoidal tear								ASTM D4533-85
CBR								SABS 0221-88
Dart test								TRH 15 TEST METHOD B2
Tensile strength								SABS 0221-88

Numerical values represent the **minimum** average values (in the weaker principle direction), except for the dart test where the numerical value represent the **maximum** allowable diameter of hole made by the falling dart.

Geotextile acceptance shall be based on the specified test methods.

TABLE 2104/2: INSTALLATION CONDITIONS RELATING TO GRADE OF GEOTEXTILE

INSTALLATION CONDITION	GRADE				
Trench less than 2.0 deep, with rough or irregular sides and/or sharp drainage stone, with moderate degree of compaction.*					
Trench less than 2.0 deep, with rough or irregular sides and/or sharp drainage stone, with high degree of compaction.*					
Trench greater than 2.0 deep with smooth sides and rounded drainage stone, with moderate degree of compaction.					
Trench greater than 2.0 deep, with rough or irregular sides and/or sharp drainage stone, with high degree of compaction.*					
Erosion protection with stone hand-packed directly onto geotextile (gabions and mattresses).					
Erosion protection with rock less than 100 kg placed on geotextile protected by 150-300 mm sand, or “zero drop height” (dumped or packed riprap).					
Erosion protection with rock heavier than 100 kg placed on geotextile protected by 150-300 mm sand, or “zero drop height” (dumped or packed riprap).					

**The geotextile under this installation condition shall exhibit an elongation characteristic of not less than 20% in both directions.*

The engineer shall assess the severity of the installation and/or confirm the grade of geotextile to be used in each case.

In certain applications the following minimum hydraulic properties will apply or as decided by the engineer.

TABLE 2104/3: HYDRAULIC PROPERTIES

PROPETY		GRADE					TEST METHOD
Normal through flow @ 100 mm head							SABS 0221-88
Planar through flow under a confining pressure of 100 kPa							ASTM D4716-87

The contractor shall submit a sample 1,0 m x full roll width as well as commercial literature showing the flow curves of each grade of geotextile he proposes to use. Before bringing the material onto site the contractor shall obtain the approval of the engineer for the make and grade of material to be used. The engineer may, at any time, require random samples of the material used on site to be tested from time to time. Products found to vary markedly from the specified norms may be rejected and replaced at the contractor’s cost.

(iv) Composite in-plane drainage fabric (for geocomposite drain)

The geocomposite drain shall, excluding the pipe, consists of a synthetic drain core sandwiched between two layers of geotextile. The geotextile shall allow the free passage of water, but not the soil particles, and the thicker drain core shall permit the water to move in the plan of the composite with virtually no head loss.

The geotextile shall comply with the requirements of Subclause (iii) above.

The drain core shall be manufactured from any suitable synthetic polymer. It shall not be subject to degradation by the chemicals and organisms encountered in normal soils. Immersion in fresh or sea water during its design life shall not significantly alter the specified properties of the material.

The thickness of the drain core shall not be reduced by more than 30 % under a confining pressure of 100 kPA.

The geotextile jacket shall not reduce the flow capacity of the geocomposite drain by more than 50 % under a confining pressure of 100 kPA.

(b) Crushed stone

The crushed stone used for subsurface drains shall be clean, hard, durable, crushed stone from approved sources. The aggregate crushing value of the stone shall not exceed 30 when tested in accordance with method B1 of TMH1.

The crushed stone shall conform to the following grading:

GRADE	SIEVE SIZE (mm)	PERCENTAGE PASSING BY MASS
Curse grade	26,5	100
	13,2	60 – 85
	6,70	15 min
	2,36	15 max

The aggregate shall be evenly graded between the coarse and fine fractions with no excessive discontinuities.

B10 SECTION 2200: PREFABRICATED CULVERTS

B2201 SCOPE

Add the following:

"All rectangular culverts with spans from 0,9m up to and including 2,4m shall be constructed with precast units.

The attention of the contractor is drawn to the fact that information given on the plans, longitudinal sections or drainage schedules may have to be altered to suit actual site conditions and, therefore, the contractor shall only construct these culverts after the engineer has verified the information on the drawings from detail surveys taken on site by the contractor as directed by the engineer.

Precast units shall be ordered by the contractor from actual measurements of length acquired on the site and not from lengths stated in the drainage schedule or from the bill of quantities.

No precast units shall be ordered until the engineer has satisfied himself that the proposed units have been manufactured to the required tolerances and loading standards. The engineer must be given the opportunity to load test units if he considers this necessary".

B2203 MATERIALS

(f) Skewed Ends

Delete the second and third paragraphs and substitute with the following:

"Precast portal and rectangular culverts placed on a skew shall be supplied with cast in situ skewed ends as shown on the drawings. In situ skew ends are to be constructed simultaneously with the wingwalls and headwalls".

B2204 CONSTRUCTION METHODS

Add the following:

"In all cases where soft founding materials is classified as suitable for culvert bedding construction, the in situ material shall be ripped, moistened and compacted to 90% or 93% modified AASHTO density. The depth of preparation and compaction of founding material shall be as indicated on the drawings or as specified by the engineer. Allowance for measurement and payment for this work is made in the bill of quantities under this section."

(c) Excavation by hand

Where circumstances prevent the use of mechanical excavators and material can be removed only by hand tools, the engineer shall authorise the supplementary payment to the contractor for such work at the tendered rates for excavation by hand should he be satisfied that the contractor had been unable to prevent the necessity for excavation by hand by proper planning and precautionary measures. The supplementary rate for excavation by hand shall not apply to minor finishing or clearing jobs in excavations which are otherwise being done by mass excavation plant.

Payment for hand excavation shall be an "extra over" payment to normal excavation as allowed for in item 22.01."

B2205 EXCAVATION FOR CONSTRUCTION BY TRENCH METHOD

Add the following subclauses:

"(c) Excavation by hand

Where circumstances prevent the use of mechanical excavators and material can be removed only by hand tools, the engineer shall authorise the supplementary payment to the contractor for such work at the tendered rates for excavation by hand should he be satisfied that the contractor had been unable to prevent the necessity for excavation by hand by proper planning and precautionary measures. The supplementary rate for excavation by hand shall not apply to minor finishing or clearing jobs in excavations which are otherwise being done by mass excavation plant.

Payment for hand excavation shall be an "extra over" payment to normal excavation as allowed for in item 22.01.

(d) Drainage of excavations

The contractor shall apply suitable, effective drainage and dewatering methods for preventing the ingress of water into the excavation and to keep them dry.

Drainage measures, with the exception of pumping, shall be maintained until the backfilling has been completed. Between various construction stages, pumping may be interrupted in consultation with the engineer.

Any draining or pumping of water shall be done in a manner as will preclude the concrete or materials or any part thereof from being carried away.

Allowance for measurement and payment for dewatering and keeping dry of culvert excavations is made in the schedule in this section".

B2210 LAYING AND BEDDING OF PREFABRICATED CULVERTS

B.2210(b)(i) Cast in situ invert slabs

Replace with the following:

"In accordance with the drawings, transverse construction joints are required in cast in situ concrete invert slabs for portal culverts. In addition, longitudinal construction joints as shown on the drawings between the invert slabs of each of the barrels of multiple culverts are required. Allowance for measurement and payment for a Class F1 surface finish and soft board in these joints is made in the bill of quantities. No payment shall be made for formwork on the outside edges of invert slabs (closest to excavated face).

All culverts (precast as well as in situ) shall be constructed with an in situ reinforced concrete floor laid on a 75mm concrete screed".

Delete subclause B.2210(b)(ii) : "Prefabricated floor slabs."

B2211BACKFILLING OF PREFABRICATED CULVERTS

Change the last sentence in the fourth paragraph to read "90% or 93% as shown on the drawings or as directed by the engineer."

B2212 INLET AND OUTLET STRUCTURES, CATCHPITS AND MANHOLES

(b) Concrete work

Add the following:

“The type of surface finish for in situ concrete in the culverts shall be as indicated on the drawings. Generally all exposed faces shall be of Class F2 formwork and faces covered by backfill shall be Class F1. The top of parapet walls and wingwalls shall be finished to a Class U2 surface finish.”

(h) Prefabricated inlet and outlet structures

Add the following:

“The use of precast concrete inlets and outlets as described in clause 2212(h), shall not be allowed under any circumstances.
Cast in situ concrete wingwall type inlets and outlets shall be constructed as indicated on the drawings and shall be in accordance with section 6000 of the Standard Specifications. Allowance for measurement and payment for wingwall type inlets and outlets is made in the schedule in this section.”

B16 SECTION 3400: PAVEMENT LAYERS OF GRAVEL MATERIALS

B3402 MATERIALS

(a) General

ADD THE FOLLOWING TO THE SECOND PARAGRAPH:

"Natural gravel shoulder material shall comply with the requirements of a Type 1 material according to Table 3402/4."

ADD THE FOLLOWING AFTER THE SECOND PARAGRAPH:

"Distinction shall be made between crushed and natural G4, G5 and G6 materials. Where the crushing and/or screening of these materials has been specified, the combined grading shall conform to the grading limits specified for G4 class material in Table B3402/1.

The same shall apply for all materials obtained from commercial sources."

REPLACE THE GRADING SECTION IN TABLE 3402/1 WITH:

"TABLE B3402/1: REQUIREMENTS FOR TYPES OF G4 TO G6 MATERIALS

	Nominal aperture size of sieve (mm)	**Percentage passing through sieve by mass**			
		Crushed material Nominal maximum size		**Uncrushed material (mm)**	
		37,5 mm	**28 mm**		
GRADING	53			100	**The percentage by mass passing the 2,00 mm sieve shall not be less than 20% nor more than 70%**
	50			95 – 100	
	37,5	100		85 – 100	
	28	86 – 95			
	20	73 – 86	87 – 96	61 – 91	
	14	61 – 76	73 – 86		
	5	37 – 54	43 – 61	31 – 66	
	2	23 – 40	27 – 45	20 – 50	
	0,425	11 – 24	13 – 27	10 – 30	
	0,075	4 – 12	5 – 12	5 – 15	

Note:

Refer to standard COLTO table for COLTO grading if required."

(b) Compaction requirements

AMEND THE COMPACTION REQUIREMENTS AS FOLLOWS:

Base	:	Shall be compacted to minimum 97% of modified AASHTO density.
Shoulder and wearing course	:	Shall be compacted to minimum 95% of modified AASHTO density."

ADD THE FOLLOWING SUBCLAUSE:

"(d) Material requirements

When the values listed in Table 3402/5 cannot be attained with the type and quantity of stabilizing agent specified in Section 3500 in the Project Specifications, the Engineer will authorise the Contractor to vary and/or amend the quantity and possibly the type of stabilizing agent as well in order to obtain the required values."

ADD TABLE B3402/6 AFTER TABLE 3402/5:

"TABLE B3402/6: REQUIREMENTS FOR EMULSION TREATED MATERIALS

Criteria	**E1**	**E2**
Material before treatment	**G1 to G3**	**G4 to G5**
After treatment:		
- Minimum CBR @ 100% modified AASTHO density	150%	100%
- Minimum UCS @ 100% modified AASHTO density	1 200 kPa	700 kPa

B3403 CONSTRUCTION

ADD THE FOLLOWING SUBCLAUSE:

"(f) Temporary stockpiling of material

The Contractor shall plan his activities so that materials excavated from borrow areas and cuttings or imported from commercial sources can be directly transported to and placed at the designated points.

The temporary stockpiling of material will not be paid for separately unless instructed by the Engineer, and full compensation will be deemed to have been included in the rates tendered for the various payment items for work for which the material is to be used."

B3406 QUALITY OF MATERIALS AND WORKMANSHIP

REPLACE THE SECOND PARAGRAPH WITH THE FOLLOWING:

"Test results and measurements will be assessed in accordance with the provisions of Section 8200."

B3407 MEASUREMENT AND PAYMENT

DELETE THE FIRST PARAGRAPH AND REPLACE IT WITH THE FOLLOWING:

"No additional or extra over payment will be made for work in restricted or confined areas."

B13 SECTION 3500: STABILIZATION

B3502 MATERIALS

(a) Chemical stabilising agents

Delete subclauses (ii) Ordinary Portland cement and (iii) Portland blast-furnace cement and replace with the following:

"Cement shall comply with the relevant requirements of SANS 50197-1:2000. The use of strength classes greater than 32,5 shall not be permitted.

The nominal rate of application for tender purposes as a percentage of the mass of the material to be stabilized and compacted to the required modified AASHTO density shall be as follows:

C3 material	:	3,0% on a G5 material
C4 material	:	2.75% on a G6 material

The engineer may instruct the contractor to amend the percentage and possibly the type of stabilizing agent if necessary, after tests on the site during construction."

B3503 CHEMICAL STABILIZATION

(i) Construction limitations

In table 3503/1, delete “8 hours” for ordinary Portland cement and cement blends and replace with “6 hours”.

B3506 TOLERANCES

(b) Uniformity of mix (chemical stabilization)

Add the following:

“The method described under 3506(b)(ii) shall be applicable to this contract.”

B3507 ROUTINE INSPECTION AND TESTS

Statistical control as per Section 8300 (Scheme 2) will apply.

Add the following sub-clause:

(j) Rejection of stabilized layers

Where newly constructed layers have been stabilized and have been rejected, the following shall apply:

(i) if rejected within seven (7) days of construction – 50% stabilizing agent shall be added and the layer reworked.
(ii) if rejected more than seven (7) days of construction – the material shall be removed and replaced and the layer reworked with 100% stabilizing agent.

B3604: CONSTRUCTION

B 15 SERIES 4000: ASPHALT PAVEMENTS AND SEALS

SECTION B4100: PRIME COAT

B 4102 MATERIALS

(a) Priming materials
"From the list of priming materials given in sub-clause 4102(a) of the Standard Specifications, only the bitumen-based products may be used in prime coats. No tar-based priming materials shall be allowed for application under this contract."

(b) Aggregate for blinding

Add the following sentence:

"Blinding of the primed surface with aggregate shall only be permitted to facilitate vehicular access across the primed base where necessary."

B 4104 WEATHER AND OTHER LIMITATIONS

Replace paragraph (g) with the following:

"(g) When the moisture content of the upper 50mm of the layer is higher than 50% of the optimum moisture content determined according to TMH 1, Method A7"

B 4106 APPLICATION OF THE PRIME COAT

Add the following to paragraph (c)

"The nominal application rate of the prime shall be 0,8 ℓ/m^2. Unless directed otherwise by the engineer or indicated on the drawings, the edges of the primed surface shall be 150mm wider than the edges of the surfacing."

Add the following subclause

"(j) Application in areas treated by reworking and construction of a new base shall be primed using a mechanical distributor complying with subclause 4103(a). The edges of the previously constructed or existing surfacing shall be adequately protected by

approved means to ensure that an overlap of prime not exceeding 50mm is sprayed onto the previously constructed or existing surfacing."

B 4108 TOLERANCES
Replace the first paragraph with the following:

"The actual spray rates measured at spraying temperature shall not deviate by more than 8.0% from that ordered by the engineer. The engineer may, at his discretion, conditionally accept application rates falling outside this tolerance at reduced payment in accordance with Table B4108/1.

Table B4108/1

Payment Reduction Factors for Conditionally Accepted Prime Coat

Deviation specified spray rate at spraying temperature. (%)	Payment reduction factor of tendered rate.
±8,0	1.00
±9,0	0.97
±10,0	0.95
±11,0	0.90
±12,0	0.85
±13,0	0.80

Any deviation outside these limits shall not be paid for, however, the engineer shall have the right to instruct the contractor to make up any deficiency, or blind excessive prime without additional payment. Where so instructed, the material for blinding shall consist of approved, but shall consist of screened 4,75mm nominal single size aggregate. The use of crusher dust for blinding shall not be permitted. If under-spraying occurs, and it is accepted by the engineer, only the actual quantities applied shall be paid for"

B 4109 TESTING

Add the following

"No payment will be made if this condition is not adhered to. The contractor shall provide, at his cost, representative samples of every batch of prime delivered onto site."

B17 SECTION 5600: ROAD SIGNS

B5601 SCOPE

"This section also covers the supply and erection of permanent danger plates at culverts and bridges at the locations indicated on the drawings or as directed by the engineer."

B5603 MANUFACTURING OF ROAD SIGN BOARDS AND SUPPORTS

(a) Road signboards

Add the following:

"The contractor shall make every effort to ensure that signboards are correct in all respect and before dispatching the boards from the manufacturer's factory shall provide the Engineer with a 100mm x 150mm colour photograph of each sign face for approval of the correctness of the legend. Such approval will not imply final acceptance of the board. If the Contractor is in any doubt as to the correctness of the sign detail, the sign designer shall be contacted for verification."

(a) (ii) Steel profile road signboards

Add the following:

"Where the letter or legends cross the horizontal joints of the sign panels, the letter shall be cut on the joint and both ends folded around the radius.

Retro-reflective material to adjoining Chromadek panels on a sign shall be practical visual match of the specified colour."

B5604 ROAD SIGN FACES AND PAINTING

Add the following new subclause:

"(e) Application of retro-reflective material

All sign faces shall be faced with diamond grade retro-reflective material. Painted front sign faces shall not be used.

Where applied to Chromadek sections, retro-reflective material shall be applied as specified for aluminium section in Clause 5603(d) of the Standard Specification, and of Clause B5603(a)(ii) of this project Specification."

B5605 STORAGE AND HANDLING

Add the following:
"The following shall not be allowed on the sign face:
Drilling of holes, except for the fastening of overlays
Application of any form of adhesive
Cleaning with any chemicals that are not specifically approved by the manufacturer of the retro-reflective material
Covering the sign face with an impermeable material that does not allow free circulation of air."

B5606 ERECTING ROAD SIGNS

(c) Erection

Add the following:

"After erection the signboard shall be thoroughly cleaned with a cleaning agent approved by the retro-reflective material's manufacturer.

All vegetation obstructing the new or replaced sign board shall be removed and disposed of as instructed by the Engineer."

B5608 DISMANTLING, STORING AND RE-ERECTING EXISTING ROAD SIGNS

Add the following:

"Existing overhead and ground mounted road signs that are being replaced by new signs shall be dismantled and disposed of by the Contractor. Where possible the dismantling of the signs shall not be before the replacement sign is erected and displayed. Where dismantling of the sign is required before erection of the replacement sign, the dismantling shall not take place until immediately before work is to commence on the replacement, and the replacement shall be completed and the new sign displayed as soon as possible thereafter (within 72 hours).
Dismantling shall include sign panels and ground mounted sign supports.

Ground mounted sign supports shall be cut off just below ground level. Material excavated for removal of buried poles shall be replaced, and any depression made good using excess material from excavation for new signs.

Pay items are provided in the Bill of Quantities. Payment will differentiate between different types of sign panels."

B18 SECTION 5700: ROAD MARKINGS

B5701 SCOPE

Replace South African Road Traffic Signs Manual in the second paragraph with:

"SADC Road Traffic Signs Manual"

After the last paragraph, add the following:

"Provision is made in the pricing schedule for different road marking materials. The contractor shall take note that the employer reserves the right to utilize any, or all, or a combination of any of these road marking materials at any stage during the construction period. The utilization of the road marking materials as indicated cannot be regarded as grounds for any claim by the contractor."

B5702 MATERIALS

Insert the following before subclause (a) Paint:

"The selection of appropriate road marking materials for permanent road markings to ensure conformance with the requirements of this specification rests with the contractor. Road marking materials for temporary road markings as clarified in SANS 731-1 shall be equal to or more durable than road marking paint specified in subsubclause B5702(a)(i) and (ii), provided it meets the specified initial performance criteria. Road marking materials for permanent road markings as clarified in SANS 731-1 shall be hot-melt thermoplastic or cold plastic equal to or more durable than plastic road-marking material specified in subsubclause B5702(a)(iii) provided it meets the specified initial performance criteria. Should the contractor propose alternative materials for permanent road markings, the onus rests on the contractor to provide the engineer with sufficient supporting evidence to assess the extent to which the alternative product/s meet the requirements of subsubclause B5702(a)(iii)."

(a) Paint

(i) Road-marking paint

Add the following to the end of the paragraph:

"The product supplied for temporary road markings shall be subject to the approval by the engineer on the submission of a certificate by an accredited institution indicating that the product substantially equals or surpasses the requirements of SANS 731-1 for Type 1, 2 or 4 paints."

(ii) Retro-reflective road-marking paint

Replace “CKS192” in the first paragraph with “SABS EN 1423 for medium grading glass beads”.

When measured in accordance with SABS Method 1261-1998 within a period of two weeks (± 1 week) after application, the coefficient of retro-reflected luminance, R_L, of temporary road markings shall be at least 150 mcd/m².lx for white markings and 100 mcd/m².lx for yellow markings.

(iii) Plastic road marking material

Add the following:

"Notwithstanding the specified composition of hot-melt thermoplastic, it is required that the permanent road markings shall comply with the requirements of EN 1436 Type I road markings of Class R5 for white markings ($R_L \geq 300$ mcd/m².lx) and Class R3 for yellow markings ($R_L \geq 150$ mcd/m².lx) for dry road markings when measured in accordance with SABS Method 1261-1998 within a period of two months (± 2 weeks) after application.

The employer retains the right to require the contractor to apply EN1436 Type II road markings as the permanent road markings on this contract. (Type II road markings are road markings with special properties meant to enhance the retroreflection in wet or rainy conditions.)

The product supplied for permanent road markings shall be subject to the approval by the engineer, who may request the contractor to provide sufficient supporting evidence to compare the durability of the proposed product with that of hot-melt thermoplastic material."

Add the following subsubclause:

"(iv) Textured road marking materials:

Various proprietary textured road marking products are available in the market, including products named: Drop-on line ™, Vibraline ™ , Stamark ™ and Rumble-stripe.

In the interest of road safety the employer may require the application of such proprietary textured road markings. Such markings shall be applied by a contractor suitably licensed by the proprietary holder for such application. The application shall be done strictly in accordance with the suppliers’ requirements."

B5704 MECHANICAL EQUIPMENT FOR PAINTING

Add the following:

"The machine shall always operate in the same direction of the traffic flow when applying lane markings."

B5705 SURFACE PREPARATION

Add the following at the end of the second paragraph:

“The onus is on the contractor to ensure that the surface on which the road markings are to be applied is sufficiently clean and dry to ensure that the quality of the road markings will not be adversely affected. The contractor is also responsible for protecting road studs from being painted over, and the subsequent cleaning thereof if such over-painting did occur. (The cleaning of the road studs shall be done in such a manner that the functionality of the road studs will not be detrimentally affected by the cleaning agent.)”

(b) Roadstuds

Replace the second sentence with the following:

“All square roadstuds shall have a footprint of 100mm x 100mm and a height of 20mm. Round roadstuds shall be 100mm in diameter and 20mm in height. Only non metallic products with glass as reflective material shall be used. Shanked roadstuds shall be used on the outside slow lane shoulders.

B5706 SETTING OUT THE ROAD MARKINGS

Add the following:

“Where road markings are to be replaced after milling/overlay seal, it is essential that all existing barrier lines and other road marking lines be accurately referenced before commencement of milling or other operations which will obliterate the existing road markings. The position of barrier lines shall be re-assessed on site by the engineer before the contractor commences with the road marking. No separate payment will be made for referencing the existing road markings and full compensation shall be included in the rate tendered for item B57.06.

For safety purposes, temporary road markings as directed by the engineer, shall be done on a daily basis at the end of each working shift.

The contractor shall ensure during construction and paving of the final surfacing layer that the longitudinal joints coincide with the new lane markings. ”

B5707 APPLYING THE PAINT

Replace the second last paragraph with the following:

“Road marking materials shall be applied at application rates which would suit the traffic conditions in such a way that the functional life of the temporary road markings would exceed six months, whilst the expected functional life of the permanent road markings should exceed 36 months.

Replace the last paragraph with the following:

"The center-line shall be painted immediately after 2.0 km of continuous road has received a new asphalt layer, or 4km of continuous road has received a new seal surfacing or where, in the opinion of the engineer, conditions are unsafe.
The Contractor's establishment on site and general obligation shall be deemed to fully include the establishment of the road-marking team, irrespective of the number of times the road-marking team is required to be on site or is required to move within the site or is required to move within the site, excluding the re-establishment of the road-marking team at the end of the maintenance period."

B5708 APPLYING THE RETRO-REFLECTIVE BEADS

Replace the second sentence with the following:

"The rate of application of the beads shall be such that the coefficient of retro-reflected luminance, R_L, specified in Section B 5702(a) (ii) or Section B 5702(a) (iii) will be achieved."

Delete the second paragraph.

B5710: TOLERANCES

(a) Alignment of Markings

Add the following paragraphs:

"When an unbroken line and a broken line are painted alongside each other, the beginning and the end of the unbroken lane shall coincide with the beginning of one broken line and the end of another broken line. When existing lines are repainted, the new markings shall not deviate more than 100 mm in the longitudinal direction, nor 10 mm in the transverse direction, from the existing marking.

The alignment of the road studs shall not deviate from the true alignment by more than 10 mm and shall be positioned so that the reflective faces are within 5 degrees of a right angle of the centre line of the road."

B5711 GENERAL

Insert the following into the last sentence of the last paragraph between "black paint" and "or chemical paint remover":

"bituminous emulsion, slurry"

Add the following to the last paragraph:

"Where black paint is used, it shall be matt."

B5712 FAULTY WORKMANSHIP OR MATERIALS

Add the following paragraphs:

" The contractor shall rectify in an acceptable manner and at his own costs, all marking that do not comply with the specified requirements. The specified coefficient of retro-reflected luminance shall be measured in accordance with SABS Method 1261:1998.

While work is in progress, tests shall be carried out on materials and/or the quality of work to ensure compliance with the specified requirements. The sampling methods

are specified in SABS 731 – 1. The sampling methods described in TMH5 shall be followed where applicable.

No additional payment, other than that specified in the contract, shall be made if any portion of the works is found to exceed the specifications in any respect, or for any benefits accruing as a result of any superior performance of the applied road markings."

C3.5 MANAGEMENT

C3.5.1 Management of the works

C3.5.1.1 Applicable SANS 1921 standards

The standards for Construction and Management requirements for Works Contracts is SANS 1921-1:2004 - Construction and management requirements for works contracts - Part 1: General engineering and construction works.

C3.5.1.2 Planning and Programming

The Contractor shall submit within the period stated in the Contract Data a suitable and realistic construction programme for the consideration of the Engineer. The programme shall be in the form of a Gantt chart and shall include the following details:

- A work breakdown structure, identifying the major activity groups.
- For each activity group further details shall be provided with regard to the scheduled start and end dates of individual activities.
- The linkages between activities shall be clearly indicated and the logical network upon which the programme is based shall be separately submitted to the engineer if requested. Any constraints shall be classified as being time-related or resource-related.
- The critical path(s) shall be clearly indicated and floats on non-critical activities shall be shown.
- The Contractor shall indicate the working hours per day, night, week and month allowed for in the programme.
- Where relevant the Contractor shall state the production rates for key activities, e.g. earthworks, etc.
- The dates when, in order to construct the Works in accordance with his programme, the Contractor will need materials and other things to be provided by the Employer.
- For each activity, a statement of how the Contractor plans to do the work identifying the principal equipment and other resources which he plans to use.
- The execution of the work must be programmed in such a manner as to limit disruption to passing traffic and residents to a minimum.

Together with the programme as detailed above the Contractor shall submit to the Engineer a cash flow projection, indicating projected monthly invoice amounts. This have to be done for each of the projects identified within the limits of the tender. The cash flow projection shall be updated at monthly intervals to reflect actual payments to date and anticipated further payments.

The programme will be reviewed at the monthly site meetings at which the Contractor shall provide sufficient detail that will allow the comparison of completed work per activity that has fallen behind. The updated programme shall be submitted to the Engineer at least two days prior to the monthly meetings.

If the programme has to be revised by reason of the Contractor falling behind his programme, he shall produce a revised programme showing how he intends to regain lost time in order to ensure completion of the Works within the time for completion as defined in Clause 5.6 of the General Conditions of Contract or any granted extension of time. Any proposal to increase the tempo of work must be accompanied by positive steps to increase production by providing more labour and plant on site, or by using the available labour and plant on site, or by using the available labour and plant in a more efficient manner.

Failure on the part of the Contractor to submit the programme or to work according to the programme or revised programmes shall be sufficient reason for the Engineer to take steps as provided in Clause 9 of the General Conditions of Contract.

The approval by the Engineer of any programme shall have no contractual significance other than that the Engineer will be satisfied that the work is carried out according to such programme and that the Contractor undertakes to carry out the work in accordance with the programme. It shall not limit the right of the Engineer to instruct the Contractor to vary the programme if required by circumstances. The Contractor is also referred to Clause 4.8 of the General Conditions of Contract when drawing up his programme.

C3.5.1.3 Sequence of the works

2.1 General

A separate programme for the various schedules (i.e. pavement layers) shall be compiled and submitted to the Engineer for acceptance, for tender purposes.

2.2 Construction Procedure

The proposed construction procedures for tender purposes are:

a) Site Establishment

b) The contractor shall verify levels of existing services to the engineer in writing.

c) The contractor shall construct stormwater systems.

d) The contractor shall construct base.

e) The contractor shall construct surfacing.

f) Roadmarking & Signs and finishing off road reserve.

Any software used for planning and programming must be fully compatible with Windows XP operating system and Microsoft Project 2003.

C3.5.1.5 Software application for programming

Any software used for planning and programming must be fully compatible with Windows XP operating system and Microsoft Project 2003.

C3.5.1.6 Methods and procedures

The COLTO Standardized Specifications are applicable

C3.5.1.7 Quality plans and control

The contractor shall determine his own frequencies at which quality or process control tests are to be undertaken. The engineer will, however, undertake all acceptance control tests for the judgement of workmanship and quality of products

The engineer shall, for the purpose of acceptance control on products and workmanship, assess test results and measurements in accordance with the provisions of SANS1200 of the standard specifications

C3.5.1.8 Environment

Due regard must be given to environmental protection during construction. In order to achieve this, the following recommendations are made:

- Minimise the extent of impact during construction,
- Ensure appropriate restoration of areas affected by construction.
- Prevent long term environmental degradation.

These are aimed at ensuring that the Contractor maintains adequate control over the project.
The contractor must be aware of the environmental obligations that are stipulated in this document, and declares himself/herself to be conversant of all relevant environmental legislation.

C3.5.1.9 Accommodation of traffic on public roads occupied by the contractor

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

- The travelling public shall have the right of way on public roads and the Contractor shall make use of approved methods to control the movement of his equipment and vehicles so as not to constitute a hazard on the road.
- Failure to maintain road signs, warning signs, etc, in a good condition shall constitute ample reason for the Engineer to bring the works to a stop until the road signs, etc, have been repaired to his satisfaction.
- The Contractor may not commence constructional activities before adequate provision has been made to accommodate traffic in accordance with the requirements of this document and the South African Road Traffic Signs Manual Volume 2 Chapter 13.
- The Contractor shall submit proposals in connection with directional signs to the Engineer for approval prior to construction.
- Sufficient signage shall be provided, erected and relocated as necessary by the Contractor to reroute traffic onto the deviations.

C3.5.1.10 Other contractors on site

The contractor shall liaise and co-ordinate activities with the other contractors that may be appointed for portions/sections of the works

C3.5.1.11 Testing, completion, commissioning and correction of defects

The COLTO Standardized Specifications are applicable

C3.5.1.12 Recording of weather

The Contractor shall erect an effective rainfall gauge on the site of the works and record the daily rainfall figures in the site diary. The site diary shall be handed to the Employer's representative for his signature no later than 10 days after rain that is considered to justify an extension of time occurs.

Extension of time due to abnormal rainfall shall be determined by means of Method 1, where rainfall records and/or values derived from rainfall records are supplied in the Scope of Work, otherwise Method 2 shall apply. Method 1 and 2 are defined and described in the Contract Data.

In the case where Method 2 applies the following is applicable:

- Extension of time resulting from abnormal rainfall or other forms of inclement weather for items on the critical path of the programme shall be calculated according to the requirements of Method 2 (Critical-path method). The value of "n" working days per calendar month as specified in this clause shall be two (2) working days. If no abnormal rainfall or other inclement weather periods occur during a specific calendar month (or months), the n-values as specified shall not be taken as accumulating over the contract period. If the n-days allowed for in the programme of work are not taken up by standing time due to abnormal rainfall or inclement weather conditions, they will fall away and will not be considered in extension of time claims which may arise later during the contract period.

- A working day, or portion thereof, shall be considered as lost when the engineer agrees that no work could have been undertaken on any item falling within the critical path. The contract extension of time arising from inclement weather shall be agreed upon between the engineer's and the contractor's representatives. The days upon shall be recorded in the minutes of the monthly site meetings.

Extension of time due to abnormal rainfall for the purposes of this contract shall be determined by means of Method 1. The rainfall records at Rainfall Station, *BRITS HARTBEESPOORTDAM, 05126131* reproduced in the accompanying table and the monthly averages, Rn and Nn, for this period, shall for the purpose of this Contract be taken as normal rainfall.

MONTH	Rn	Nn	MONTH	Rn	Nn
January	135.9	7.9	July	1.9	0.4
February	75.3	5.1	August	7.5	0.6
March	69.8	4.4	September	5	0.2
April	38.5	3.6	October	54.4	3.4
May	15.5	1.4	November	73.9	4.3
June	17.9	1.6	December	125.1	6.7
			TOTAL	620.6	39.7

Records of rain days will be recorded in the minutes of the monthly site meeting.

C3.5.1.14 Key personnel

The key personnel deployed to site by the contractor shall not be removed prior to informing the engineer thereof and providing details of his replacement staff.

C3.5.1.15 Management meetings

C3.5.1.15.1 Community participation

Community participation consists of engagement of Project Steering Committees (PSC). A PSC will be established for the town by the Ward Councillor. The functions of the PSC will be to:

- Assist in monitoring the project.

- Ensure that the community provide assistance to the contractor to ensure that he can execute the contract in accordance with the specifications and within time.

- Encourage the community to participate in the Labour Intensive construction.
- Identify skills, skilled personnel and suppliers in the towns.

The PSC will not have the power to:

- Give any instructions to the contractor, except through the engineer.
- Become involved in the daily operations of the contractor or interfere with the contract works.

A monthly meeting will be held with the PSC to discuss relevant matters. The site agent and resident engineer will attend the meetings. The contractor will have to report on progress, deviations from the programme, financial matters community related aspects, general problems and co-operation at the meeting. The PSC members will not receive any remuneration for attending, and they must provide their own transport.

C3.6 HEALTH AND SAFETY SPECIFICATION

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ANNEXURES

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2.1 Notification for Construction Work

Annexure 3 Identified Health and Safety Hazards

HEALTH AND SAFETY SPECIFICATION

1. SCOPE

1.1 Scope of Specification

This specification covers the principles, duties, responsibilities, liabilities, and requirements applicable in respect of health and safety in the work place on construction work.

This document constitutes the Employers' Health and Safety Specification as defined in the Construction Regulations, 2003 of the Occupational Health and Safety Act (Act 85 of 1993).

This specification applies to tunneling although the minimum requirements for tunneling are contained in the Mines Health and Safety Act. This specification however does not apply to underground construction at this point in time as covered by the Mines Health and Safety Act, 1996 (Act 29 of 1996) as amended.

1.2 Philosophy

Some of the terms and requirements of the Occupational Health and Safety Act and its Regulations may be novel to Contractors. This specification has therefore been prepared as an instructive guideline without being prescriptive, constraining the competitive advantage or interfering with the legal obligations of the responding parties.

The Health and Safety Plan required in terms of this specification may also be novel to Contractors. This specification has therefore been prepared in such a way to allow Contractors to employ the services of specialist consultants for the preparation and implementation of the same during the construction of the Works.

Health and safety can only be assured on construction works if all stakeholders buy into the Health and Safety plan and when the health and safety of all is an integrated line accountability of all management staff and workers on site. The management systems that are provided for in this specification is to enable the performance statistics of health and safety to be regularly captured, the intention of these systems is not to achieve health and safety by policing the conduct of the Contractor's employees.

In addition to ensuring health and safety, the intention of the management system is rather to commercially exploit the benefit of doing things right the first time that goes hand in hand with top health and safety performance. Accidents and injuries never pay. The loss of production and the cost of injuries, however, relatively infrequent they may be, far outweigh the effort required to maintain top health and safety on construction.

The specification accordingly provides for:

a) Independent periodic audits to ensure an unbiased pursuit of health and safety,
b) Follow-up audits to ensure the implementation of prescribed remedial actions,
c) The review of the efficiency and effectiveness of the Contractor's Health and Safety Plan,
d) The preparation of regular reports of inspections and accidents to enable the tracking of changes in health and safety performance,
e) The monitoring of conditions on a continuously pro-active basis to ensure that hazards are without delay identified, assessed and remedied should it threaten the health and safety of persons and property,
f) Ad hoc inspections to ensure that health and safety is pursued with dedication and not out of intimidation or coercion, and
g) Development of all aspects of the Contractor's Health and Safety Plan.

The fundamental intention of this specification is that the preservation of health and safety will become a core value of all involved during the construction of the Works.

This Specification does not require the preparation of an unduly extensive or complex risk assessment. The Contractor should rather prepare a risk assessment which takes the size of the project, the size of the Contractor's organization, the conditions of the workplace and the nature, complexity and significance of the hazards likely to be encountered during the execution of the Works into account.

2. INTERPRETATIONS

2.1 Supporting specifications

Where this specification is required for a project, the following specifications (as amended) shall, inter alia, form part of the contract document:

a) Occupational Health and Safety Act, 1993, and its regulations which shall include, but shall not be limited to the following:
- Construction Regulations, 2003,
- General Safety Regulations,
- General Administrative Regulations, 1996,
- Driven Machinery Regulations, 1988,
- Electrical Installation Regulations, 1992,
- Electrical Machinery Regulations, 1988,
- Environmental Regulations for Workplaces, 1987, and
- Facilities Regulations, 1990.

b) Clauses 4.5.2, 4.6, 4.7 and 4.8 of the Contract Data.

c) Standard Specifications for Municipal Civil Engineering Works, Third Edition 2005, of Employer.

2.2 Application

This specification contains clauses that are applicable to the occupational health and safety requirements of the Occupational Health and Safety Act, 1993 and its Regulations, in particular the Construction Regulations, 2003 promulgated on 18 July 2003 in terms of Section 43 of the Act.

2.3 Definitions

In the Contract (as defined in clause 1.(1)(e) of the Conditions of Contract) the following words and expressions shall have the meanings hereby assigned to them except where the context otherwise requires:

(a) "Assistant Construction Supervisor" means a competent person appointed in accordance with regulation 6.(2) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(b) "Batch Plant Supervisor" means a competent person appointed in accordance with regulation 18.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(c) "Construction Health and Safety Officer" means a competent person appointed in accordance with regulation 6.(6) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(d) "Construction Supervisor" means a competent person appointed on a full-time basis in accordance with regulation 6.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(e) "Construction Vehicles & Mobile Plant Inspector" means a competent person appointed in accordance with regulation 21.(1)(j) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(f) "Contractor" means the natural or juristic person or partnership whose tender has been accepted by or on behalf of the Employer and, who is defined as the Principal Contractor in the Construction Regulations, 2003.

(g) "Demolition Work Supervisor" means a competent person appointed in accordance with regulation 12.(1) of the Construction Regulations, 2003, in writing by the Contractor with written notification to the Engineer.

(h) "Employer's Designer" means the natural or juristic person or partnership named in the Appendix to Tender or any other natural or juristic person or partnership appointed from time to time by the Employer for the design of the portion of the Permanent Works which the Employer is responsible to design in terms of this Contract.

(i) "Contractor's Designer" means the natural or juristic person or partnership appointed from time to time by the Contractor and notified in writing to the Engineer and Employer for the design of the portion of the Permanent Works which the Contractor is responsible to design in terms of this Contract, and for the design of the Temporary Works.

(j) "Electrical Temporary Installation Inspector" means a competent person appointed in accordance with regulation 22.(d) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(k) "Employer" means the natural or juristic person or partnership for whom the Works are to be executed, who is named as the Employer in the Conditions of Contract and who is known as the "Client", in the Occupational Health and Safety Act, 1993 and its regulations.

(l) "Engineer" means the natural or juristic person or partnership named as the Engineer in the Conditions of Contract and appointed by the Employer to act as the Engineer in terms of this Contract.

(m) "Engineer's Representative" means the person appointed by the Engineer in terms of Clause 2 of the Conditions of Contract.

(n) "Excavation Work Supervisor" means a competent person appointed in accordance with regulation 11.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(o) "Explosive Powered Tools Issuer" means a competent person appointed in accordance with regulation 19.(2)(g)(i) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(p) "Fall Protection Developer" means a competent person appointed in accordance with regulation 8.(1)(a) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(q) "Fire Extinguisher Inspector" means a competent person appointed in accordance with regulation 27.(h) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(r) "Formwork and Support Work Supervisor" means a competent person appointed in accordance with regulation 15.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(s) "Hazard" means any object, action or condition that can potentially harm the health and safety of persons or property.

(t) "Hazard Identification" means the identification and documenting of existing or expected hazards.

(u) "Health and Safety Consultant" means the natural or juristic person or partnership appointed by the Contractor to assist in any matters related to health and safety on the construction site.

(v) "Health and Safety Plan" means a documented plan, prepared by the Contractor, of work procedures to mitigate, reduce or control hazards identified.

(w) "Health and Safety Specification" means a documented specification of all health and safety requirements and criteria to mitigate, reduce or control hazards identified.

(x) "Health and Safety Representative" means the person/s designated in accordance with section 17 of the Occupational Health and Safety Act.

(y) "Ladder Inspector" means a competent person appointed in accordance with regulation 13 of the General Safety Regulations, in writing by the Contractor, with written notification to the Engineer.

(z) "Material Hoist Inspector" means a competent person appointed in accordance with regulation 17.(8)(a) of the Construction Regulations, 2003 in writing by the Contractor, with written notification to the Engineer.

(aa) "Method Statement" means a document detailing the key activities to mitigate, reduce or control hazards identified.

(bb) "Professional Engineer" means any person employed from time to time by either the Employer or Contractor who holds registration as either a Professional Engineer or Professional Certificated Engineer under the Engineering Profession Act, 2000 (Act No. 46 of 2000).

(cc) "Professional Technologist" means any person employed from time to time by either the Employer or Contractor who holds registration as a Professional Technologist under the Engineering Profession Act, 2000 (Act No. 46 of 2000).

(dd) "Risk" means the likely occurrence and impact of a hazard.

(ee) "Risk Assessment" means a programme carried out to identify and evaluate the likely occurrence and impact of all hazards.

(ff) "Risk Assessor" means a competent person appointed in accordance with regulation 7.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(gg) "Safety Agent" means a competent natural or juristic person or partnership named in the Appendix to Tender or any other person appointed from time to time by the Employer and notified in writing to the Contractor to act on behalf of the Employer for the purposes of this specification.

(hh) "Scaffolding Supervisor" means a competent person appointed in accordance with regulation 14.(2) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(ii) "Stacking Supervisor" means a competent person appointed in accordance with regulation 26.(a) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

(jj) "Subcontractor" means the natural or juristic person or partnership who is appointed by the Contractor with prior consent of the Engineer to execute certain tasks associated with the Works and who is also an employer as defined in section 1 of the Occupational Health and Safety Act.

(kk) "Suspended Platforms Supervisor" means a competent person appointed in accordance with regulation 15.(1) of the Construction Regulations, 2003, in writing by the Contractor, with written notification to the Engineer.

2.4 Duties, responsibilities and liabilities

2.4.1 Principal Parties

This section covers the duties, responsibilities and liabilities of the following principal parties:

- Employer
- Employer's Safety Agent
- Contractor
- Subcontractor
- Employer's Designer
- Contractor's Designer

The duties and responsibilities of the various principal parties are briefly summarized below (the numbers indicated correspond to the applicable regulation number in the Construction Regulations, 2003). The intention of the summary is not to replace the Regulations, but is included for indicative purposes. The liabilities of each party are also shown.

a) Employer

In addition to the duties, responsibilities and liabilities specified in the Conditions of Contract, the Employer shall have the following duties and responsibilities to ensure compliance with the Construction Regulations, 2003:

4.(1)(a) Prepare health and safety specifications for the Works.
4.(1)(a) Provide copies of the specifications to Tenderers or to the appointed Contractor.
4.(1)(b) Provide any information to the Contractor that may affect the health and safety of his employees.
4.(1)(c) Appoint the Contractor in writing for the Works.
4.(1)(d) Take reasonable steps to ensure that the Contractor's Health and Safety Plan is implemented and maintained on the Works (which shall include monthly audits).
4.(1)(e) Stop the Contractor from executing work, not in accordance with, his Health and Safety Plan or which poses a threat to the health and safety of persons.
4.(1)(f) Ensure that sufficient health and safety information and appropriate resources are made available to the Contractor when changes are brought about to the design.
4.(1)(g) Ensure that the Contractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works.
4.(1)(h) Ensure that Tenderers have made provision in their tenders for the cost of health and safety measures during the construction of the Works.

4.(2) Discuss and negotiate the contents of the Contractor's Health and Safety Plan.
4.(2) Approve the Contractor's Health and Safety Plan for implementation.
4.(3) On request, make available copies of the Contractor's Health and Safety Plan to his employees, his Subcontractors and inspectors.
4.(4) Satisfy himself on the competencies and resources of the Contractor he intends appointing.
4.(6) Satisfy himself on the competencies and resources of his Safety Agent should he decide to appoint one.

In terms of Clause 4.6 of the Contract Data, the Contractor accepts sole liability as mandatory for due compliance with the Occupational Health and Safety Act, 1993 and all its regulations including the Construction Regulations, 2003. The Employer will only be responsible for the duties imposed on the Employer in terms of the Construction Regulations, 2003 as listed above.

b) Employer's Safety Agent

Where the Employer decides to appoint an agent in accordance with regulation 4.(5) of the Construction Regulations, 2003, the duties and responsibilities as imposed by these regulations upon the Employer shall as far as reasonably practicable apply to his Safety Agent.

c) Contractor

In addition to the duties, responsibilities and liabilities specified in the Conditions of Contract, the Contractor shall have the following duties and responsibilities to ensure compliance with the Construction Regulations, 2003:

3.(1)(a) Notify the provincial director in writing of the commencement of the construction works.
3.(3) Ensure that a copy of the notification letter is kept on site for inspection on request as well as proof of its receipt by the Department of Labour.
5.(1) Demonstrate a Health and Safety Plan, based on the Employer's health and safety specifications.
5.(1) Apply the Health and Safety Plan from the Commencement Date until completion of the Works.
5.(2) Ensure co-operation between all contractors to enable each to comply with the provisions of Construction Regulations.
5.(3)(a) Provide any Tenderer or Subcontractor with copies of the Employer's health and safety specifications.
5.(3)(b) Appoint Subcontractors in writing.
5.(3)(c) Ensure that each Subcontractor's Health and Safety Management Plan is implemented and maintained on their portion of the Works.
5.(3)(d) Stop any Subcontractor from executing Works, not in accordance with, the Contractor's Health and Safety Plan or which poses a threat to the health and safety of persons.
5.(3)(e) Ensure that sufficient health and safety information and appropriate resources are made available where applicable, to the Subcontractor when changes are brought about to the design of the Works.

5.(3)(f) Ensure that his Subcontractor is registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works.

5.(3)(g) Ensure that his Tenderers have made provision in their tenders for the cost of health and safety measures during the construction of the Works in line with the requirements of the Employers Health and Safety Specification and his Health and Safety Management Plan.

5.(5) Discuss and negotiate the contents of his Subcontractor's Health and Safety Plan, to ensure compliance with the Employer's Health and Safety Specification and consistent with the Contractors Health and Safety Management Plan.

5.(5) Approve his Subcontractor's Health and Safety Plan for implementation and to keep records of all such approvals on site for auditing purposes.

5.(6) On request, make available a copy of his and his Subcontractor's Health and Safety Plan to an employee, inspector, contractor, the Employer or the Employer's Safety Agent.

5.(7) Open and maintain a record management system regarding health and safety for the Contractors own and Subcontractors' Health and Safety Documentation on the construction site.

5.(7) Upon request, make available his health and safety record management system to an inspector, Employer, the Employer's Safety Agent or the Contractor.

5.(8) Deliver the health and safety record management system to the Employer upon completion of the Works.

5.(9) Ensure that a comprehensive and updated list of all his Subcontractors (including their respective subcontracting agreements) are included in the health and safety record management system.

5.(10) Satisfy himself on the competencies and resources of the Subcontractor he intends appointing.

6.(1) Appoint a construction supervisor.

6.(3) Appoint assistant construction supervisors if required by an inspector.

6.(5) Appoint individual construction supervisors for individual construction sites.

6.(6) The Contractor shall after due consideration of the complexity, size and potential hazards and associated risks as well as controls towards the mitigation of risks, appoint a safety officer in writing. The contractor shall submit a detailed CV of the envisaged Safety Officer appointment for final acceptance thereof by the Employer or his Safety Agent.

6.(7) Provide opportunities to the construction safety officer to provide inputs into the Health and Safety Plan.

6.(8) Satisfy himself with the competencies and resources of the construction safety officer he intends appointing.

7.(1) Perform a risk assessment prior to the commencement of any construction work.

7.(2) On request, make available copies of the his/her risk assessment.

7.(3) Consult with the health and safety committee on the development, monitoring and review of the risk assessment.

7.(4) Ensure that all employees are informed, instructed and trained regarding any hazard and the related work procedures before any work commences. The contractor shall ensure that proof of such is available on site for auditing purposes.

7.(5) Ensure that all Subcontractors are informed regarding any hazard as stipulated in the risk assessment. Further that Subcontractors conduct their own risk assessments as and when required

7.(6) Analyze ergonomic related hazards and address the same in the risk assessment.

7.(7) Ensure that all employees undergo health and safety induction prior to permitting each employee access to the Works. The Contractor shall ensure that proof of such is available on site for auditing purposes.

7.(8) Ensure that all visitors undergo health and safety induction and are provided with the necessary personal protective equipment. The Contractor shall ensure that proof of such is available on site for auditing purposes.

7.(9) Ensure that every employee is in possession and carries at all times his proof of health and safety induction training.

9.(1)(a) Prevent the uncontrolled collapse of any structure which may become unstable due to the carrying out of construction work.

9.(1)(b) Ensure that no structure is loaded in an unsafe manner.

9.(3) Ensure that all construction drawings are on site and available on request by an inspector, contractors, Employer, the Employer's Safety Agent or employee.

In terms of Clause 4.6 of the Contract Data, it shall be deemed that the parties to this Contract have agreed in writing in terms of Section 37(2) of the Occupational Health and Safety Act, 1993 that the Contractor accepts sole liability for due compliance with the relevant duties, obligations, prohibitions, arrangements and procedures imposed by the Occupational Health and Safety Act, 1993 and all its regulations, including the Constructions Regulations, 2003, for which he is liable as mandatory.

d) Subcontractor

To ensure compliance with the Construction Regulations, the Subcontractor shall:

5.(4) Demonstrate a Health and Safety Plan, based on the Employer's health and safety specification.

5.(4) Apply his Health and Safety Plan from the Commencement Date and until completion of the Works.

5.(12) Satisfy himself on the competencies and resources of any Subcontractor he intends appointing.

5.(14) Provide the Contractor with any information which might affect the health and safety of any person or which might justify a review of the Health and Safety Plan.

In addition to the above items, the Subcontractor shall, to ensure compliance with the Construction Regulations, comply with regulations 5.7, 6.(1), 6.(3), 6.(5), 6.(6), 6.(7), 6.(8), 7.(1), 7.(2), 7.(3), 7.(4), 7.(6), 7.(7), 7.(8), 7.(9), 9.(1)(a), 9.(1)(b) and 9.(3), summarized in Section 2.4.1(c) above.

e) Designer (Employer's Designer or Contractor's Designer)

To ensure compliance with the Construction Regulations, 2003, the Designer (as defined in the Construction Regulations, 2003) shall:

9.(2) Make available to the Employer all relevant information affecting the pricing of the Works.

9.(b) Inform the Contractor of any hazards relating to the Works.

9.2(b) Make available all information required for the safe execution of the Works.

9.2(c) Ensure that information relating to geo-sciences, designs loads, and the methods and sequencing of construction processes are made available to the Contractor in a report.

9.2(d) Not include dangerous procedures or hazardous materials in the structure's design which could be avoided.

9.2(e) Make provision in the design of the Works for hazards likely to be encountered during its subsequent maintenance.

9.(2)(f) Carry out inspections of the construction work during the construction period to ensure compliance with the designs.

9.2(f) Keep records of the inspections carried out on the construction site.

9.2(g) Stop any contractor from executing works not in accordance with the designs.

9.2(h) Conduct a final inspection of the completed Works prior to its commissioning.

9.2(h) Issue a completion certificate to the Contractor subsequent to a successful final inspection.

9.(2)(i) Ensure that cognizance is taken of ergonomic design principles in order to minimize related hazards.

The Employer's Designer shall only accept responsibility to comply with the Construction Regulations, 2003 for that portion of the Permanent Works which the Employer is responsible to design in terms of the Contract.

The Contractor's Designer shall accept sole responsibility and liability to comply with the Construction Regulations, 2003 for that portion of the Permanent Works for which the Contractor is responsible to design in terms of the Contract as well as the design of the Temporary Works.

2.4.2 Secondary Parties

This section covers the duties, responsibilities and liabilities of the following secondary parties:

- Construction Health and Safety Officer
- Contractor's Employees
- Fall Protection Developer
- Health and Safety Consultant
- Health and Safety Representative
- Risk Assessor

a) Construction Health and Safety Officer

The Construction Health and Safety Officer will act as Health and Safety advisor to the site management staff, ensuring the integrity of the Safety management System and Plan and its implementation. The Construction Health and Safety Officer can therefore never take over the line management responsibilities for safe work practices.

The Contractor is responsible for the development of the position outcomes descriptors for the Construction Health and Safety Officer. This documentation shall be available on site for auditing purposes.

The Construction Health and Safety Officer shall if given an opportunity, provide an input into the Contractor's Health and Safety Plan.

b) Contractor's Employees

All employees will be responsible for safety on the construction site and the work place as prescribed in section 14 of the Occupational Health and Safety Act, 1993 and briefly summarized as follows:

- Take reasonable care for the health and safety of himself and of other persons who may be affected by his acts,
- Co-operate with his employer with regards to health and safety to ensure that his employer complies with requirements imposed on him,
- Obey the health and safety rules and procedures laid down by his employer,
- Report any unsafe or unhealthy situation to his employer or to the health and safety representative for his workplace,
- Immediately report any incident in which he was involved which has caused an injury to himself or others, and
- Assist in inquiries and incident investigations.

No employee shall intentionally or recklessly interfere with, damage or misuse anything which is in the interest of health and safety

c) Fall Protection Developer

The Fall Protection Developer will be responsible for the preparation and maintenance of a fall protection plan to be implemented by the Contractor, in such a manner to ensure compliance with regulation 8 of the Construction Regulations, 2003.

d) Health and Safety Consultant

The Health and Safety Consultant shall assist the Contractor in any health and safety matters on the Works for which he is appointed.

e) Health and Safety Representative

The Health and Safety Representative shall fulfill the duties as set out in section 18 of the Occupational Health and Safety Act, (Act 85 of 1993). A health and safety representative shall not incur any civil liability by reason of the fact only that he failed to do anything which he may do or is required to do in terms of the Act.

f) Risk Assessor

The Risk Assessor shall facilitate the risk assessment process of the Contractor or Subcontractor. The Risk Assessor shall be responsible for the compilation and implementation of a management plan towards the continuous mitigation of identified risks to as low as is reasonable practicable.

2.4.3 Supervisors, Inspectors and Issuers

This section covers the duties, responsibilities and liabilities of the following Supervisors, Inspectors and Issuers likely to be found on the Works:

a) Batch Plant Supervisor

The Batch Plant Supervisor shall be required to ensure compliance with regulation 18 of the Construction Regulations, 2003. In addition, he shall fulfill the following duties and responsibilities:

- Manage the day to day operation of a batch plant,
- Be responsible for the maintenance of the batch plant,
- Be able to identify developing defects and hazardous situations,
- Act as the Occupational Health and Safety Representative at the batch plant, and
- Take responsibility for the safety of the personnel at the batch Plant.

The Batch Plant Supervisor will have the authority to stop operation of the plant should any hazardous situation require it.

b) Construction Supervisor

The Construction Supervisor shall be responsible for supervising the construction work inclusive of the implementation and maintenance of safe work practices.

c) Construction Vehicle & Mobile Plant Inspector

The Construction Vehicle and Mobile Plant Inspector will ensure the safety of all construction vehicles and plant in such a manner to ensure compliance with regulation 21 of the Construction Regulations, 2003. The inspector will also be responsible for the regular inspection of all vehicles and plant and the recording of his findings. The Contractor shall ensure that proof of such is available on site for auditing purposes.

d) Demolition Work Supervisor

The Demolition Work Supervisor will supervise and control all demolition work on the Works in such a matter to ensure compliance with regulation 12 of the Construction Regulations, 2003. The supervisor will be responsible for all administration related to the demolition works. The Contractor shall ensure that proof of such is available on site for auditing purposes.

e) Electrical Temporary Installation Inspector

The Electrical Temporary Installation Inspector will control all temporary electrical installations on the Works to ensure compliance with regulation 22 of the Construction Regulations, 2003, the Electrical Installations Regulations, 1992 and SANS 0142. The Contractor shall ensure that proof of such is available on site for auditing purposes.

f) Excavation Work Supervisor

The Excavation Work Supervisor will supervise all excavation work on the Works in such a matter to ensure compliance with regulation 11 of the Construction Regulations, 2003 and shall in particular ensure that every excavation is inspected:

- On a daily basis before each shift,
- After every blasting operation,
- After an unexpected fall of ground,
- After substantial damage to supports, and
- After rains.

The Contractor shall ensure that proof of such is available on site for auditing purposes.

g) Explosive Power Tools Issuer

The Explosives Power Tools issuer will control the issuing and collection of explosive tools, cartridges and nails or studs to ensure compliance with regulation 19 of the Construction Regulations, 2003. The Contractor shall ensure that proof of such is available on site for auditing purposes.

h) Fire Extinguisher Inspector

The Fire Extinguisher Inspector will be responsible for the operation and inspection of all firefighting equipment on the Works to ensure compliance with regulation 27 of the Construction Regulations, 2003. The Contractor shall ensure that proof of such is available on site for auditing purposes.

i) Formwork and Support Work Supervisor

The Formwork and Support Work Supervisor will supervise all formwork and support work operations and will see to it that formwork and support work erectors, operators and inspectors are competent to carry out their work Works to ensure compliance with regulation 10 of the Construction Regulations, 2003. The Contractor shall ensure that proof of such is available on site for auditing purposes.

j) Ladder Inspector

The Ladder Inspector will be responsible for the regular inspection and recording of his/her findings of all ladders on the Works and to ensure compliance with regulation 13 of the General Safety Regulations. The Contractor shall ensure that proof of such is available on site for auditing purposes.

k) Material Hoist Inspector

The Material Hoist Inspector will be responsible for the daily inspection of material hoists or similar machinery and to ensure Works to ensure compliance with regulation 17 of the Construction Regulations, 2003. The inspector must have experience pertaining to the erection and maintenance of all hoists on the Works. The inspector must be able to determine the serviceability of the entire material hoist including guides, ropes and their connections, drums, sheaves or pulleys and all safety devices. The Contractor shall ensure that proof of such is available on site for auditing purposes.

l) Scaffolding Supervisor

The Scaffold Supervisor will be required to supervise all scaffolding work operations carried out on the Works and to ensure compliance with regulation 14 of the Construction Regulations, 2003 as well as ensure compliance with applicable SABS 085 specifications. The Contractor shall ensure that proof of such is available on site for auditing purposes.

m) Stacking Supervisor

The Stacking Supervisor shall supervise the stacking and storage of all articles on site and shall be responsible to ensure compliance with regulation 26 of the Construction Regulations, 2003.

n) Suspended Platform Supervisor

The Suspended Platform Supervisor will supervise all suspended platform work operations carried out on the Works and to ensure compliance with regulation 15 of the Construction Regulations, 2003. The supervisor will also see to it that all suspended platform erectors, operators and inspectors are competent to carry out their work. The Contractor shall ensure that proof of such is available on site for auditing purposes.

3. GENERAL REQUIREMENTS OF HEALTH AND SAFETY PLAN

3.1 General

It will be expected from the Contractor to include in his safety plan method statements on how to accomplish the requirements relating to the Construction Regulations, 2003 and related incorporated standards and regulations.

Contractors should describe how their safety management systems will work and what control procedures they plan on using to ensure safety on the construction site

The following generic aspects should be covered in their safety plan

- What administrative procedures the Contractor envisages to use in the implementation and maintenance of the safety plan with reference to the construction site
- How continuous assessment of the safety plan will be assessed and implemented with respect to construction site
- What control systems the Contractor envisages to implement on site to support his safety program
- How the Contractor will ensure that he adheres to the construction regulations in respect of competent persons for appointments
- What external resources the Contractor envisages on using to ensure successful implementation and sustainability of the safety plan
- What training to employees the Contractor envisages and how he would go about to execute it
- The Contractor should indicate which competent persons he plans on employing

During the tendering phase it will be expected from the tenderer to briefly explain how the abovementioned will be accomplished.

Once a successful tenderer has been appointed, the Contractor shall supply a detailed Health and Safety Plan for review by the Employer, prior to site mobilization, to ensure compliance with the Construction Regulations, 2003. Mobilization shall be dependent upon the acceptance of the Contractor's Health and Safety Management Plan by the Employer. The Contractor's Health and Safety Plan should include, but not be limited to, those sections indicated in Section 3.2 of this specification.

3.2 Outline of Health and Safety Plan

The Contractor's Health and Safety Plan prepared in accordance with this specification shall consist of at least the following sections and sub-sections:

1. Aim and Scope of Plan,
2. Risk Assessment,
    a. Alternative Forms of Risk Assessment,
    b. Methodology of Risk Assessment,
    c. Elements of Risk Assessment,
        i. Scope of assessment,
        ii. Risks Identified,

iii. Risk Analysis,
iv. Risk Evaluation,
v. Risk Treatment,
vi. Monitoring and reviewing,

3. Resources,
   a. Health and Safety Staffing Organogram,
   b. Supervisors, Inspectors and Issuers,
   c. Employees,
   d. Subcontractors inclusive of their scope of work and their core resources,
   e. Training,
   f. Plant,
   g. Vehicles,
   h. Equipment
4. Materials,
   a. Temporary Materials
   b. Permanent Materials
5. Categories of Work
6. Implementation of Health and Safety Plan,
   a. Administrative systems,
   b. Training,
   c. Reporting,
   d. Monitoring,
   e. Inspections,
7. Auditing,
   a. Internal audits,
   b. Follow-up audits,
8. Financial Aspects,
9. Emergency procedures and response

4. RISK ASSESSMENT

4.1 General

This section of the specification provides guidelines for the Contractor in preparation of risk assessments in order to ensure compliance with Regulation 7 of the Construction Regulations, 2003. This section highlights the principles related to the preparation of suitable and sufficient risk assessments. Contractor Staff intending to prepare risk assessments should be trained and suitably experienced in the application envisaged.

A suitable and sufficient risk assessment is an assessment which:

- Accounts for risks that are likely to arise during the construction of the Works,
- Enables the development and implementation of systems to manage the risks,
- Remains valid for a reasonable period of time,
- Provides a basis for training of employees, and
- Improves working procedures and introduce long term controls.

The requirements of the Construction Regulations will not be satisfied by a single risk assessment exercise that holds good for all time. The risk assessment process on the Works is an ongoing process.

The objectives of risk assessments are to:

- Identify the risks that are mostly in need of reduction,
- Identify the various options for achieving such reduction,
- Identify the risks that require careful ongoing management, and
- Identify the nature of the required ongoing attention.

4.2 Forms of Risk Assessment

In order to ensure compliance with the Construction Regulations, the Contractor will be required to carry out the following three forms of risk assessment:

4.2.1 Baseline or datum risk assessments

The Contractor will be required carry out a risk assessment before the commencement of construction activities on the Works. This “baseline” or “datum” risk assessment will form part of the Contractor’s Health and Safety Plan. The risks and hazards to which persons, plant, vehicles and facilities may be exposed during the construction of the Works should be identified and evaluated. Measures to reduce or control these risks or hazards should be defined during this assessment. The effectiveness of the measures defined and the baseline risk assessment prepared shall be monitored and reviewed from time to time to ensure that it remains relevant and accurate.

4.2.2 Issue based risk assessments

The Contractor will be required to carry out separate risk assessments during construction of the Works when methods and procedures are varied, for example when:

- Designs are amended,
- New machines are introduced,
- Plant is periodically cleaned and maintained,
- Plant is started-up or shut-down,
- Systems of work change or operations alter,
- Incidents or near-misses occur, or
- Technological developments invalidate prior risk assessments.

4.2.3 Continuous risk assessments

The Occupational Health and Safety Act specifically requires that employers shall provide and maintain working environments that are safe and without risk to health. The general awareness of hazards needs to be raised as work ethic to maintain a safe and risk free environment on an ongoing basis. This is achieved by continuous risk assessments, the most important form of risk assessment that takes place as an integral part of day-to-day management. Examples of continuous risk assessments include:

- Regular audits,
- Maintaining general hazard awareness,
- Pre-work risk assessment

4.3 Methodology for the Preparation of Risk Assessments

The Contractor shall in the preparation of his risk assessments, follow the following general principles:

- Employ a team of suitably qualified individuals with appropriately varied and relevant experience in risk assessment,
- The appointed risk assessor shall lead the risk assessment,
- Provide the team with background data, scope of work, potential hazards and underlying causes, and
- Where necessary employ experts for complex risk assessments and aspects of risk assessments that require experiential judgment,
- Institute an ongoing system of identifying aspects of the work that require risk assessment, and
- Conduct risk assessments in workshops of the team or by individual members of the team under guidance of the leader as appropriate to the situation.

4.4 Elements of a Risk Assessment

4.4.1 General

The process of carrying out a risk assessment consists of a number of well-defined steps. These steps improve decision-making by providing a greater understanding of the risks and their impacts. The main steps or elements of the risk assessment process are as follows:

1) Consider scope and nature or risks involved, determine purpose and physical and legal bounds of assessment and define risk evaluating criteria,
2) Systematically identify risks,
3) Analyze risks with regard to causes, likelihood of occurrence and possible consequences against the background of existing controls and its effectiveness,
4) Evaluate risks in terms of pre-established criteria to determine need and priority for attention,
5) Treat risks through a process of risk elimination, substitution, controlling risk at source, risk mitigation such as training and as far as risk remains, provide personal protective equipment (PPE),
6) Monitor and review progress and performance in terms of management system, and
7) Communicate and consult.

The following sections 4.4.2 to 4.4.7 deal with items (2) to (7) above. These items form the continuing process of the risk assessment as indicated in Figure 1, below.

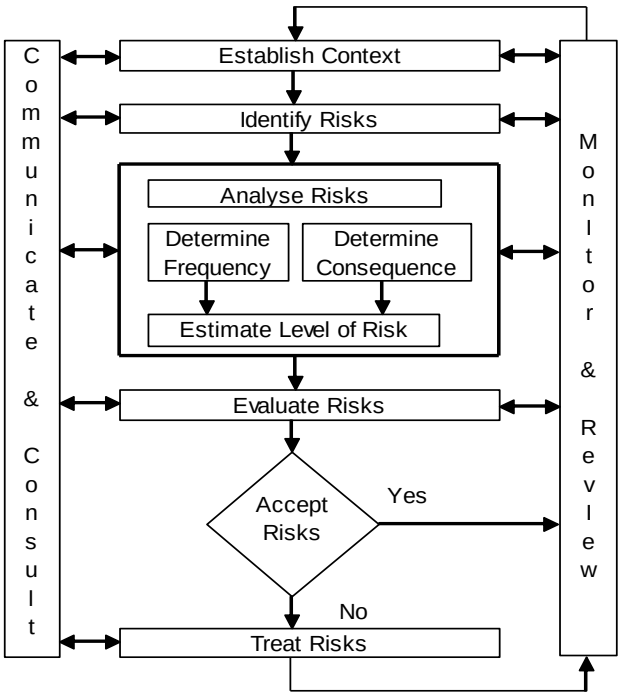

Figure 1: Risk Management Process

The Contractor shall ensure that the risk assessment compiled as part of his Health and Safety Plan contains at least these items.

4.4.2 Risk Identification

The Contractor should regard this step of the risk assessment as the most important. Subsequent analysis and evaluation of risks and the development of risk control measures are wasted if the risks or hazards on the Works are not carefully identified.

The Contractor should bear the following principles in mind when identifying the risks:

i) Systematically address all risks or hazards on the Works,
ii) Review all aspects of the work, but consider only those that have a potential to cause harm,
iii) Rank the risks identified in order of importance and then use appropriately advanced techniques to deal with major risks,
iv) Deal mainly with major risks and don't obscure these with unimportant information, especially minor risks,
v) Address what actually happens in the workplace during the work activity
vi) Consider all persons that may be affected,
vii) Highlight those groups and individuals who may particularly be at risk, and
viii) Review the adequacy and effectiveness of existing safety controls and measures

4.4.3 Risk Analysis

In this step, the Contractor will be required to analyse the risks identified by determining each risks frequency and magnitude or severity of the consequence of the risk or hazard.

The frequency of occurrence of a hazard may be expressed as the number of times that it may occur in a year, decade, lifetime, century, or longer period, according to comparative human experience. The magnitude of the likely consequence of a hazard may be expressed in terms of the degree of incapacitation, number of people or costs involved. The frequency of occurrence of a hazard and the magnitude of its consequence may be compounded as the risk that it poses as shown in the "risk matrix" in Figure 2 below.

Frequency of Occurrence of Hazard	Severity of Consequences of Potential Hazard					
	1 Medically treatable injury	1 Compensable injury	10 Compensable injuries	1 Permanently disabling injury	1 Fatality	10 Fatalities
Frequent; 1 or more occurrences per year	Medium	High	Very high	Severe	Severe	Severe
Several times during a career; 0.1 occurrences per year	Medium-low	Medium	High	Very high	Severe	Severe
Unlikely, but possible during a career; 0.01 occurrences per year	Low	Medium-low	Medium	High	Very high	Severe
Very unlikely during a career; 0.001 occurrences per year	Low	Low	Medium-low	Medium	High	Very high
Barely credible; 0.0001 occurrences per year	Low	Low	Low	Medium-low	Medium	High

Figure 2: Compounded Risk Matrix

The columns in the table represent the likely consequence of the hazard and the rows, the frequency of occurrence. The scales for both quantities represent consistent progressions, albe they qualitative. The risks evidently range from low to severe. Note that diagonals in the matrix represent the risks of the identified hazards, taking the effectiveness of controls into consideration.

The table represents a typical risk matrix that need not necessarily be adopted by the Contractor. The Contractor may use an alternative risk matrix provided that it is approved as part of his Health and Safety Plan.

4.4.4 Risk Evaluation

In this step the Contractor will be required to compare the assessed risk with similar risks previously experienced for the purpose of deciding how to treat the risk. A useful systematic approach for this purpose is as follows:

If the assessed risk exceeds similar risks that have occurred in the past and that are considered to be unacceptable, the assessed risk would require treatment depending upon its magnitude as discussed in Section 4.4.5, or

- If the assessed risk exceeds similar historical risks that are acceptable, treatment of the assessed risk will depend on the extent by which it exceeds the historical risks, or
- If the assessed risk is less than historical risks that are unacceptable, treatment of the assessed risk will depend on the extent by which it is less than the historical risks, or
- If the assessed risk is less than historical risks that are acceptable, the assessed risk would also be acceptable and would not require any treatment.

4.4.5 Risk Treatment

In this step, the Contractor will select and implement appropriate measures for dealing with risk. Typically measures comprise the following:

- Elimination by changing designs, procedures, management methods, etc, applicable to high frequency–high consequence risks, or
- Reduction by changing designs, procedures, management methods, etc, applicable to high frequency–high consequence risks, or
- Minimization by changing designs, procedures, management methods, etc, applicable to high frequency–low consequence risks, or
- Transfer or share whole or part of the risk to another party by insurance, contractual arrangements or organizational structures, applicable to low frequency–high consequence risks, or
- Control to ensure that risks do not increase, applicable to low frequency–high consequence risks, or
- Retention together with provision of monitoring and personal protective equipment, applicable to low frequency–low consequence residual risks after reduction, or
- Acceptance without particular action other than provision of personal protective equipment, applicable to low frequency–low consequence risks.

The following principles enable the optimum treatment to be determined:

- Avoid risks altogether if possible by using different approaches, substances or methods of work,

- Combat risks at source rather than by adopting secondary measures,
- Adapt work to the individual rather than the individual to the work, that is, in the design consider the people and their attributes that will operate the system
- Take advantage of technological and technical progress,
- Risk prevention measures must be part of a coherent policy and approach to safety management that involves performance measurement, goal setting, feedback and analysis,
- Give preference to measures that protect the whole work force,
- Ensure that those for whom protection is provided understand what they need to do to make sure that the protection works, and
- Ensure that measures to control risks are an accepted part of an active health and safety culture supported by all levels of the organization; single risk reduction initiatives invariably fail.

4.4.6 Reporting and Recording

The Contractor shall ensure that the risk assessment process is recorded in the form of a report and included in his Health and Safety Plan. The report should be easily accessible to the Contractor's employees, their representatives, to inspectors, the Employer or his Safety Agent and the Engineer. The essential contents of the report should be as follows:

- Objectives and expected outcomes,
- Description of the Works under assessment,
- Summary of context of study
- Composition of risk assessment team, (including qualifications and relevant experience),
- Approach used to systematically identify risks,
- Identified risks (ranked in order of priority),
- Method adopted for assessing frequencies and consequences of risks,
- Consequences (ranked in order of magnitude),
- Identification of individuals and groups who may be affected by major hazards and risk and who may especially be at risk,
- Basis for defining safety standards to be achieved,
- Contractor's resources devoted to risk assessment,
- Actions proposed to reduce unacceptably high risks,
- Review effectiveness of existing safety measures to control risks, and
- Implementation programme of selected treatments (including controls to manage unacceptably high risks).

4.4.7 Monitoring and Review

It is necessary to monitor risks, the effectiveness of the risk treatment plan and the strategies and management system set up to control implementation. Control of the risk management program entails the setting of standards, monitoring actual performance, comparing the performance with the standards and correcting any deviations from the standard. Risks and the effectiveness of the control measures need to be monitored to ensure changing circumstances do not alter risk priorities. Few risks remain static.

Ongoing review is essential to ensure that the management plan remains relevant. Factors that affect the likelihood and consequences of an outcome may change, as may factors that affect the suitability or cost of the various treatment options. If an accident occurs, or if more is learnt about the hazards in the workplace, the risk assessment may need to be reviewed or modified. Hazards may be observed that have not been anticipated or previously identified and which may require appropriate measures to be taken. After an accident has occurred, it is important to determine whether it was predicted, whether preventive measures were identified, and if so, why they did not work, whether the risk assessment is still suitable and sufficient if it failed to predict the accident, whether to the decision to accept a predicted risk as tolerable is still valid, why the accident occurred and what should be done to prevent similar accidents occurring again. It is therefore necessary to regularly repeat the risk management cycle, the time between reviews being dependent on the nature of the risks and the degree of change likely to take place in the work activity. Review is an integral part of the risk management treatment plan.

4.4.8 Communication and Consultation

The Contractor will be required to communicate and consult with internal and external stakeholders during each step of the risk assessment process. Stakeholders will include the Employer and his Safety Agent, the Engineer and the Contractor's employees and consultants.

Effective communication will ensure that those responsible for implementing the risk management process and those with a vested interest, understand the basis on which decisions are made and why particular actions are taken. It will also ensure that the perceptions of all those involved are noted and accommodated during the process.

5. RESOURCES

5.1 General

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health And Safety Act, 1993 and all its Regulations and related incorporated standards with regards to the resources and facilities intended for use on the temporary and permanent Works.

5.2 Employees

5.2.1 Inspectors, supervisors and Issuers

The Contractor shall provide in his Health and Safety Plan his intended Staffing Organogram for the Works. The organogram should include those inspectors, supervisors and issuers as envisaged in the Construction Regulations, 2003 required for the Works and any additional supervisory staff members as the Contractor (having taken the scope of the Works into account) considers necessary.
Copies of the supervisory staffs' curriculum vitae or portfolio of evidence and their appointment letters should be appended to the Contractor's Health and Safety Plan.

The Contractor's Health and Safety Plan should in addition cover at least the following aspects:

- The number of unskilled, semi-skilled and skilled (including Foreman, Charge hands, Artisans, Operators, Drivers, Clerks, Storeman and Team Leaders) employees he intends employing on the Works,
- The health and safety training to be provided to the Contractor's employees,
- The programme of the health and safety training,
- Systems for the review of the effectiveness of the training provided, and
- Systems to determine further training requirements throughout the construction period.

In preparing his Health and Safety Plan, the Contractor shall ensure compliance with Clause PS 22 in Section 4.2 of the Project Specifications.

Pro-forma letters of appointment for the various inspectors, supervisors and issuers as contemplated in the Construction Regulations, 2003 are included in Annexure 1 to this specification for use by the Contractor. The Contractor shall ensure that he includes in his Health and Safety Plan the appointment letters for all his inspectors, supervisors and issuers appointed for the Works.

5.2.2 Subcontractors

The Contractor shall with reference to the use of subcontractors on the Works and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- The steps intended to ensure that his Subcontractors prepare, implement and maintain Health and Safety Plans,
- How health and safety information will be made available to his Subcontractors when changes are brought about to the design,

- How he intends determining that his Subcontractors are registered and in good standing with the compensation fund or with a licensed compensation insurer prior to the commencement of the Works,
- How he intends determining if his Subcontractors have made provision in their tenders for the cost of health and safety measures during the construction of the Works,
- How he intends satisfying himself on the competencies and resources of Subcontractors he intends appointing, and
- How he intends ensuring that his Subcontractors perform risk assessments prior to commencing their respective portions of the Works.

5.2.3 Competencies

The Contractor shall establish if a person is competent to perform a certain duty or be appointed in a certain capacity by requesting all candidates to supply the required certificates of competency. Where certificates of competencies cannot be delivered, the Contractor shall request a portfolio of evidence from the respective candidates.

Contractors should do enquiries at the South African Qualifications Authority (SAQUA) relating to the qualifications required for appointment of competent persons.

5.2.4 Physical and Psychological Fitness

Were required by the Occupational Health & Safety Act and its regulations the contractor shall ensure that his employees are in possession of a valid medical certificate of fitness to work in such an environment.

In terms of the Construction Regulations 2003 medical certificates of fitness are required for persons working at elevated positions (Regulation 8(2)(b)), persons working on suspended platforms (Regulation 15(12)a) tower crane operators (Regulation 20 (g)) and construction vehicle and mobile plant operators (Regulation 21 (1)(d)(ii)).

5.3 Plant, Vehicles and Equipment

5.3.1 Suspended platform

The Contractor shall with reference to Regulation 15: Suspended platforms of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends complying with SABS 1808 and SABS 1903,
- What systems he intends using to ensure the safety of all suspended platforms,
- What tests will be performed to establish the safety of suspended platforms,
- How he intends maintaining suspended platforms being used, and

- How he will document the design, testing, maintenance and inspections of the suspended platforms.

5.3.2 Boatswains chairs

The Contractor shall with reference to Regulation 16: Boatswains chairs of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Explain what systems he intends using to ensure the safety of all boatswains chairs,
- Explain how he intends maintaining boatswains chairs in use,
- What tests will be performed to establish the safety of boatswains chairs, and
- How he will document the design, testing, maintenance and inspections of the boatswains chairs.

5.3.3 Material hoists

The Contractor shall with reference to Regulation 17: Materials Hoist, of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends confirming the construction stability of the material hoists,
- What systems he intends using to ensure the safety of all material hoists,
- What tests will be performed to establish the safety of all material hoists,
- How he intends maintaining the material hoists being used, and
- How he will document the design, testing, maintenance and inspections of all material hoists and
- What safety procedures and precautions are envisaged to ensure safe operation of the materials hoists.

5.3.4 Batch Plants

The Contractor shall with reference to Regulation 18: Batch plants of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- What systems he intends using to ensure the safety of all batch plants,
- How he intends maintaining the batch plants in use, and
- How he will document the design, testing, maintenance and inspections of batch plants in use.

5.3.5 Explosive powered tools

The Contractor shall with reference to Regulation 19: Explosive powered tools, of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends controlling the issuing of explosive powered tools,
- How he intends implementing safety procedures prior to use of explosive powered tools, and
- What safety measures will be required during the use of explosive powered tools.

5.3.6 Cranes

This section of the specification shall be read in conjunction with the provisions of the Driven Machinery Regulations, 1988.

The Contractor shall with reference to Regulation 20: Cranes, of the Construction Regulations, 2003 and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How will environmental factors be taken into account in respect to the use of cranes,
- What systems he intends using to ensure the safety of all cranes in use,
- How he intends maintaining cranes in use,
- What tests will be performed to establish the safety of all cranes in use,
- What safety procedures and precautions are envisaged to ensure the safe operation of all cranes in use,
- How he will document the design, testing, maintenance and inspections of all cranes in use, and
- The contractor shall proof compliance of the Driven Machinery Regulation, 1988, with reference to the lifting machinery and tackle being used.

5.3.7 Construction vehicles and mobile plant

The Contractor shall with reference to Regulation 21: Construction vehicles and mobile plant of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends ensuring that construction vehicles and mobile plant are:
  - Of acceptable design and construction,
  - Maintained and in good working order,
  - Used according to design specifications, and
  - Are protected from falling into excavations, water or areas lower than the working surfaces,
- How he intends ensuring that workers are trained, authorised and physically fit to operate construction vehicles and mobile plant,
- What traffic arrangements and safety precautions will be implemented to ensure safe operation of construction vehicles and mobile plant on the Works, and
- How he intends safeguarding employees against construction vehicles and mobile plant moving on the construction site.

5.3.8 Electrical Installation and Machinery on construction sites

This section of the specification shall be read in conjunction with the provisions contained in the Electrical Installation Regulations, 1992.

The Contractor shall with reference to Regulation 22: Electrical Installation and machinery on construction sites of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends safeguarding employees against electrical cables or apparatus under, over or on site, and

- How he will ensure that electrical installations are of adequate strength to withstand working conditions on a construction site.

5.3.9 Ladders

The Contractor shall with reference to Regulation 13A of the General Safety Regulations and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How he intends ensuring that ladders used are safe and constructed of materials approved for its intended use, and
- What precaution will be made to ensure the stability of ladders in use.

6. MATERIALS

6.1 General

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 1993 and all its regulations and related incorporated standards with regards to the design, supply, storage and erection of materials used for the temporary and permanent Works.

6.2 Fall Protection Equipment

The Contractor shall with reference to Regulation 8: Fall Protection Equipment of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Compilation of a fall protection plan,
- How the fall protection plan will be implemented and maintained,
- How employees will be screened and declared medically fit to work in areas where fall protection equipment is needed,
- How the safeguarding of persons, plant, vehicles, equipment and facilities on the construction site is contemplated,
- Training of staff working at heights and in the use of fall protection equipment,
- How a continuous assessment of the situation will be executed,
- How fall protection equipment will be inspected for safety, and
- How corrective actions will be implemented
- Emergency plans and procedures for treatment of incidents relating to falls from height.

6.3 Scaffolding

The Contractor shall with reference to Regulation 14: Scaffolding of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How compliance with SABS 085 will be ensured,
- How scaffolding in use will be maintained,
- What systems are intended to ensure the safety of scaffolding used, and
- What tests will be performed to establish the safety of scaffolding used
- Training plan for scaffold erectors and inspectors.

6.4 Use and temporary storage of flammable liquids on construction sites

This section of the specification shall be read in conjunction with the provisions for the use and storage of flammable goods as determined in the General Safety Regulations.

The Contractor shall with reference to Regulation 23: Use and temporary storage of flammable liquids on construction sites of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How flammable liquids will be stored to minimize the risk of fire or explosions,
- How the contractor will identify a flammable store
- What safety precautions will be employed if ventilation of the flammable store is not possible,
- How access to flammable stores will be controlled,
- How empty vessels used for the storage of flammable liquids will be disposed of,
- What quantity of flammable liquids will be stored on the construction site,
- What systems are intended to ensure the safe storage of flammable liquids, and
- What retaining methods will be used to prevent the spreading of any spillage.

6.5 Stacking and storage

This section of the specification shall be read in conjunction with the provisions for the stacking of articles contained in the General Safety Regulations.

The Contractor shall with reference to Regulation 26: Stacking and storage on construction sites of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- Who will supervise the stacking and storage of materials on site, and
- What systems are intended to ensure the safe stacking and storage of materials on the site

6.6 Personnel Safety Equipment and Facilities

The Contractor shall comply with Section 2 of the General Safety Regulations, and shall in particular provide all necessary personnel protective equipment for his personnel for the duration of the construction period. To this end the Contractor shall without limiting his obligations indicate in his Health and Safety Plan:

- Identify training requirements in the Contractors Training plan in the use and maintenance of personal protective equipment,
- The type of personnel safety equipment he will provide,
- How he intends issuing it to his employees, and
- How he will maintain the personnel safety equipment issued.

6.7 First Aid, Emergency Equipment and Procedures

The Contractor shall comply with Section 3 of the General Safety Regulations regarding first aid, emergency equipment and procedures.

7. CATEGORIES OF WORK

In this section of his Health and Safety Plan, the Contractor will be required to state how he intends to comply with the requirements of the Occupational Health and Safety Act, 1993 and all its regulations and related incorporated standards with regards to the execution of the following categories of work.

7.1 General

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

7.1.1 Construction welfare facilities

Contractors will be required to adhere to Regulation 28: Construction welfare facilities of the Construction Regulations, 2003.

This regulation must be read in conjunction with the provisions of the Facilities Regulations, 1990 (as amended) and SANS 0400.
The Contractor must discuss the following in detail in his safety plan:

- How will the Contractor establish the amount of facilities required for employees to shower, change, eat and attend to sanitary needs
- What measures will the employer take to house employees on site who lives far form their residences or for the provision of transport

7.1.2 Environmental regulations for workplaces

The Contractor shall comply with the Environmental Regulations for Workplaces, 1987, and shall address the following aspects as described in the regulations in his Health and Safety plan:

- Thermal requirements,
- Lighting,
- Windows,
- Ventilation,
- Housekeeping,
- Noise and hearing conservation,
- Precautions against flooding, and
- Fire precautions and means of egress.

7.1.3 Housekeeping on construction sites

Contractors will be required to adhere to Construction Regulation 25: Housekeeping on construction sites, of the Construction Regulations, 2003.

This regulation must be read in conjunction with the provisions of the Environmental Regulations for Workplaces, 1987 (as amended).

The Contractor must discuss the following in detail in his safety plan:

- How will contractors ensure the neatness of construction sites
- What measures does the Contractor envisage to
    - Store and/or stack materials,
    - Remove debris from site,
    - Prevent unauthorized entrance to the site
    - Protect employees or passers-by from falling objects

7.1.4 Fire precaution on construction sites

Contractors will be required to adhere to Construction Regulation 27: Fire precautions on construction sites, of the Construction Regulations, 2003.

This regulation must be read in conjunction with the provisions of the Environmental Regulations for Workplaces, 1987 (as amended).

The Contractor must discuss the following in detail in his safety plan:

- How the Contractor will minimize the risk of fire on the site
- How the Contractor will identify potential fire hazards
- What prohibitions the Contractor will implement to manage risk areas
- How many employees the Contractor will train in fire fighting
- What organization the Contractor envisage to combat fires on sites
- What precautions and procedures will be followed to evacuate employees in the case of a fire

7.1.5 Water Environments

The Contractor will be required to adhere to Construction Regulation 24: Water Environments, of the Construction Regulations, 2003.

The Contractor must discuss the following in detail in his safety plan:

- What precautions will the Contractor take to identify dangers where employees may fall into water
- What safety procedures and equipment will the Contractor implement to safeguard employees working at water environments

7.1.6 Structures

The Contractor will be required to adhere to Construction Regulation 9: Structures, of the Construction Regulations, 2003.

The Contractor must discuss the following in detail in his safety plan:

- Explain what controls, test or precautions will be made to prevent structures from collapsing during construction,
- The Contractor shall indicate what steps will be taken and implemented to ensure that structures or parts thereof will not be loaded in such a manner that it may collapse, and
- What procedures does the Contractor envisage to implement in order to obtain all relevant data on structures before commencement of construction work.

7.1.7 Watching, barricading and lighting

The Contractor will be required to adhere to regulations 11.3.(i) and 11.3.(l) of the Construction Regulations, 2003.

The Contractor must discuss the following in detail in his safety plan in respect of any excavation or other dangerous activity adjacent to public roads and thoroughfares:

- Type of barrier or fencing to be used,
- Type and spacing of warning lights and warning signs, and
- Control systems and personnel he intends employing to ensure that the above items are maintained.

7.1.8 Hazardous Chemical Substances

The Contractor will be required to adhere to the Regulations for Hazardous Chemical Substances 1995 as amended in the handling and storage cement of and other hazardous chemical substances.
The Contractor must discuss the following in detail in his safety plan in respect of each hazardous chemical substance that will be used in the works:

- Storage of substance
- Handling of substance
- Protective clothing and other devices to be used while handling the substance
- Medical surveillance.

7.2 Site Clearance

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

7.2.1 Demolition work

Contractors will be required to adhere to Construction Regulation 12: Demolition work, of the Construction Regulations, 2003.

The Contractor shall discuss the following in detail in his safety plan:

- Briefly explain how he will safeguard people and property during and after demolition works

- Briefly explain how he will protect staff from dangerous situations
- Discuss the methods proposed to safeguard the public and property against harm during demolition works
- Discuss what type of equipment he envisages to use during demolition work
- How will the Contractor ensure the safety of equipment used during demolition work
- What steps will the Contractor deem necessary to take where hazardous materials is encountered
- Dust control measures
- Noise control measures

7.3 Earthworks

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

7.3.1 Excavation Work

Contractors will be required to adhere to Construction Regulation 11: Excavation work, of the Construction Regulations, 2003.

The Contractor must discuss the following in detail in his safety plan:

- How will the Contractor establish the stability of ground prior to excavations,
- What steps will the Contractor follow to ensure that bolstering, shoring and bracing is sufficient to ensure the safety of the excavation, and
- What steps will the Contractor follow to ensure the equipment used to safeguard an excavation is sufficient and safe.

7.4 Concrete

The Contractor shall, without limiting his obligations, cover at least the following matters in his Health and Safety Plan under this category of work:

7.4.1 Formwork and support work

The Contractor shall with reference to Regulation 10: Formwork and support work, of the Construction Regulations, 2003, and without limiting his obligations, cover at least the following matters in his Health and Safety Plan:

- How the design of formwork and support work will be carried out,
- How the erection of formwork and support work will be managed,
- How the continuous assessment of the safety of formwork will be done,
- How the loading of formwork and support work will be managed or limited, and
- How he intends keeping records of the above.

7.5 Pipes

The Contractor shall comply with Section 9 of the General Safety Regulations, with regards to the welding, flame cutting, grinding, soldering or similar operations associated with pipework.

8 IMPLEMENTATIONS OF CONTRACTOR'S HEALTH AND SAFETY PLAN

8.1 General

The Contractor shall describe in his Health and Safety Plan how he intends implementing his plan.

The Contractor shall indicate the methods he intends using to ensure accurate record keeping of all critical elements identified in his risk assessment and covered in his Health and Safety Plan.

The Contractor shall indicate how internal audits will be carried out, how shortcomings will be addressed, how he intends to review the safety plans, how he would train staff and how he would implement the findings and recommendations of internal audits or inputs of employees.

8.2 Administrative Systems

.

The Contractor shall comply with Section 9 of the General Administrative Regulations, 1996. The Contractor's administrative system shall without limiting his obligations, cover the following:

- Up keep of a safety file on site,
- Maintenance of his Health and Safety plan,
- Procedures to follow for the appointment of competent persons,
- Application for permits,
- Procedures to follow for notifications,
- Injury on duty [IOD] administration,
- Recording of minutes of safety meetings,
- Recording of checklists,
- Safe keeping of checklists, and
- Internal audits.

The Contractor shall in particular ensure that at least one copy of the Occupational Health and Safety Act,1993 and its Regulations is available on the for every 20 employees employed.

8.3 Reporting Systems

The Contractor shall comply with Section 9 of the General Administrative Regulations, 1996 and shall in particular (in accordance with section 12) furnish an inspector with information relating to health and safety on the construction site, when requested to do so.
The Contractor shall notify the Employer of any investigations, complaint or criminal charge which may arise as a consequence of the provision of the Occupational Health and Safety Act, 1993 and its Regulations, pursuant to work performed in terms of this Contract.

8.4 Training

The Contractor shall train all his employees in accordance with the requirements of section 13 of the Occupational Health and Safety Act, 1993. The Contractor shall ensure that every employee is informed of the following:

- The hazards of any work he has to perform or plant machinery or equipment he is permitted to use, and
- The precautionary measures which should be taken regarding the above.

The Contractor shall, without limiting his obligations, indicate in his Health and Safety Plan how he intends:

- Identifying the training needs of the personnel he intends employing, and
- Implementing the training identified
- What proof of induction training will be carried by his employees (e.g. laminated type identification card).

8.5 Safety Meetings

The Contractor shall conduct at least one formal safety meeting per month with his employees to ensure safety awareness and shall maintain appropriate records of attendance and meeting content. Such records shall be made available to the Employers Safety Agent. Such meetings shall address at least the following:

- Accident / safety incidents
- Hazardous conditions
- Hazardous materials / substances
- Job or work projections
- Work procedures
- Protective clothing / equipment
- Housekeeping
- General safety topics

8.6 Inspections and Monitoring

The Contractor shall be required to inspect each workplace prior to works commencing to ensure that all protective equipment is in place and that by entering the workplace no person will be exposed to any hazard which could affect his health or safety. The Contractor shall without limiting his obligations, indicate the following in his Health and Safety Plan:

- The inspection and monitoring procedures he intends employing to determine the safety of workplaces, and
- Who will be responsible for the checking of each workplace at the commencement of each shift.

The Contractor shall include in his Health and safety Plan all the checklists he intends using during the inspection and monitoring of the implementation of his Health and Safety Plan.

The Contractor can expect inspections of the works by any of the following parties:

- The Employer or his Safety Agent,
- The Employer's Occupational Safety Officer, or

- The designated officer serving in the Department of Manpower and appointed by the Minister as Chief Inspector or his representative.

In addition to site inspections performed by the Employer or his safety agent they shall also do audits and asses the safety situation at the works and investigate incidents. Follow-up inspections will be performed to ensure compliance to recommendations done.

The Employer, his Safety Agent or his Occupational Safety Officer may stop the work at any time under the following conditions:

- If the Contractor is not compliant with his Health and Safety Plan
- Imminent threat to the health and safety of any person on site
- Continuous non-conformance to corrective action requests.

Inspections by the Chief Inspector or his representative will be by appointment and the purpose would be to investigate complaints received by the Inspector or to investigate serious incidents.

The Chief Inspector or his representative may issue prohibition notices to stop the activities at the works until the situation investigated has been resolved or he may issue an improvement notice whereby the Contractor will have a period to rectify any hazard identified by the inspector.

9. AUDITING

9.1 Internal Audits

The audits contemplated in regulation 4.(1)(d) of the Construction Regulations,2003 will be carried out by the Employer or his appointed Safety Agent.

The intervals for the audits shall be agreed between the Contractor and the Employer or his Safety Agent during the preparation of the Contractor's Health and Safety Plan, but shall be carried out at least once every month or at such shorter interval that an inspector may require. The Employer or his Safety Agent shall provide at least 7 calendar days notice prior to the conducting of an audit.

The findings of each audit will be made known to the Contractor and the Employer in a report prepared by the Employer or his Safety Agent and will be submitted to all parties within seven working days of the respective audit being completed. Any shortfalls identified will be documented in the audit report together with the Contractor's proposals to rectify the same. All audit reports will be filed in the Health and Safety File.

A date for a follow up audit will be negotiated with the Contractor to verify the implementation of all actions to rectify shortfalls as identified in the audit report.

The Contractor will ensure that the same arrangement detailed above be implemented with his Contractors to ensure his compliance with the Construction Regulations and contemplated in regulation 5. (3)(c).

The audits described above only constitute part compliance by the Employer or the Safety Agent with regulation 4.(1)(c) of the Construction Regulations, 2003.

9.2 Audits by Employer or Safety Agent

The Employer or Safety Agent will be entitled to carry out additional audits or follow-up audits, as the case may be, at any time during the construction period provided that:

i) The audit or follow-up audit are carried out during ordinary working hours, and
ii) The Employer or Safety Agent gives the Contractor at least 24 hours notice of his intention to carry out such audits.

The Contractor's employees indicated in Section 9.1 will be present during any audit carried out by the Employer or his Safety Agent.

10. MEASUREMENT AND PAYMENT

10.1 Measurement and Payment

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

10.1.2 The Contractor shall price all items scheduled in this section of the schedule of quantities to enable the Employer to comply with clause 4.1.(h) of the Construction Regulations, 2003. Failure by the Contractor to price these items will force the Employer to reject the Contractor's tender in terms of clause 4.(4) of the Construction Regulations, 2003.

ANNEXURE 1

APPOINTMENT LETTERS

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Assistant Construction Supervisor's Name)***

APPOINTMENT OF THE ASSISTANT CONSTRUCTION SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 6(2)

I, **(*contractor's name)*** hereby appoint **(*assistant construction supervisor's name)*** as the assistant supervisor responsible for **(*site address)*** to carry out the construction work of ***(description of construction work and area of responsibility).***

In terms of this appointment you are required to ensure that all construction work performed under your supervision is carried out as follows:

1. By persons suitably trained and competent to do such work;
2. That all persons are aware and understand the hazards attached to the work being carried out;
3. That the required risk assessments are carried out;
4. That precautionary measures are identified and implemented;
5. That discipline is enforced at the construction site at all times;
6. That all identified statutory requirements are met; and
7. That any other interest in terms of health and safety with respect to the responsible area is met.
8. You will accept the duties of the Construction Supervisor in his absence.

You are required to report any deviations of the above-mentioned instruction to **(*construction supervisor's name)*** and in his absence to the contractor's representative.

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

You shall submit a written weekly report any non-compliance with the construction Regulations, 2003.

_____ _____ _____

Contractor's Representative full name Signature Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(assistant construction supervisor)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Assistant construction supervisor's full name Signature Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Safety Officer's Name)***

APPOINTMENT OF THE CONSTRUCTION HEALTH AND SAFETY OFFICER IN TERMS OF CONSTRUCTION REGULATION 6(6)

I, **(*contractor's name)*** hereby appoint **(*safety officer's name)*** as the Construction Health and Safety Officer responsible for **(*site address)*** to manage all the health and safety issues as required in terms of the Act by establishing a health and safety program with elected health and safety Representatives.

You shall ensure that all the requirements in terms of the Act and in particular in terms of the Construction Regulations, 2003 are met. You shall also ensure that all appointed sub-contractors comply with the requirements as stipulated in the Construction Regulations, 2003.

You shall further ensure that all records, registers and required lists are maintained and shall stop construction work upon identifying any non-compliance by any contractor; this includes stopping any work should the competency of the person carrying out such work be questionable.

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

_____ _____ _____

Contractor's Representative full name Signature Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*construction health and safety officer's name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Construction Health & Safety Officer's full name Signature Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Construction Vehicle and Mobile Plant Inspector)***

APPOINTMENT OF THE CONSTRUCTION VEHICLE AND MOBILE PLANT INSPECTOR IN TERMS OF CONSTRUCTION REGULATION 21(1)(j)

I, **(*contractor's name)*** hereby appoint (***construction vehicles and mobile plant inspector's name****)* as the construction vehicles and mobile plant inspector responsible for (***site address****)* to inspect on a daily basis all construction vehicles and mobile plant, as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to construction vehicles and mobile plant that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2003 are at all times met.

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

_____	_____	_____
Contractor's Representative full name	Signature	Date

……

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*construction vehicles and mobile plant inspector's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____	_____	_____
Construction vehicles and mobile plant inspector's full name	Signature	Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Sub-Contractor's Name)***

APPOINTMENT OF SUB-CONTRACTOR IN TERMS OF THE CONSTRUCTION REGULATION 5(3)(b)

I, ***(contractor's name)*** hereby appoint ***(sub-contractor's name)*** as the sub-contractor responsible for ***(site address)*** to carry out the construction work of ***(description of construction work)***.

You shall ensure that you meet all the requirements in terms of the Act and in particular in terms of the section 37(2) agreement and the Construction Regulations, 2003. You shall also ensure that all contractors appointed by yourself and reporting to you comply with the requirements as stipulated in the Construction Regulations, 2003.

You shall also ensure that all the information and specifications to ensure that the construction work is carried out in a safe manner are carried over to all contractors appointed and reporting to you.

You shall further ensure that all records, registers and required lists are maintained and that all persons appointed to carry out tasks as stipulated by these regulations are competent and have the necessary resources to complete their tasks effectively in such a manner that health and safety is not in any manner compromised.

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

You shall submit a written weekly report on all shortfalls that have not been met in terms of these regulations.

_____ _____ _____

Contractor's Representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, (***sub-contractor's name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Sub-Contractor's Representative full name Signature Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Construction Supervisor's Name)***

APPOINTMENT OF THE CONSTRUCTION SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 6(1)

I, ***(contractor's name)*** hereby appoint ***(construction supervisor's name)*** as the Supervisor responsible for ***(site address)*** to carry out the construction work of ***(description of construction work and area of responsibility)***.

In terms of this appointment you are required to ensure that all construction work performed under your supervision is carried out as follows:

1. By persons suitably trained and competent to do such work;
2. That all statutory appointments have been completed;
3. That, where required, health and safety committees are established and that meetings are accordingly held;
4. That all persons are aware and understand the hazards attached to the work being carried out;
5. That the required risk assessments are carried out;
6. That precautionary measures are identified and implemented;
7. That discipline is enforced at the construction site at all times;
8. That all identified statutory requirements are met; and
9. That any other interests in terms of health and safety with respect to the responsible area is met.
10. You will in writing delegate your duties to the Assistant Construction Supervisor while absent from site.

You are required to report any deviations of the above-mentioned instructions to **(*contractor's name)***. This appointment is valid from ***(date)*** to the completion of the stipulated construction work. You shall submit a written weekly report on all shortfalls that have not been met in terms of these regulations.

_____	_____	_____
Contractor's Representative full name	Signature	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(construction supervisor)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____	_____	_____
Construction Supervisor's full name	Signature	Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Excavation Work Supervisor's Name)***

APPOINTMENT OF THE EXCAVATION WORK SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 11(1)

I, ***(contractor's name)*** hereby appoint ***(excavation work supervisor's name)*** as the excavation work supervisor responsible for ***(site address)*** to supervise and carry out all the necessary inspections in terms of all excavation work as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to excavation work that that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations are at all times met.

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

_____	_____	_____
Contractor's representative full name	Signature	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*excavation work supervisor's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____	_____	_____
Excavation Work Supervisor full name	Signature	Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Form work and Support work supervisor's name)***

APPOINTMENT OF THE FORMWORK AND SUPPORT WORK SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 10(a)

I, ***(contractor name)*** hereby appoint **(*form work and support work supervisor's name)*** as the formwork and support work supervisor responsible for ***(site address)*** to supervise and carry out all the necessary inspections in terms of all formwork and support work as per the provided checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to formwork and support work that the necessary precautionary measures are taken and enforced. Hazards are reported in writing to the Construction, Health and Safety Officer and the Construction Supervisor.

You shall further ensure that the requirements of the Construction Regulations are at all times met.

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

_____ _____ _____

Contractor's representative full name | Signature | Date

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(formwork and support work supervisor's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Formwork and Support Work Supervisor's full name | Signature | Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Ladder Inspector's Name)***

APPOINTMENT OF THE LADDER INSPECTOR IN TERMS OF CONSTRUCTION REGULATION 13(A)

I, ***(contractor's name)*** hereby appoint (***ladder inspector's name)*** as the ladder inspector responsible for **(*site address*)** to manage ladders on site. You should inspect the ladders as per the checklist at least once a week.

You shall ensure that when becoming aware of any health and safety hazards in respect to ladders that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2003 are at all times met.

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

_____ _____ _____

Contractor's representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*ladder inspector's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____

Ladder inspector's full name Signature Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Risk Assessor's Name)***

APPOINTMENT OF THE CONSTRUCTION SITE RISK ASSESSOR IN TERMS OF CONSTRUCTION REGULATION 7(1)

I, ***(contractor's name)*** hereby appoint ***(risk assessor's name)*** as the construction site risk assessor responsible for ***(site address)*** to carry out risk assessments prior to the commencement of construction work and any other risk assessment that may be required for the duration of the construction work.

You shall ensure that all risks are identified and analyzed and that safe working procedures are drafted and implemented to reduce, mitigate or controls the hazards that were identified.

You will at least use the risk evaluation program with the provided checklists.

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

_____	_____	_____
Contractor's representative full name	Signature	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, **(*construction site risk assessor's name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____	_____	_____
Construction site Risk Assessor's full name	Signature	Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Scaffolding Supervisor's Name)***

APPOINTMENT OF THE SCAFFOLDING SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 14(2)

I, ***(contractor's name)*** hereby appoint **(*scaffolding supervisor's name*)** as the scaffolding supervisor responsible for **(*site address)*** to supervise and carry out all the necessary inspections in terms of all scaffolding work. (Whether newly erected, altered or moved as per the provided checklist)

You shall ensure that when becoming aware of any health and safety hazards in respect to scaffolding work that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations, 2003 are at all times met.

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

_____ _____ _____
Contractor's Representative full name Signature Date

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(scaffolding supervisor's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____ _____ _____
Scaffolding Supervisor's full name Signature Date

Company Logo

Company Name
Company Address
Company Address
Code

Attention: ***(Stacking and Storage Supervisor's Name)***

APPOINTMENT OF THE STACKING AND STORAGE SUPERVISOR IN TERMS OF CONSTRUCTION REGULATION 26(a)

I, ***(contractor's name)*** hereby appoint ***(stacking and storage supervisor's name)*** as the stacking and storage supervisor responsible for ***(site address)*** to manage all stacking and storage on site.

You shall inspect all new stacking and thereafter as often as needed according to the checklist.

You shall ensure that when becoming aware of any health and safety hazards in respect to stacking and storage that these hazards are reported in writing to the Construction Health and Safety Officer and Construction supervisor and the necessary precautionary measures are taken and enforced.

You shall further ensure that the requirements of the Construction Regulations are at all times met. On identifying any shortfalls or hazards convey such information in writing to the construction supervisor.

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

_____	_____	_____
Contractor's Representative full name	Supervisor	Date

Kindly confirm your acceptance of this appointment by completing the following:

I, ***(stacking and storage supervisor's full name)*** understand the implications of the appointment as detailed above and confirm my acceptance.

_____	_____	_____
Stacking and Storage Supervisor's full name	Signature	Date

ANNEXURE 2

NOTIFICATION TEMPLATES

Company Name
Company Address
Company Address
Code

Attention: The Provincial Director
The Department of Labour
[Postal Address*]

NOTIFICATION OF CONSTRUCTION WORK ON CONTRACT [NUMBER]
[CONTRACT DESCRIPTION]

In terms of regulation 3.(1) of the Construction Regulations , 2003 promulgated on 18 July 2003 in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993), we hereby notify you of our intention to commence construction works on the abovementioned contract, which:

- Includes the demolition of a structure exceeding a height of 3 meters,
- Includes the use of explosives to perform the construction work,
- Includes the dismantling of fixed plant at a height greater than 3 meters,
- Will exceed 30 days or will involve more than 300 person days of construction,
- Includes excavation work deeper than 1 meter, or
- Includes working at a height greater than 3 meters above ground or a landing.

1. Parties involved on the Contract

1.1 The Principal Contractor is: [Contractor's Name]
[Contractor's postal address]
[Contractor's postal address]
Att: [Contractor's contact person and telephone number]

1.2 The Client (Employer) is: [Employer's Name]
[Employer's postal address]
Att: [Employer's contact person and telephone number]

1.3 The Client's Safety Agent is: [Safety Agent's Name]
[Safety Agent's postal address]
Att: [Safety Agent's contact person and telephone number]

1.4 The Contractor's Construction Supervisor is: [Contractor's Construction Supervisor's name and telephone number]

2. Details of the construction works

2.1 The physical address of the works is: [Physical address of works]

[Physical address of works]

2.2 The nature of the construction works is: [Provide a description of the works].

2.3 The expected commencement date of the Works is : [Insert expected commencement date]

2.4 The expected completion date of the works is : [Insert expected completion date]

2.5 The estimated maximum number of persons on the construction site:

2.6 A total of _____ contractors will be accountable to the Principal Contractor on the construction site during the execution of the Works. The names of the contractors already chosen are as follows: [Provide a list of the Contractor's subcontractors already appointed]

3. Other details

3.1 The Principal Contractor's compensation registration number is: _____

3.2 In terms of regulation 3.(3) a copy of this notification will be kept on site for inspection.

We trust the above is in order.

Yours faithfully,

_____ _____

Signature Date

* Postal Address of Provincial Director as indicated in regulation 1 of the General Administrative Regulations, 1996.

ANNEXURE 3

IDENTIFIED HEALTH AND SAFETY HAZARDS

ANNEXURE 3: IDENTIFIED HEALTH AND SAFETY HAZARDS

In terms of Regulation 4(1)(b) of the Construction Regulations 2003 the following hazards anticipated with the scope of work have been identified.

NOTE: The list of potential hazards is by no means intended to be all inclusive and is not limited to this list, and it remains the responsibility of the Contractor to identify all possible hazards with regards to his scope of work and to put measures in place to mitigate, reduce or control these hazards.

Potential Hazards

1. Commissioning of new installations
2. Confined space entry
3. Demolition/breaking into existing structures
4. Excavation shoring / brazing
5. Excavations been flooded during rainy season
6. Explosives
7. Hazardous material handling / storage / management
8. Heat stress
9. Loading and off-loading vehicles
10. Manual handling of materials
11. Plant and equipment integrity
12. Public and traffic safety
13. Requirements for plant isolations
14. Roofing and Cladding operations
15. Safe usage and storage of Oxygen, Acetylene and LPG cylinders
16. Scaffolding
17. Stacking and storage of equipment / materials
18. Tie-ins into existing equipment
19. Usage of compressed air and equipment
20. Work involving radioactive sources
21. Working in operational areas
22. Working on live electrical installations / sub-stations / MCC rooms
23. Working on moving equipment.

Part C4 Green pages X 2

C4 SITE INFORMATION

SITE INFORMATION

C4.1 NATURE OF GROUND AND SUBSOIL CONDITIONS

A visual inspection of the area of Dennilton will not be shown to the tenderers. Tenderers are encouraged to familiarise themselves with the site before submission of Tender.

Substantial rock is expected, the earthworks will include the excavation of pipe trenches.

C4.2 OTHER INFORMATION

None.

Part C5 White pages X 3

C5 DRAWINGS FOR TENDER PURPOSES

C5.1 ISSUE OF DRAWINGS

The following drawings will be issued at tender stage

DRAWING NO:	DESCRIPTION
K1004 – 501	LOCALITY PLAN - SEKHUKHUNE DISTRICT MUNICIPALITY
K1004 – 502	LOCALITY PLAN - ELIAS MOTSOALEDI LOCAL MUNICIPALITY
K1004 – 503	TOPOGRAPHICAL MAP – DENNILTON, PHOOKO, AND ELADSDORING
K1004 – 504	EXISTING WASTE WATER TREATMENT PLANT & PHOOKO PUMP STATION
K1004 – 505	DENNILTON WASTE WATER TREATMENT WORKS & PHOOKO BOOSTER PUMP STATION PHOTOS
K1004 – 506	ELANDSDORING TOWNSHIP 2 152 HOUSEHOLDS
K1004 – 507	PHILADELPHIA MISSION HOSPITAL & SAPS DENNILTON
K1004 – 508	KEY PLAN
SURVEY DRAWINGS	
K1004 – 509	EXISTING OUTFALL TO SEWER PHOKO PUMP STATION
K1004 – 510	EXISTING PHOOKO PUMP STATION
K1004 – 511	EXISTING RISING MAIN TO WWTW
K1004 – 512	EXISTING DENNILTON WWTW
K1004 – 513	EXISTING PIPELINES TO WWTW
K1004 – 514	EXISTING POND LINING
	BULK EARTHWORKS – POND LINER DETAILS
K1004 – 515	ANAEROBIC & AEROBIC PONDS
	CROSS SECTION
K1004 – 516	ANAEROBIC & AEROBIC PONDS
	DETAILS OF CONCRETE FLOW CHANNEL
K1004 – 517	OUTFALL SEWER FROM PHILADEPHIA HOSPITAL
K1004 – 518	DETAILS FOR CONNECTION FROM RISING MAIN
K1004 – 519	DETAILS FOR CASTING CONCRETE FLOOR SLAB
K1004 – 520	PHILADELPHIA MISSION HOSPITAL & SAPS DENNILTON SURVEY DRAWING, PROPOSED ADDITIONS

K1004 – 521	PROPOSED DISCHARGE PIPELINE KEY PLAN
K1004 – 522	PROPOSED DISCHARGE PIPELINE LAYOUT 1 OF 4
K1004 – 523	PROPOSED DISCHARGE PIPELINE LAYOUT 2 OF 4
K1004 – 524	PROPOSED DISCHARGE PIPELINE LAYOUT 3 OF 4
K1004 – 525	PROPOSED DISCHARGE PIPELINE LAYOUT 4 OF 4

LONG SECTION DRAWINGS

K1004 – 526	DISCHARGE PIPELINE SHEET 1 OF 5
K1004 – 527	DISCHARGE PIPELINE SHEET 2 OF 5
K1004 – 528	DISCHARGE PIPELINE SHEET 3 OF 5
K1004 – 529	DISCHARGE PIPELINE SHEET 4 OF 5
K1004 – 530	DISCHARGE PIPELINE SHEET 5 OF 5
K1004 – 531	WWTW PROPOSED GUARDHOUSE SHEET 1 OF 3
K1004 – 532	WWTW PROPOSED GUARDHOUSE SHEET 2 OF 3
K1004 – 533	WWTW PROPOSED GUARDHOUSE SHEET 3 OF 3
K1004 – 534	CLEARVU FENCE SHEET 1 OF 2
K1004 – 535	CLEARVU FENCE SHEET 2 OF 2

STANDARD DRAWINGS

K1004 – STD - 001	TYPICAL MANHOLE DETAILS

NOTES:

LEGEND:

SEKHUKHUNE DISTRICT MUNICIPALITY

DATE	NO.	REVISION / VARIATIONS	
01.09.25	C	ISSUED FOR TENDER	BS
05.04.25	B	DETAIL DESIGN REPORT	BS
12.08.24	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:

KUTLO CONSULTING ENGINEERS

2 HEUWELKRUIN
THABAZIMBI
0380

Tel No.: (014) 312 0112
Fax No.: 086 730 5765
Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

PROJECT:

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:

LOCALITY PLAN
SEKHUKHUNE DISTRICT MUNICIPALITY

DRAWING No.: KI004-501

SCALE: N.T.S	DESIGNED: AG
	DRAWN: AG
DATE: AUGUST 2024	APPROVED: BS
REV. NO. A B C	

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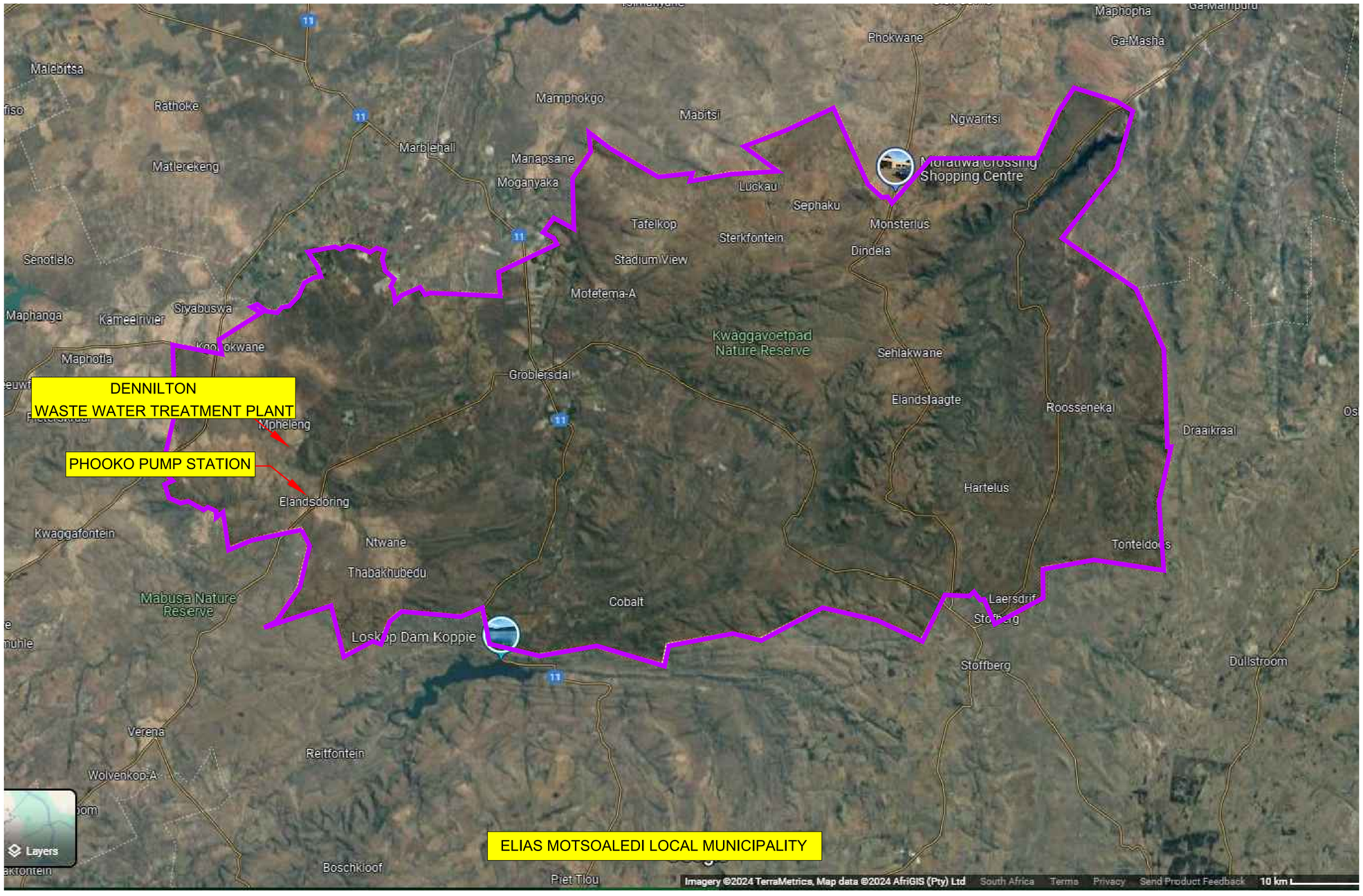

NOTES:

LEGEND:

ELIAS MOTSOALEDI LOCAL MUNICIPALITY

DATE	NO.	REVISION / VARIATIONS	
01.09.25	C	ISSUED FOR TENDER	BS
05.04.25	B	DETAIL DESIGN REPORT	BS
12.08.24	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY

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PROJECT:

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:

LOCALITY PLAN
ELIAS MOTSOALEDI
LOCAL MUNICIPALITY

DRAWING No.: KI004-502

SCALE: N.T.S	DESIGNED: AG
	DRAWN: AG
DATE: AUGUST 2024	APPROVED: BS
REV. NO. A B C	

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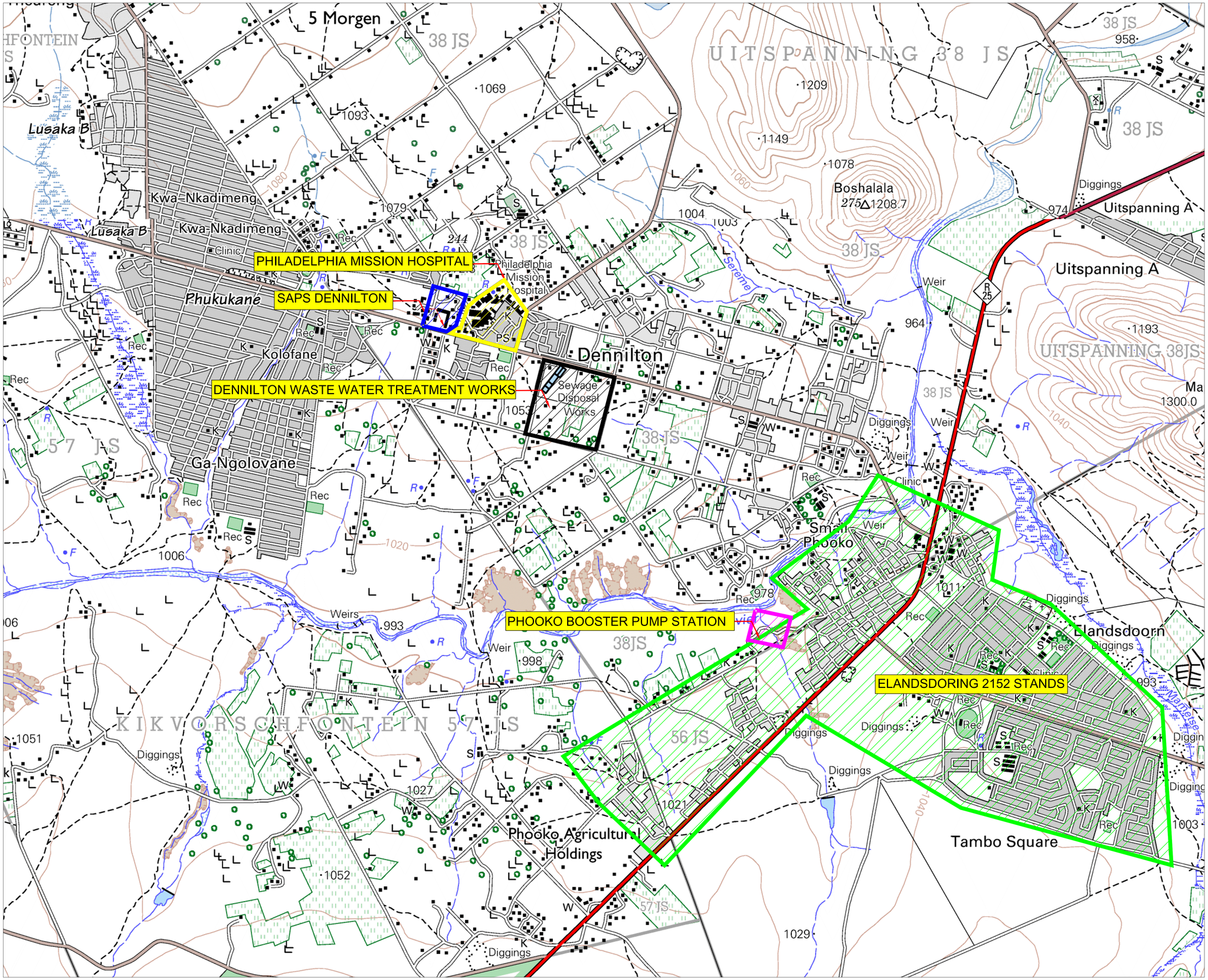

NOTES:

LEGEND:

- DENNILTON WASTE WATER TREATMENT WORKS
- PHOOKO BOOSTER PUMP STATION
- PHILADELPHIA MISSION HOSPITAL
- SAPS DENNILTON

DATE	NO.	REVISION / VARIATIONS	
01.09.25	C	ISSUED FOR TENDER	BS
05.04.25	B	DETAIL DESIGN REPORT	BS
12.08.24	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY
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PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
TOPOGRAPHICAL MAP DENNILTON, PHOOKO AND ELADSDORING

DRAWING No.: KI004-503

SCALE: N.T.S
DESIGNED: AG
DRAWN: AG
DATE: AUGUST 2024
APPROVED: BS

REV. NO. A B C

2024/08/26 18:07:03

NOTES:

LEGEND:

DATE	NO.	REVISION / VARIATIONS	
01.09.25	C	ISSUED FOR TENDER	BS
05.04.25	B	DETAIL DESIGN REPORT	BS
12.08.24	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

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PROJECT ENGINEERS:

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PROJECT:

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:

EXISTING WASTE WATER TREATMENT PLANT & PHOOKO PUMP STATION

DRAWING No.: KI004-504

SCALE: N.T.S	DESIGNED: AG
	DRAWN: AG
DATE: AUGUST 2024	APPROVED: BS

REV. NO. A B C

2024/08/26 18:07:57

1. Existing blocked outfall sewer manhole upstream Phooko pump station.

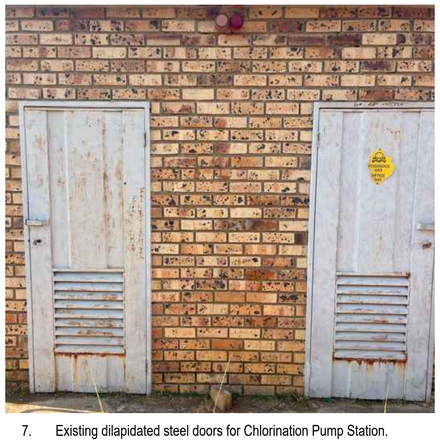
2. Raw sewage flowing towards Moses River.

4. Inlet channel at pump station blocked and not operational

4. Archimedal screw for inlet works removed and not replaced.

5. Existing sewage ponds with not lined.

6. Existing sewage ponds not lined to prevent contamination of the natural ground.



7. Existing dilapidated steel doors for Chlorination Pump Station.

8. Existing electrical control panel severely vandalized and not operational.

9. Chlorination process not done due to vandalism to existing infrastructure.

NOTES:

LEGEND:

01.09.25	C	ISSUED FOR TENDER	BS
05.04.25	B	DETAIL DESIGN REPORT	BS
12.08.24	A	PRELIMINARY DESIGN REPORT	BS
DATE	NO.	REVISION / VARIATIONS	KC

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

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Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

PROJECT:

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:

DENNILTON WASTE WATER TREATMENT WORKS & PHOOKO BOOSTER PUMP STATION PHOTOS

DRAWING No.: KI004-505

SCALE: N.T.S	DESIGNED: AG
	DRAWN: AG
DATE: AUGUST 2024	APPROVED: BS

REV. NO. A B C

2024/11/25 19:54:55

NOTES:

LEGEND:

ELANDSDORING TOWNSHIP
2152 HOUSEHOLDS

DATE	NO.	REVISION / VARIATIONS	
01.09.25	C	ISSUED FOR TENDER	BS
05.04.25	B	DETAIL DESIGN REPORT	BS
12.08.24	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

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Sekhukhune DISTRICT MUNICIPALITY

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Cell No .: 079 978 4501
E-Mail .: admin@kutloconsulting.co.za

PROJECT:

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:

ELANDSDORING TOWNSHIP
2152 HOUSEHOLDS

DRAWING No.: KI004-506

SCALE: N.T.S

DESIGNED: AG

DRAWN: AG

DATE: AUGUST 2024

APPROVED: BS

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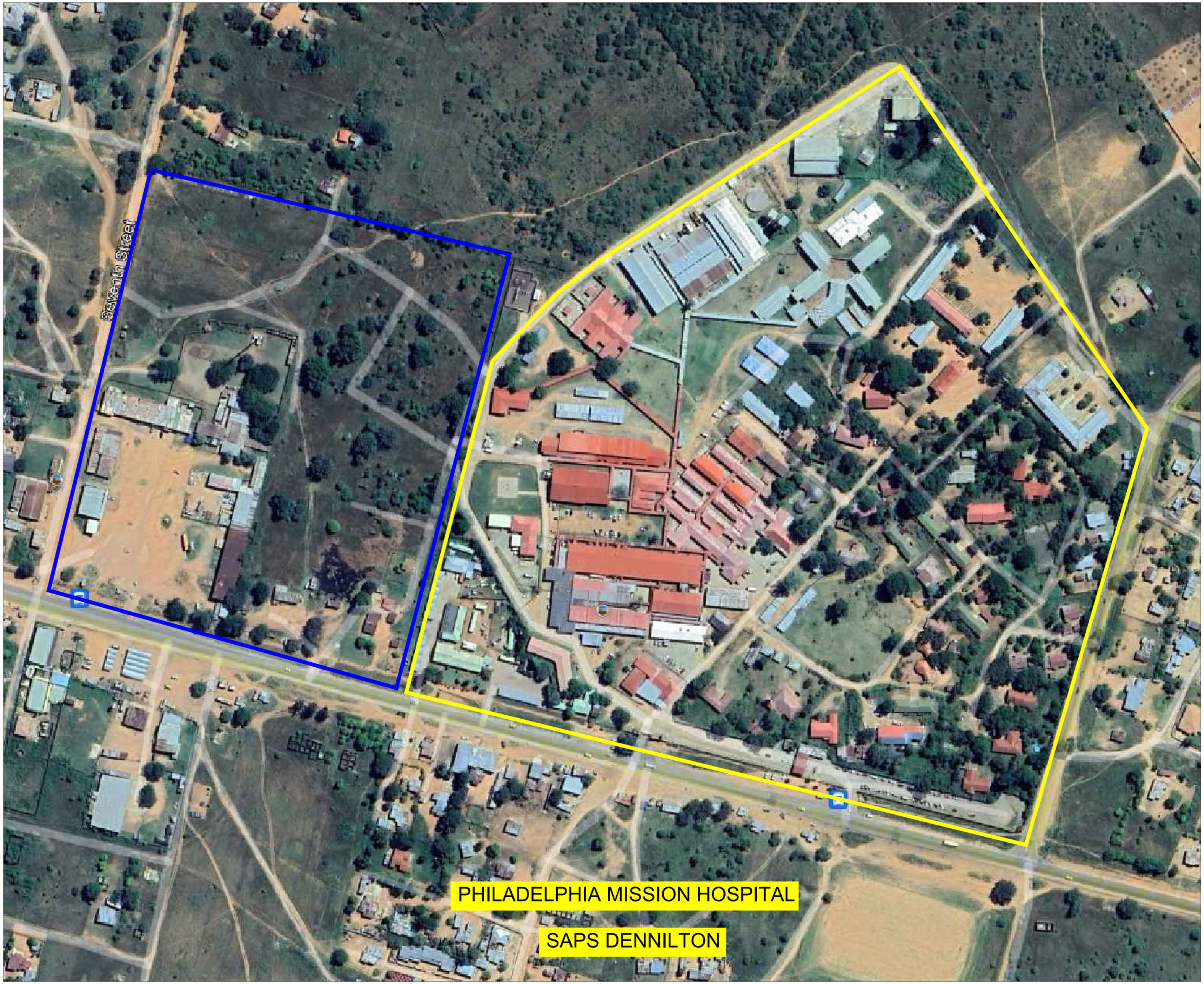

NOTES:

LEGEND:

PHILADELPHIA MISSION HOSPITAL

SAPS DENNILTON

DATE	NO.	REVISION / VARIATIONS	
01.09.25	C	ISSUED FOR TENDER	BS
05.04.25	B	DETAIL DESIGN REPORT	BS
12.08.24	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY

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E-Mail: admin@kutloconsulting.co.za

PROJECT:

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:

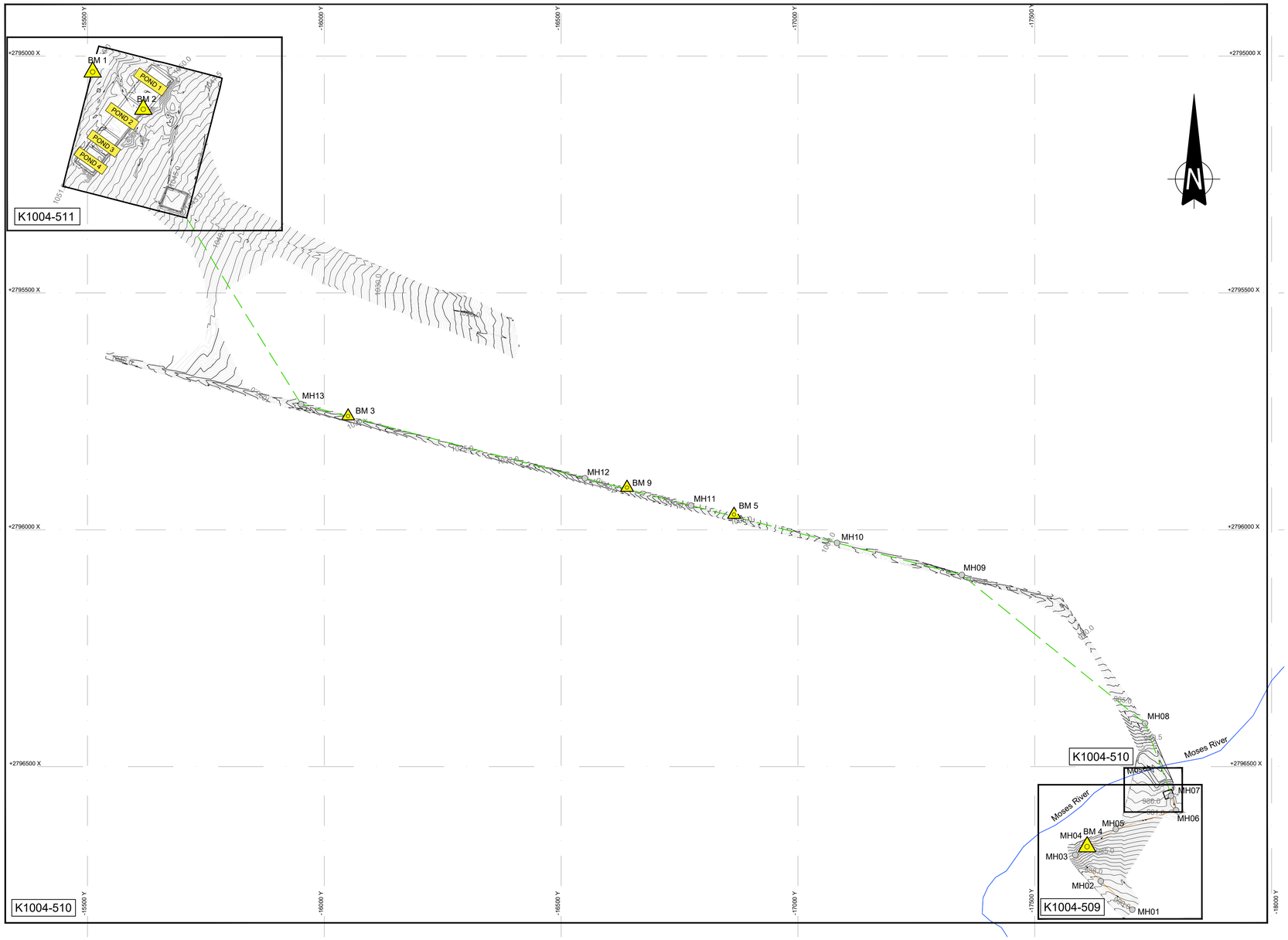
PHILADELPHIA MISSION HOSPITAL & SAPS DENNILTON

DRAWING No.: KI004-507

SCALE: N.T.S	DESIGNED: AG
	DRAWN: AG
DATE: AUGUST 2024	APPROVED: BS

REV. NO. A B C

2024/09/26 18:17:28



KEY PLAN
SCALE 1:5000

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- EXISTING OUTFALL SEWER
- EXISTING RISING MAIN
- EXISTING MANHOLE
- BENCHMARK
- WATER STREAM

01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS
DATE	NO.	REVISION / VARIATIONS	KC

CLIENT:
SEKHUKHUNE
DISTRICT
MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:

KUTLO CONSULTING ENGINEERS

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0380

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Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

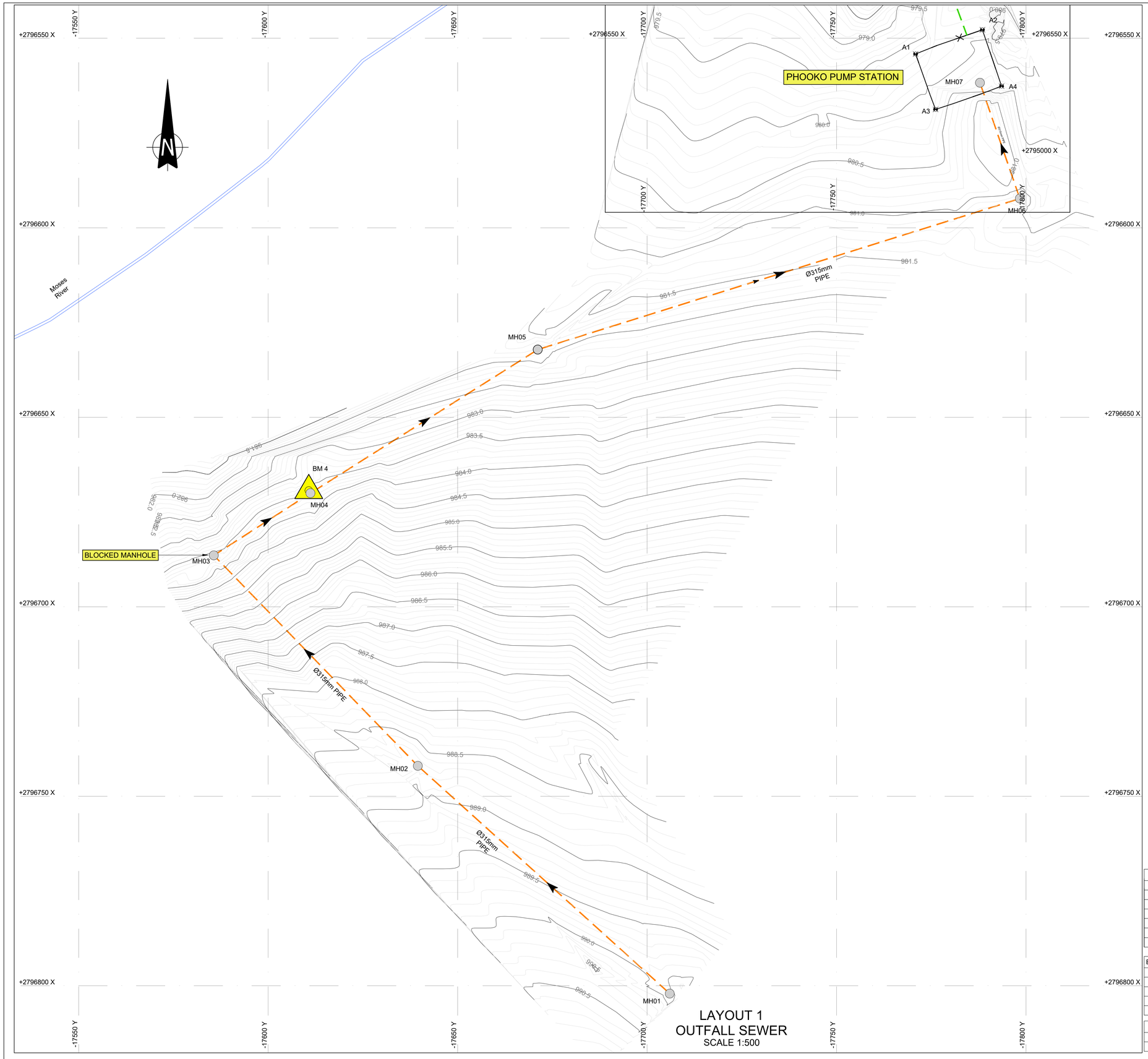
PROJECT:
UPGRADING OF DENNILTON
WASTE WATER TREATMENT
WORKS
(WWTW)

TITLE:
PHILADELPHIA MISSION HOSPITAL
& SAPS DENNILTON
KEY PLAN

DRAWING No.: K1004-508

SCALE: AS SHOWN	DESIGNED: AG
	DRAWN: MB
DATE: MARCH 2025	APPROVED: BS

REV. NO. A B



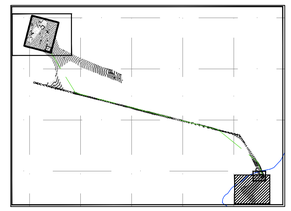
LAYOUT 1
OUTFALL SEWER
SCALE 1:500

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- EXISTING OUTFALL SEWER
- EXISTING RISING MAIN
- EXISTING MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

EXISTING MANHOLES			
Name	Y	X	Z
MH01	-17705.986	2796802.057	988.634
MH02	-17639.506	2796741.975	987.031
MH03	-17585.668	2796686.435	982.266
MH04	-17611.169	2796670.023	981.265
MH05	-17671.143	2796632.136	980.823
MH06	-17798.364	2796592.287	980.737

EXISTING PHOOKO PUMP STATION		
	Y	X
A1	-17770.858	2796554.138
A2	-17788.497	2796547.762
A3	-17776.129	2796568.772
A4	-17793.540	2796562.637

BENCH MARKS			
	Y	X	Z
BM 4	-17610.72	2796669.31	983.74

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE
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3 WEST STREET
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0470

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

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KUTLO CONSULTING ENGINEERS

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0380

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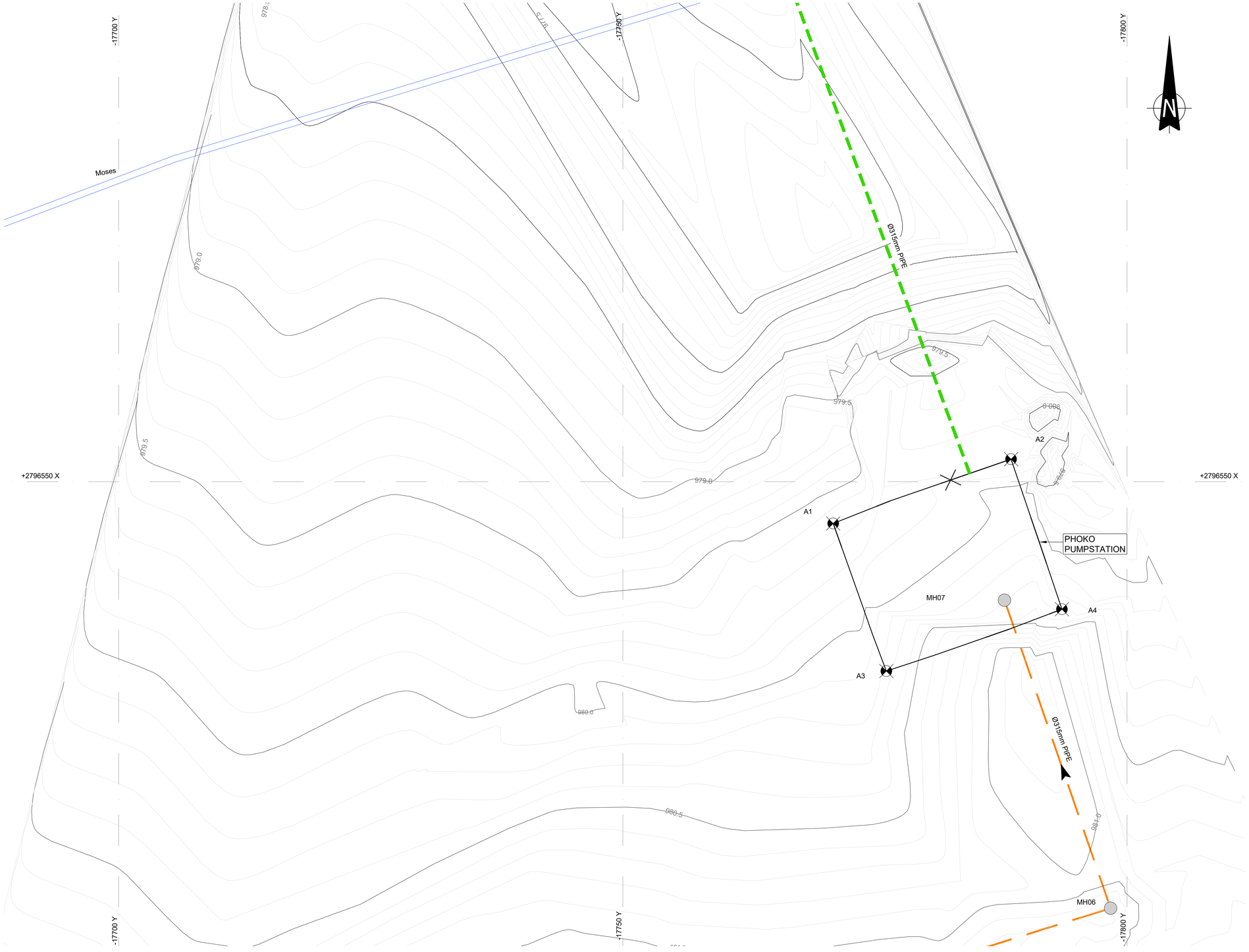
Cell No .: 079 979 4501
E-Mail : admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON
WASTE WATER TREATMENT
WORKS
(WWTW)

TITLE:
SURVEY DRAWING EXISTING OUTFALL
TO SEWER PHOKO PUMPSTATION

DRAWING No.: K1004-509

SCALE: AS SHOWN
DESIGNED: AG
DRAWN: MB
DATE: APRIL 2025
APPROVED: BS
REV. NO. A B



LAYOUT - PHOOKO PUMP STATION
SCALE 1:200

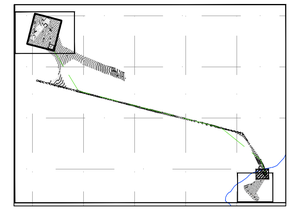
EXISTING PHOOKO PUMP STATION		
	Y	X
A1	-17770.858	2796554.138
A2	-17788.497	2796547.762
A3	-17776.129	2796568.772
A4	-17793.540	2796562.637

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE MADIBENG LOCAL MUNICIPALITY

LEGEND:

- EXISTING OUTFALL SEWER
- EXISTING RISING MAIN
- EXISTING MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
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PROJECT:
UPGRADING OF DENNILTON
WASTE WATER TREATMENT
WORKS
(WWTW)

TITLE:
PHOOKO PUMP STATION SURVEY DRAWING, EXISTING PHOOKO PUMP STATION

DRAWING No.: K1004-510

SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE: MARCH 2025		APPROVED:	BS
REV. NO.	A B		

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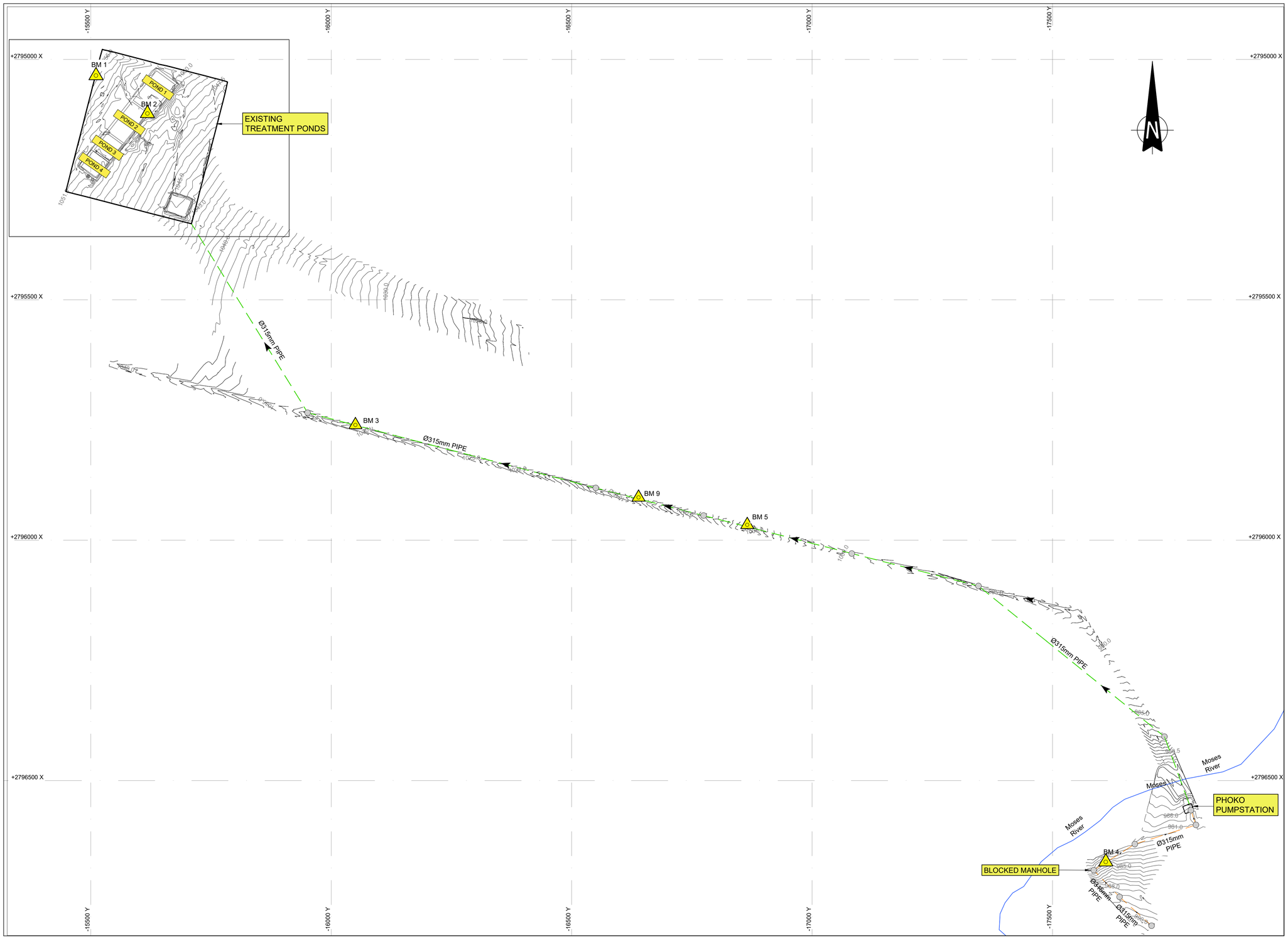
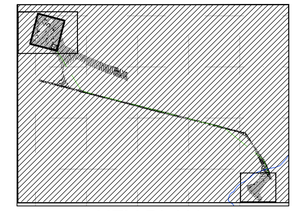


NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE MADIBENG LOCAL MUNICIPALITY

LEGEND:

- EXISTING OUTFALL SEWER
- EXISTING RISING MAIN
- EXISTING MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY

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0470

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:

KUTLO CONSULTING ENGINEERS

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THABAZIMBI
0380

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E-Mail: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
PHOKO PUMPSTATION SURVEY DRAWING, EXISTING RISING MAIN TO WWTW

DRAWING No.: K1004-511

SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE: MARCH 2025		APPROVED:	BS
REV. NO.	A B		

4/9/2025 11:44:33 AM

BENCH MARKS			
	Y	X	Z
BM 3	-16050.41	2795760.20	1031.00
BM 5	-16865.19	2795967.99	1006.06
BM 9	-16639.16	2795910.95	1014.25

EXISTING MANHOLES			
NAME	Y	X	Z
MH08	-17732.822	2796408.675	984.28
MH09	-17346.071	2796095.242	996.96
MH10	-17082.656	2796027.723	1000.1
MH11	-16774.423	2795948.783	1010.01
MH12	-16550.197	2795891.348	1018.12
MH13	-15951.039	2795734.865	1033.79

LAYOUT - EXISTING RISING MAIN
SCALE 1:4000

LAYOUT 3
EXISTING SEWAGE TREATMENT PONDS

SCALE 1:1000

BENCH MARKS			
	Y	X	Z
BM 1	-15510.88	2795033.58	1054.81
BM 2	-15617.81	2795112.40	1052.18

SETTING OUT POINTS- FENCE		
	Y	X
B1	-15448.24	2795274.705
B2	-15524.078	2794978.912
B3	-15784.358	2795046.807
B4	-15709.363	2795341.736

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
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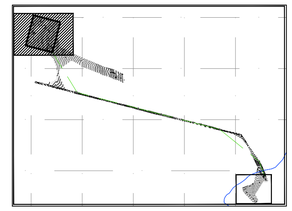
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- EXISTING OUTFALL SEWER
- EXISTING RISING MAIN
- EXISTING MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE
DISTRICT
MUNICIPALITY

3 WEST STREET
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Sekhukhune DISTRICT MUNICIPALITY

Tel No.: (013) 262 7300
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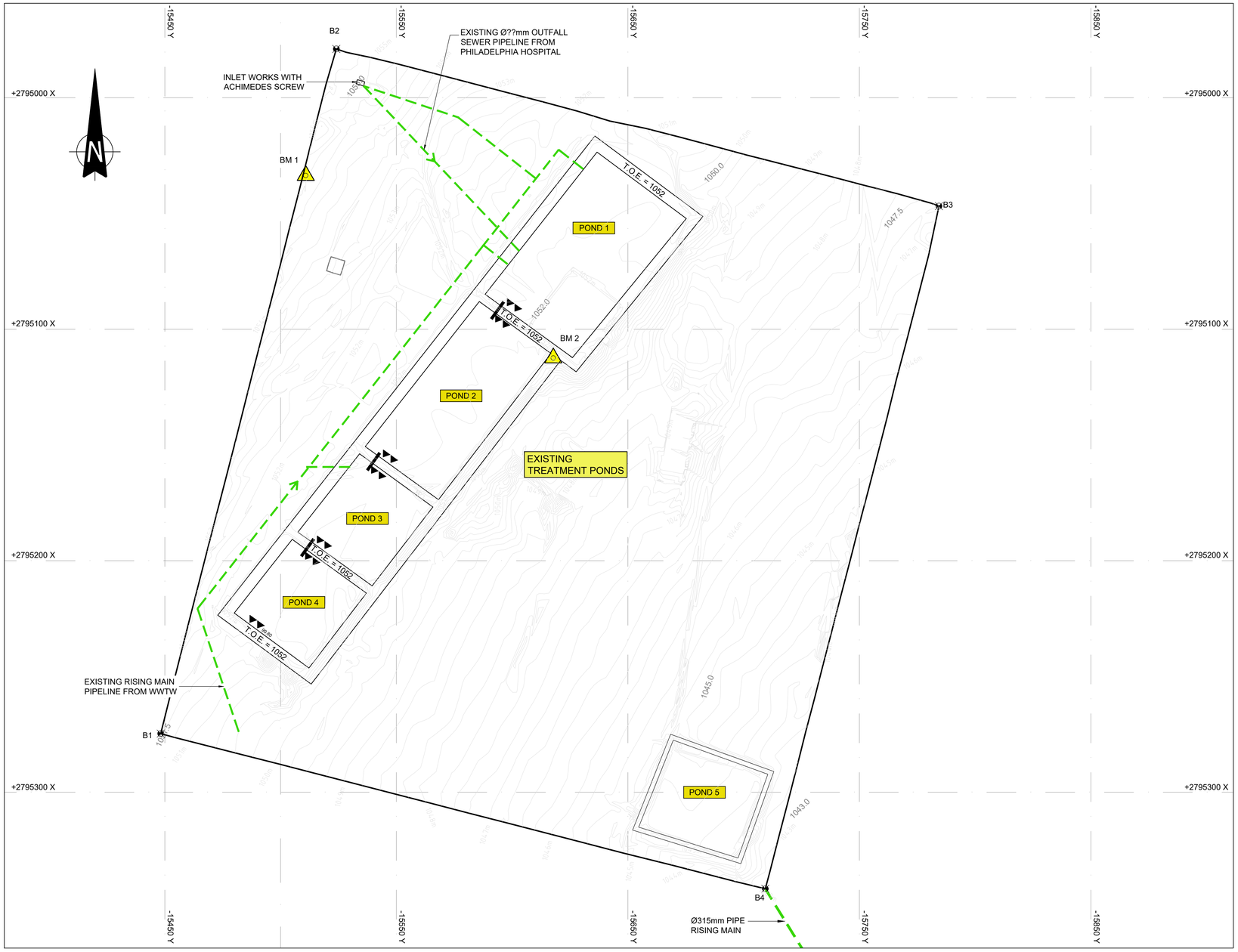
E-Mail : admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON
WASTE WATER TREATMENT
WORKS
(WWTW)

TITLE:
WWTW SURVEY DRAWING,
EXISTING TREATMENT SEWAGE
PONDS

DRAWING No.:	K1004-512		
SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE:	MARCH 2025	APPROVED:	BS
REV. NO.	A B		



LAYOUT PLAN
EXISTING SEWAGE TREATMENT PONDS
SCALE 1:1000

BENCH MARKS			
	Y	X	Z
BM 1	-15510.88	2795033.58	1054.81
BM 2	-15617.81	2795112.40	1052.18

SETTING OUT POINTS- FENCE		
	Y	X
B1	-15448.24	2795274.705
B2	-15524.078	2794978.912
B3	-15784.358	2795046.807
B4	-15709.363	2795341.736

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
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9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- EXISTING SEWER PIPE
- SEWER PIPE
- BENCHMARK

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
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Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

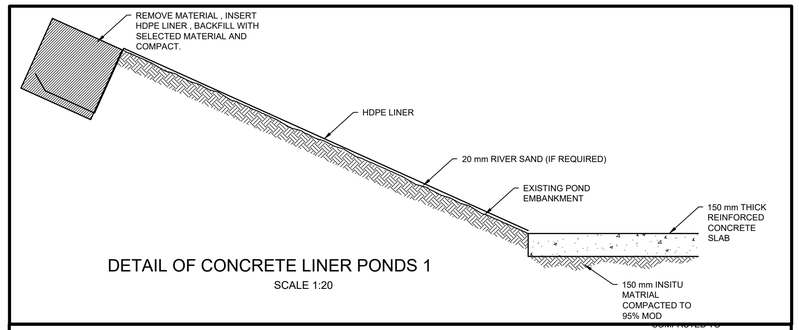
TITLE:
WWTW SURVEY DRAWING,
EXISTING PIPELINES TO WWTW

DRAWING No.: K1004-513

SCALE: AS SHOWN	DESIGNED: AG
	DRAWN: MB
DATE: APRIL 2025	APPROVED: BS
REV. NO. A B	

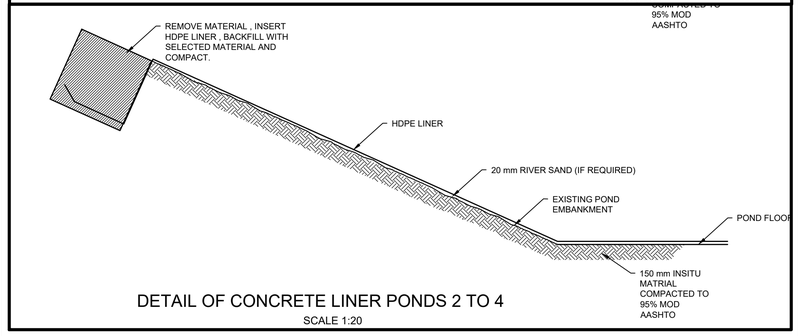
LAYOUT PLAN
EXISTING TREATMENT PONDS

SCALE 1:1000



DETAIL OF CONCRETE LINER PONDS 1

SCALE 1:20



DETAIL OF CONCRETE LINER PONDS 2 TO 4

SCALE 1:20

BENCH MARKS			
	Y	X	Z
BM 1	-15510.88	2795033.58	1054.81
BM 2	-15617.81	2795112.40	1052.18

SETTING OUT POINTS- FENCE		
	Y	X
B1	-15448.24	2795274.705
B2	-15524.078	2794978.912
B3	-15784.358	2795046.807
B4	-15709.363	2795341.736

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
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5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

BENCHMARK

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE
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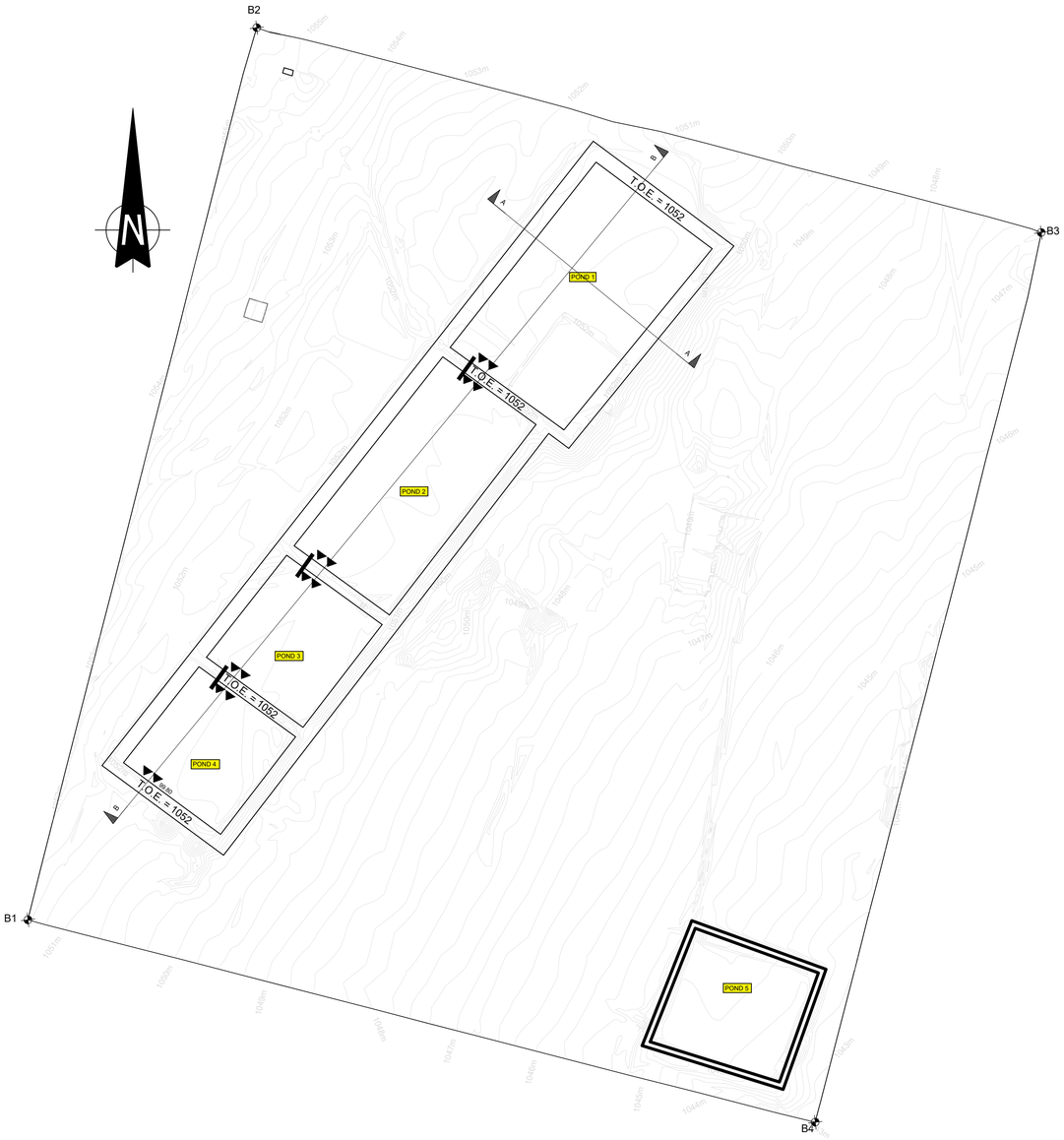
PROJECT:
UPGRADING OF DENNILTON
WASTE WATER TREATMENT
WORKS
(WWTW)

TITLE:
WWTW
EXISTING POND LINING BULK
EARTHWORKS -POND LINER DETAILS

DRAWING No.: K1004-514

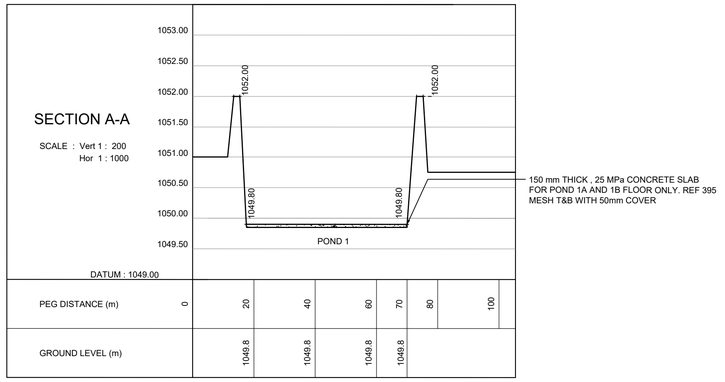
SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE: MARCH 2025		APPROVED:	BS
REV. NO.	A B		



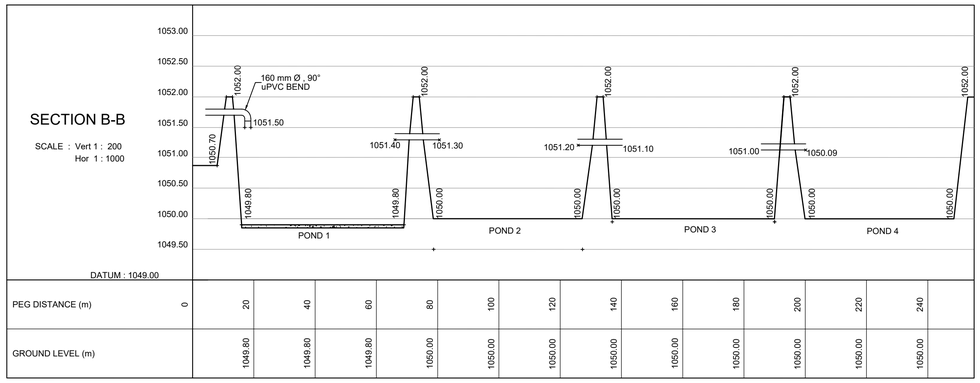
LAYOUT PLAN
SCALE 1:1000

BENCH MARKS			
	Y	X	Z
BM 1	-15510.88	2795033.58	1054.81
BM 2	-15617.81	2795112.40	1052.18

SETTING OUT POINTS- FENCE		
	Y	X
B1	-15448.24	2795274.705
B2	-15524.078	2794978.912
B3	-15784.358	2795046.807
B4	-15709.363	2795341.736



SECTION A - A
CROSS SECTION



SECTION B - B
CROSS SECTION

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0,3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
28.03.25	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
3 WEST STREET
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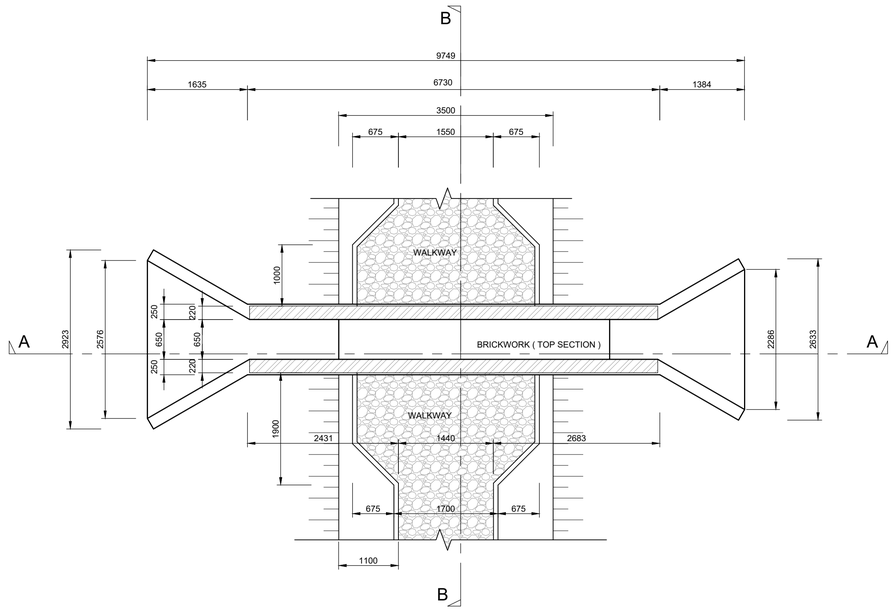
Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
WASTE WATER TREATMENT WORKS POND LINING DETAIL

DRAWING No.: K1004-515

SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE: MARCH 2025		APPROVED:	BS
REV. NO.	A B		



PLAN OF CONCRETE FLOW CHANNEL

SCALE 1:50

REINFORCEMENT

(To: SABS 920-1969 with amendments)

R - Plain mild steel bars (Type A)

(fy=250 MPa ≤ 20 mmØ and fy=230 MPa ≥ 25 mmØ)

Y - High yield steel

(Type C : Class 2 : Grade 1 : fy=450 MPa)

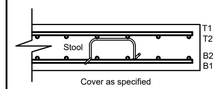
Where: fy=Yield stress

EXAMPLE

20Y25-E100-150 T2

20	-	Bars
Y	-	High yield steel
25	-	Diameter in mm
E100	-	Bar mark number
150	-	Spacing c/c in mm
T2	-	Location

NF	-	Near face	T	-	Top
FF	-	Far face	B	-	Bottom
EF	-	Each face	CTL	-	Cut to length
CTF	-	Cut to fit	EW	-	Each way
ABR	-	Alternative bars reversed			
ALT	-	Alternately			

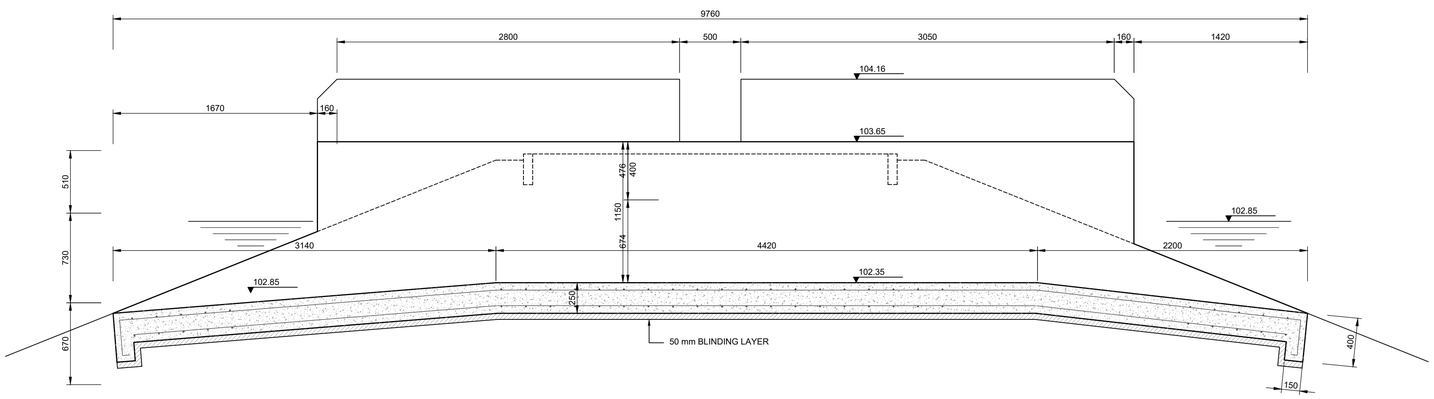


NOTE:

1. CONCRETE TO BE CLASS 20 / 19.
2. MINIMUM 50mm COVER TO REINFORCEMENT

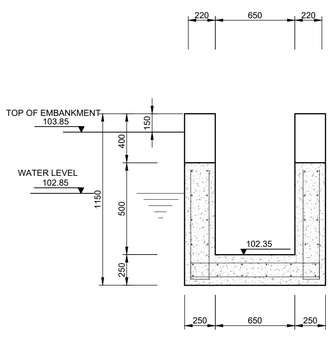
REINFORCEMENT : Y10 @ 200 TOP AND BOTTOM MESH REF 193

ALL CONCRETE : 20 MPa / 19 mm



SECTION A - A

SCALE 1:25



SECTION B - B

SCALE 1:25

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
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7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
28.03.25	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:

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THABAZIMBI
0380

Tel No.: (014) 312 0112
Fax No.: 086 730 5765
Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

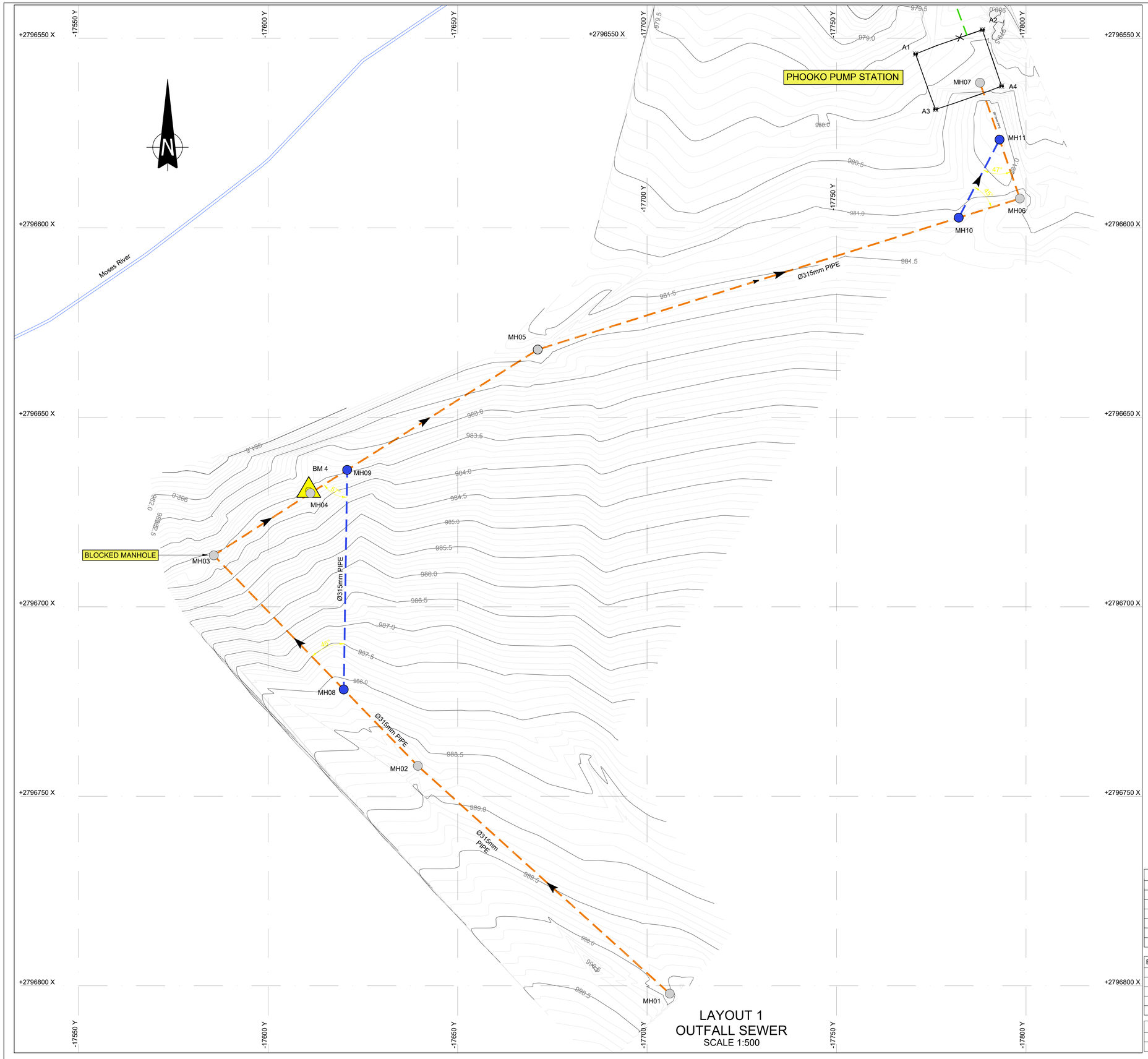
PROJECT:

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:

PHILADELPHIA MISSION HOSPITAL & SAPS DENNILTON ANAEROBIC & AEROBIC PONDS .DETAILS OF CONCRETE FLOW CHANNEL

DRAWING No.:	K1004-516		
SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE:	APRIL 2025	APPROVED:	BS
REV. NO.	A B		



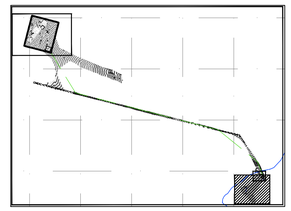
LAYOUT 1
OUTFALL SEWER
SCALE 1:500

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- EXISTING OUTFALL SEWER
- EXISTING RISING MAIN
- EXISTING RISING MAIN
- EXISTING MANHOLE
- PROPOSED MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

EXISTING MANHOLES			
Name	Y	X	Z
MH01	-17705.986	2796802.057	988.634
MH02	-17639.506	2796741.975	987.031
MH03	-17585.668	2796686.435	982.266
MH04	-17611.169	2796670.023	981.265
MH05	-17671.143	2796632.136	980.823
MH06	-17798.364	2796592.287	980.737

EXISTING PHOOKO PUMP STATION		
	Y	X
A1	-17770.858	2796554.138
A2	-17788.497	2796547.762
A3	-17776.129	2796568.772
A4	-17793.540	2796562.637

BENCH MARKS			
	Y	X	Z
BM 4	-17610.72	2796669.31	983.74

NO.		REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS
DATE	NO.	REVISION / VARIATIONS	KC

CLIENT:
SEKHUKHUNE
DISTRICT
MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:

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0380

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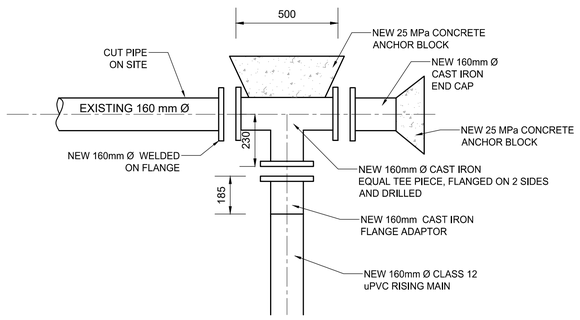
E-Mail .: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON
WASTE WATER TREATMENT
WORKS
(WWTW)

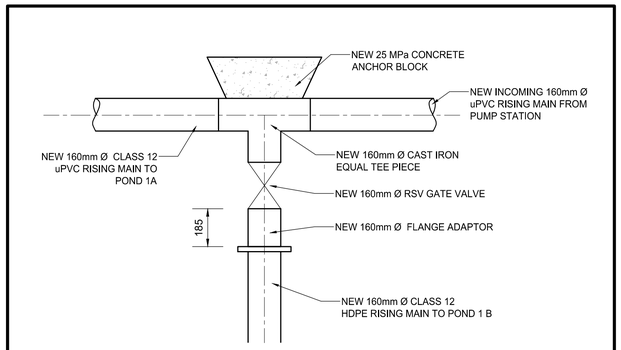
TITLE:
SURVEY DRAWING PROPOSED OUTFALL
TO SEWER PHOKO PUMPSTATION

DRAWING No.: K1004-517

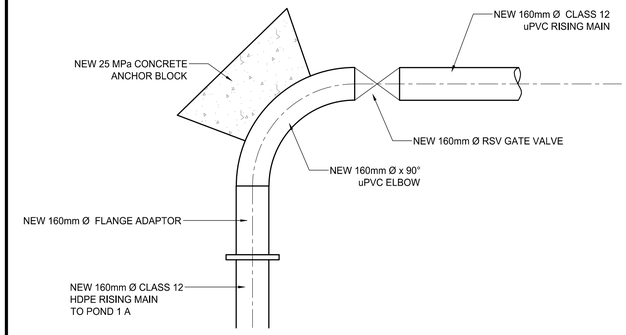
SCALE: AS SHOWN
DESIGNED: AG
DRAWN: MB
DATE: APRIL 2025
APPROVED: BS
REV. NO. A B



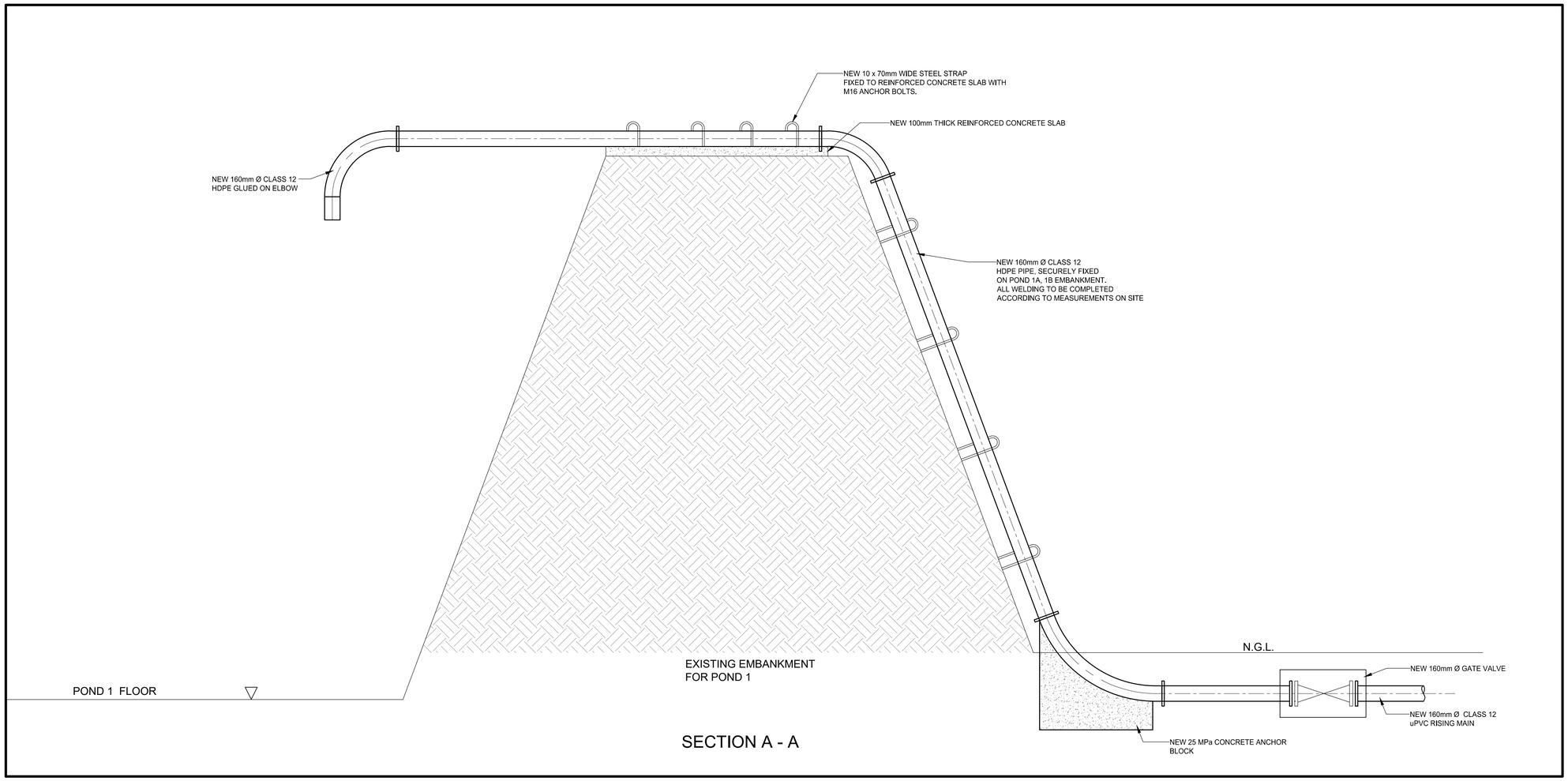
DETAIL 1



DETAIL 2 - POND 1



DETAIL 3 - POND 1



SECTION A - A

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS
DATE	NO.	REVISION / VARIATIONS	KC

CLIENT:
SEKHUKHUNE
DISTRICT
MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:

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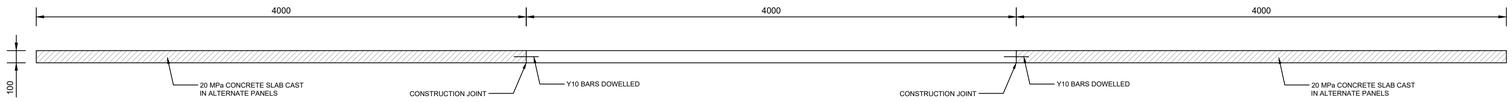
E-Mail: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON
WASTE WATER TREATMENT
WORKS
(WWTW)

TITLE:
PHILADELPHIA MISSION
HOSPITAL & SAPS DENNILTON
POND 1 RISING MAIN
CONNECTION DETAILS

DRAWING No.: K1004-518

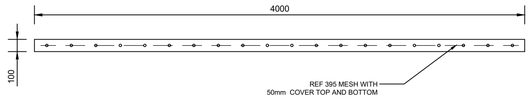
SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE: APRIL 2025		APPROVED:	BS
REV. NO.	A B		



CONCRETE PANELS

SECTION A - A

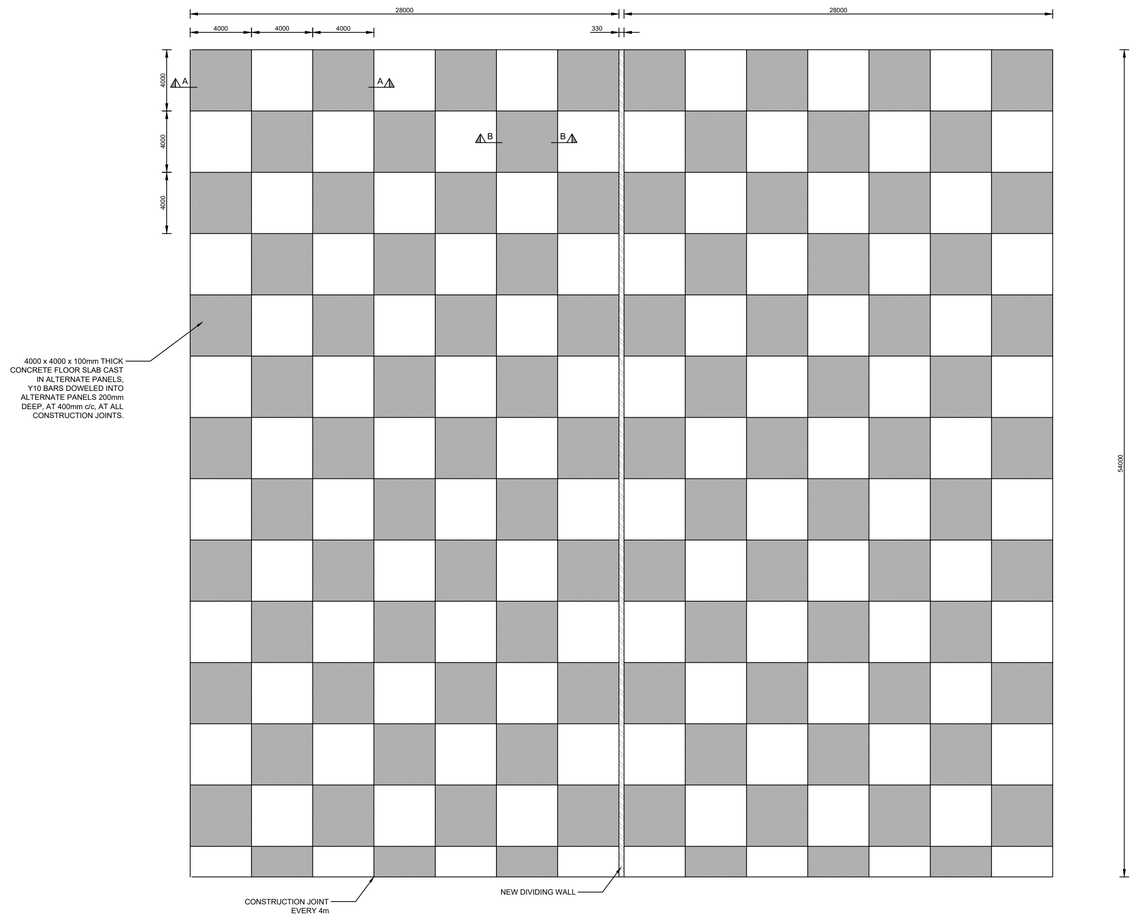
SCALE 1:25



CONCRETE PANEL DETAIL

SECTION B - B

SCALE 1:25



PLAN VIEW OF CONCRETE FLOOR

SLAB FOR POND 1A

SCALE 1:20

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
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LEGEND:

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

3 WEST STREET
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Sekhukhune DISTRICT MUNICIPALITY

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PROJECT ENGINEERS:

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Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

PROJECT:

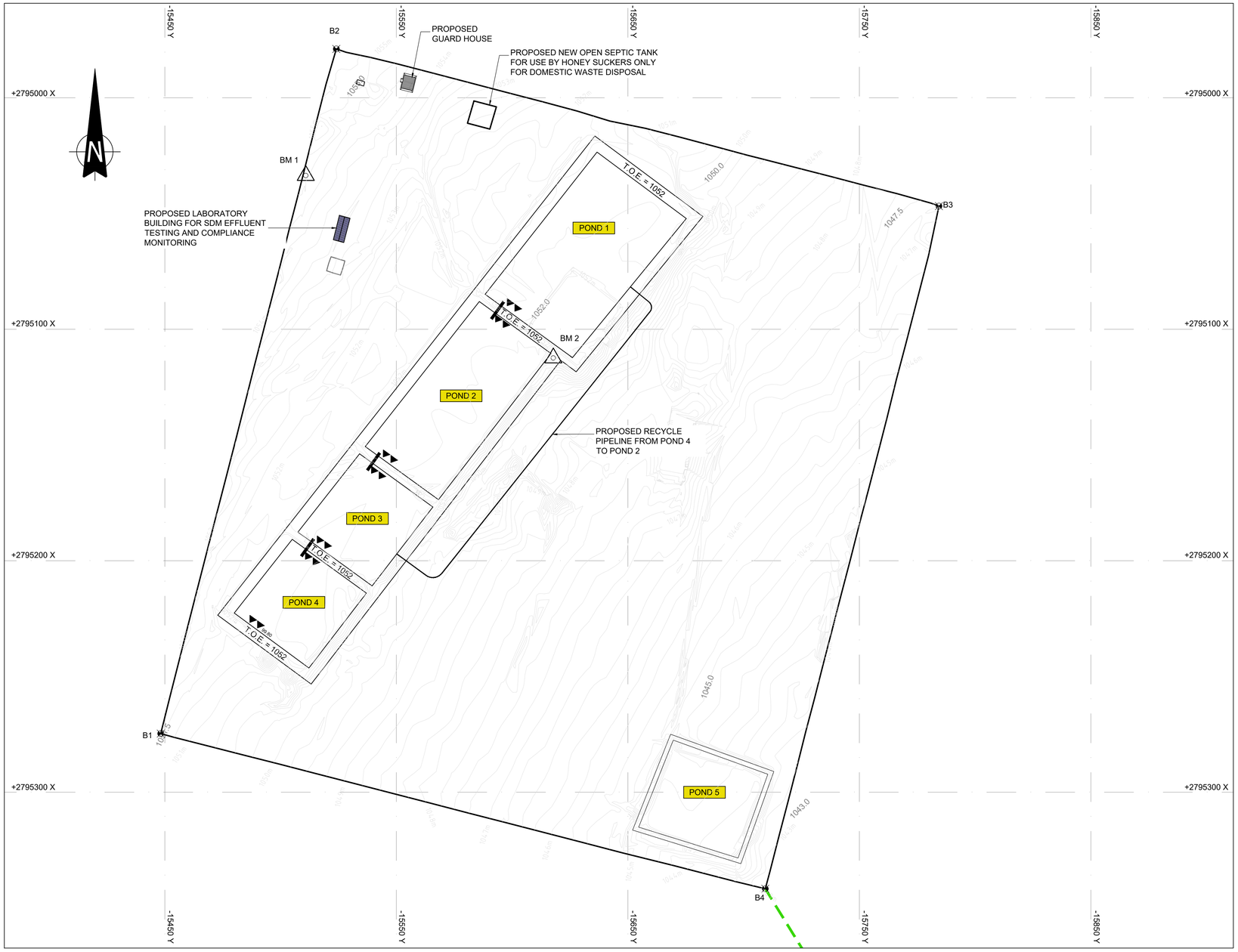
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:

DETAILS FOR CASTING CONCRETE FLOOR SLAB

DRAWING No.: K1004-519

SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE: APRIL 2025		APPROVED:	BS
REV. NO.	A B		



LAYOUT PLAN
PROPOSED ADDITIONS
SCALE 1:1000

BENCH MARKS			
	Y	X	Z
BM 1	-15510.88	2795033.58	1054.81
BM 2	-15617.81	2795112.40	1052.18

SETTING OUT POINTS- FENCE		
	Y	X
B1	-15448.24	2795274.705
B2	-15524.078	2794978.912
B3	-15784.358	2795046.807
B4	-15709.363	2795341.736

NOTES:

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9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- EXISTING MANHOLE
- BENCHMARK

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	PRELIMINARY DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
3 WEST STREET
GROBLERSDAL
0470
Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:
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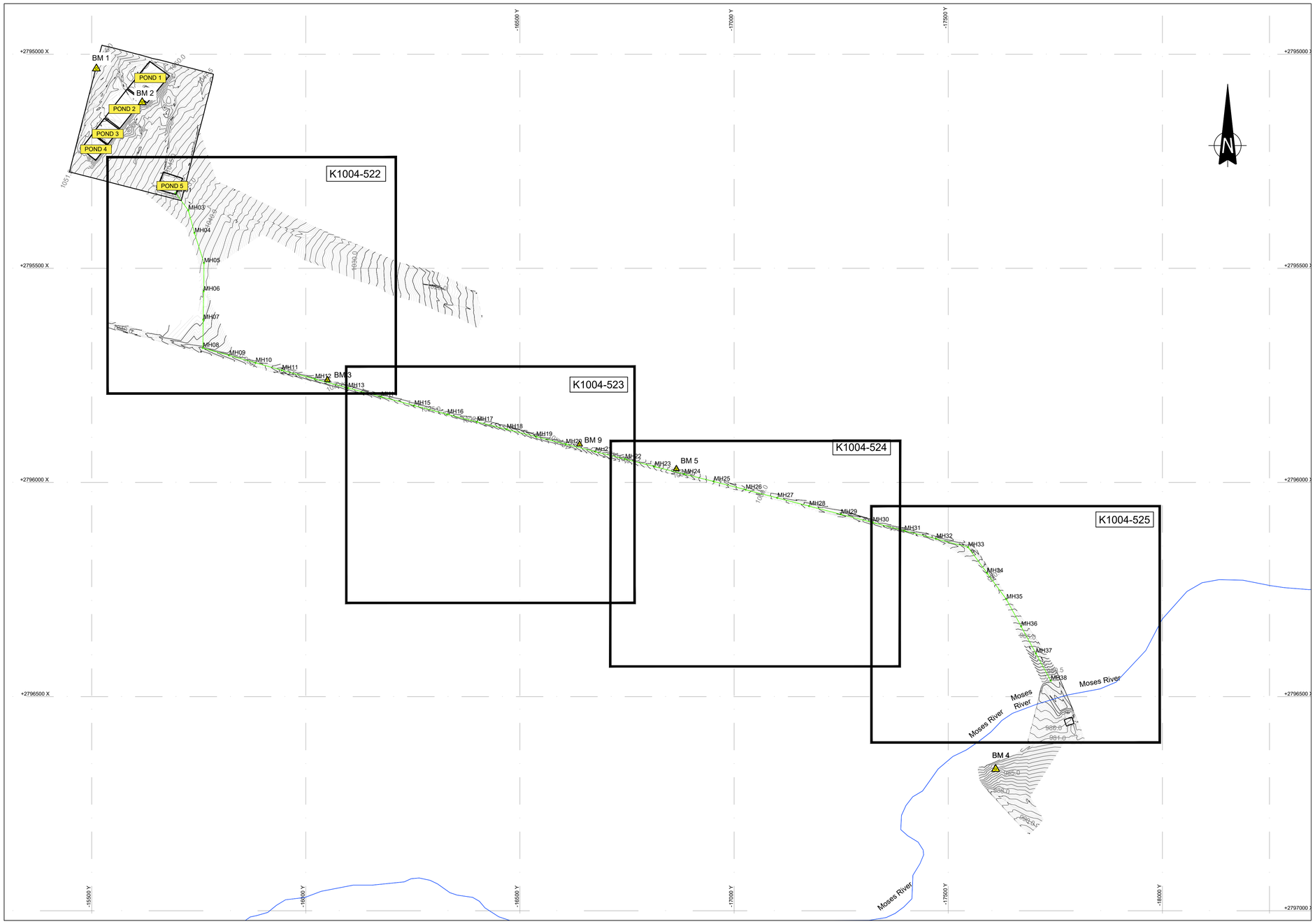
Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
PHILADELPHIA MISSION HOSPITAL & SAPS DENNILTON SURVEY DRAWING, PROPOSED ADDITIONS

DRAWING No.:	K1004-520		
SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE:	APRIL 2025	APPROVED:	BS
REV. NO.	A B		



KEY PLAN
SCALE 1:5000

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
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9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- DISCHARGED PIPELINE
- MANHOLE
- BENCHMARK
- WATER STREAM

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
3 WEST STREET
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0470
Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:
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Cell No .: 079 978 4501
E-Mail : admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
PROPOSED DISCHARGED PIPELINE KEY PLAN

DRAWING No.: K1004-521

SCALE: AS SHOWN | DESIGNED: AG
DRAWN: MB
DATE: APRIL 2025 | APPROVED: BS
REV. NO. A B

LAYOUT PLAN 1
PROPOSED DISCHARGE PIPELINE
SCALE 1:1000

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
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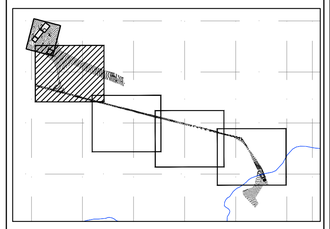
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- DISCHARGED PIPELINE
- MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE
DISTRICT
MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:

KUTLO CONSULTING ENGINEERS

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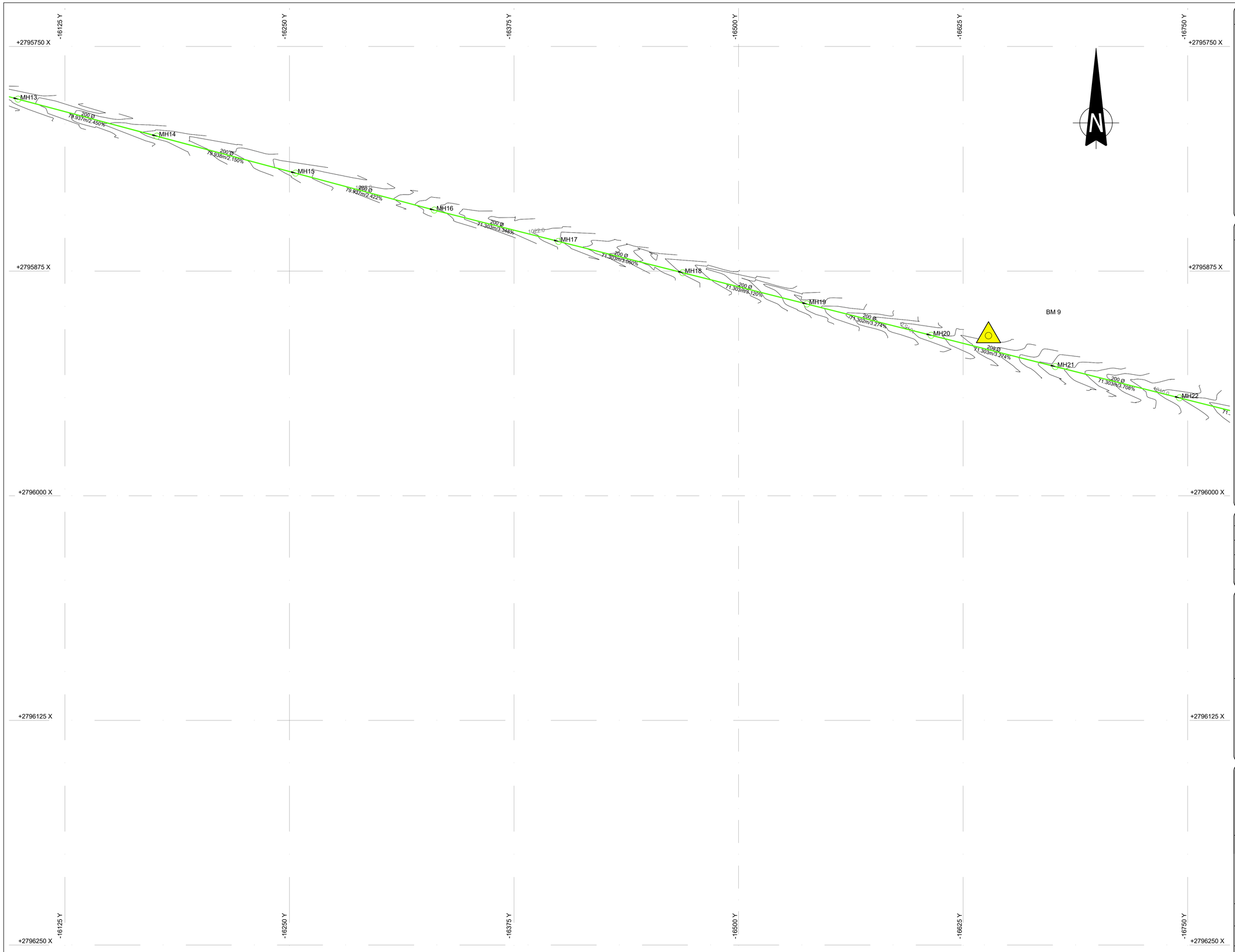
Cell No .: 079 978 4501
E-Mail .: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
WWTW
PROPOSED DISCHARGE PIPELINE
LAYOUT 1 OF 4

DRAWING No.: K1004-522

SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE: APRIL 2025		APPROVED:	BS
REV. NO.	A	B	

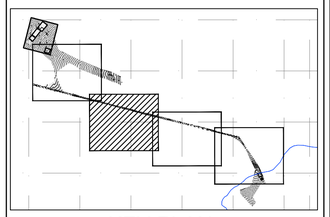


NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE MADIBENG LOCAL MUNICIPALITY

LEGEND:

- DISCHARGED PIPELINE
- MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE
DISTRICT
MUNICIPALITY

3 WEST STREET
GROBLERSDAL
0470

Sekhukhune DISTRICT MUNICIPALITY

Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:

KUTLO CONSULTING ENGINEERS

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THABAZIMBI
0380

Tel No .: (014) 312 0112
Fax No .: 086 730 5765
Cell No .: 079 979 4501
E-Mail : admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON
WASTE WATER TREATMENT
WORKS
(WWTW)

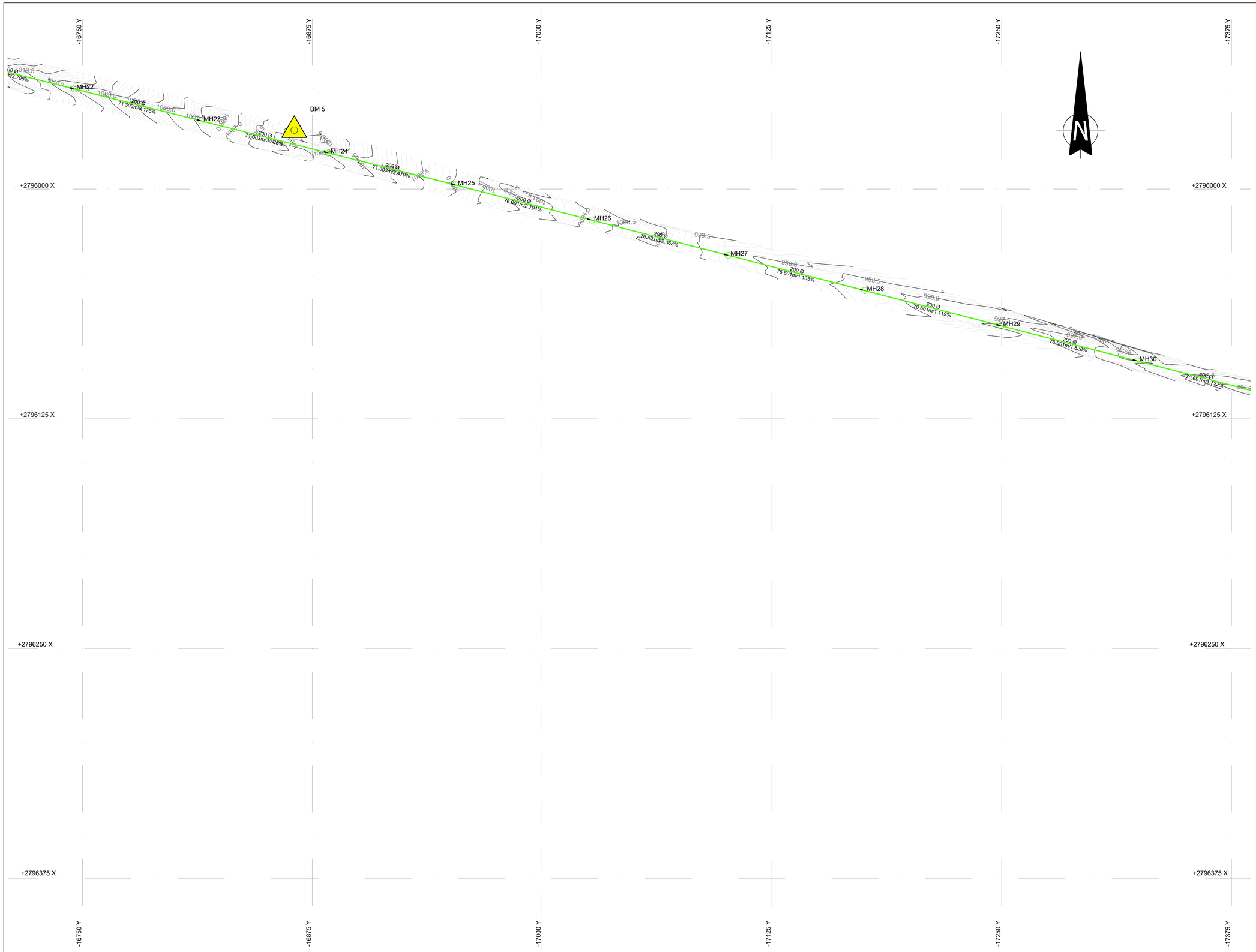
TITLE:
WWTW
PROPOSED DISCHARGE PIPELINE
LAYOUT 2 OF 4

DRAWING No.: K1004-523

SCALE: AS SHOWN | DESIGNED: AG
DRAWN: MB
DATE: APRIL 2025 | APPROVED: BS
REV. NO. A B

LAYOUT PLAN 2
PROPOSED DISCHARGE PIPELINE
SCALE 1:1000

4/9/2025 11:33:45 AM



LAYOUT PLAN 3
PROPOSED DISCHARGE PIPELINE

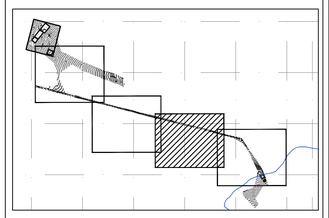
SCALE 1:1000

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- DISCHARGED PIPELINE
- MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

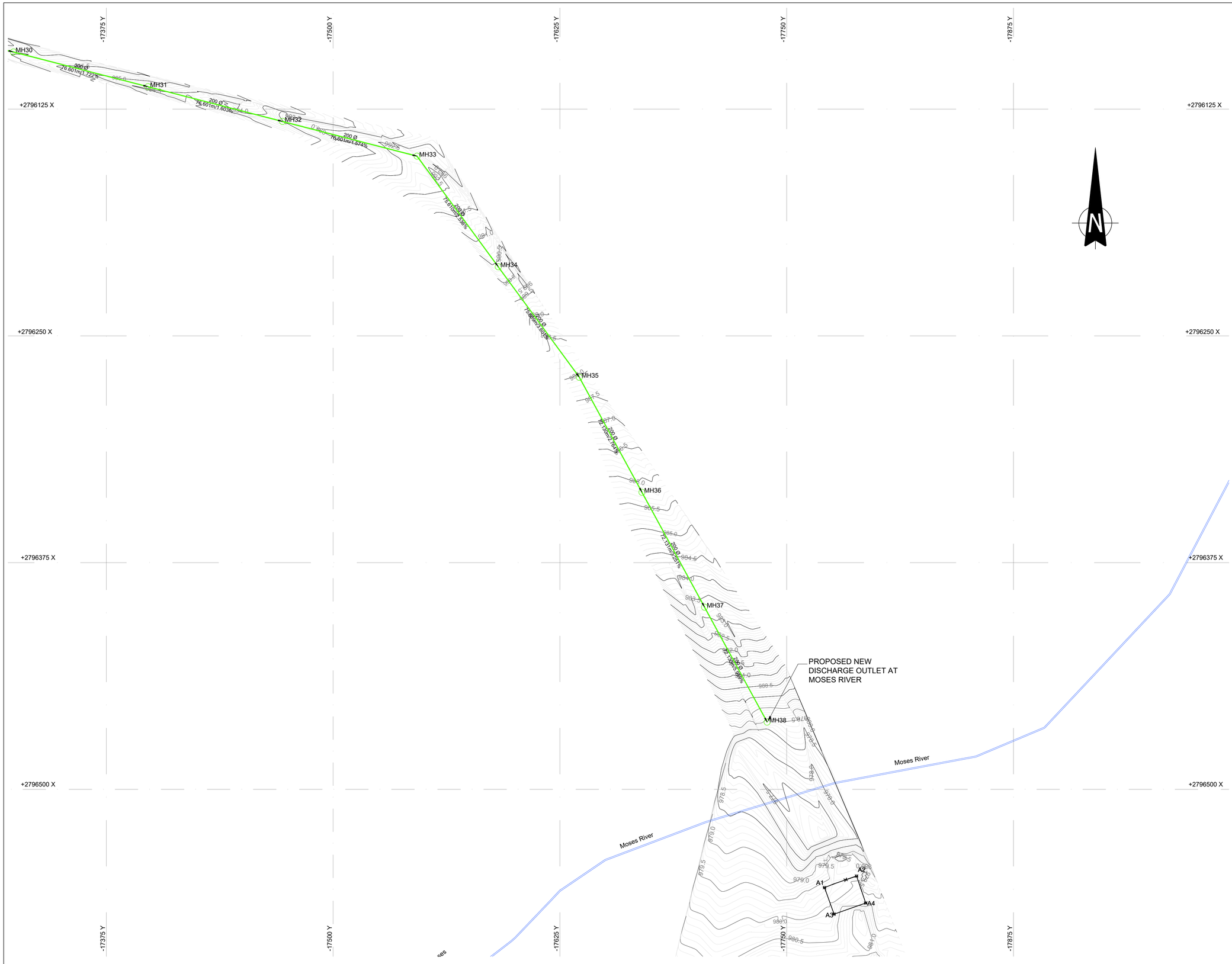
CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
3 WEST STREET
GROBLERSDAL
0470
Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:
KUTLO CONSULTING ENGINEERS
2 HEUWELKRUIN
THABAZIMBI
0380
Tel No .: (014) 312 0112
Fax No .: 086 730 5765
Cell No .: 079 979 4501
E-Mail : admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
WWTW
PROPOSED DISCHARGE PIPELINE
LAYOUT 3 OF 4

DRAWING No.:	K1004-524
SCALE: AS SHOWN	DESIGNED: AG
	DRAWN: MB
DATE: APRIL 2025	APPROVED: BS
REV. NO. A	



LAYOUT PLAN 4
PROPOSED DISCHARGE PIPELINE

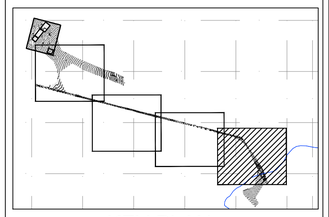
SCALE 1:1000

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

- DISCHARGED PIPELINE
- MANHOLE
- BENCHMARK
- WATER STREAM



KEY PLAN
SCALE 1:30 000

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
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Fax No.: (012) 262 3688

PROJECT ENGINEERS:
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Cell No .: 079 979 4501
E-Mail : admin@kutloconsulting.co.za

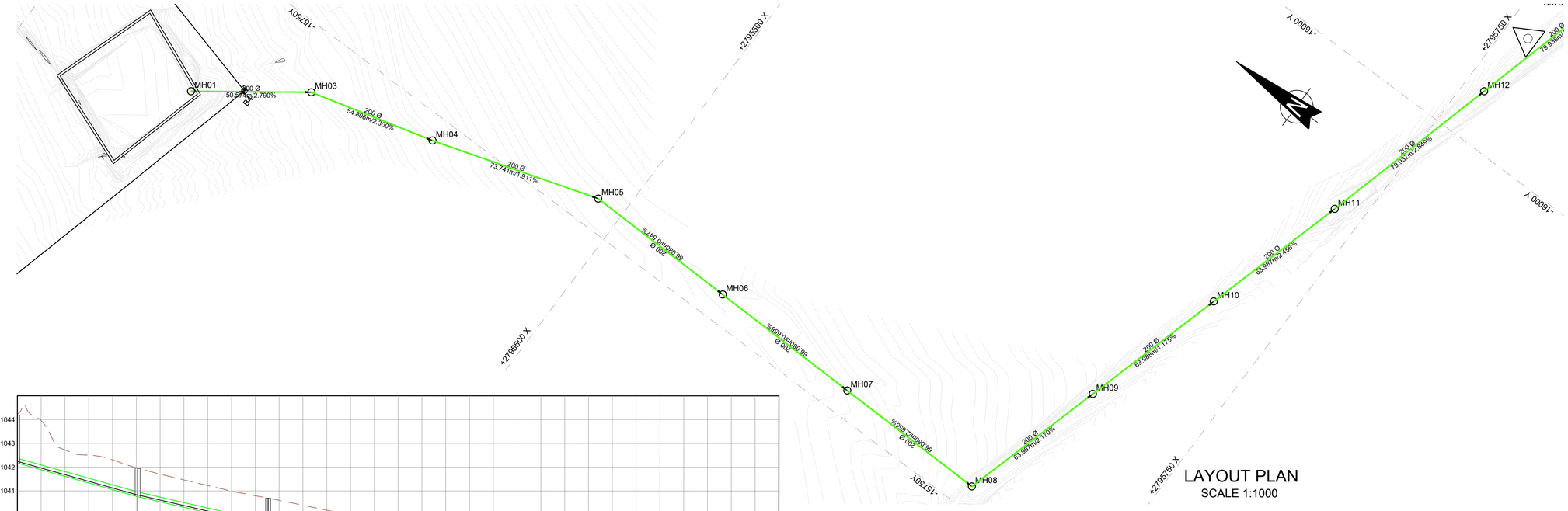
PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
WWTW
PROPOSED DISCHARGE PIPELINE
LAYOUT 2 OF 4

DRAWING No.: K1004-525

SCALE: AS SHOWN	DESIGNED: AG
	DRAWN: MB
DATE: APRIL 2025	APPROVED: BS

REV. NO. A B



LAYOUT PLAN
SCALE 1:1000

NOTES:

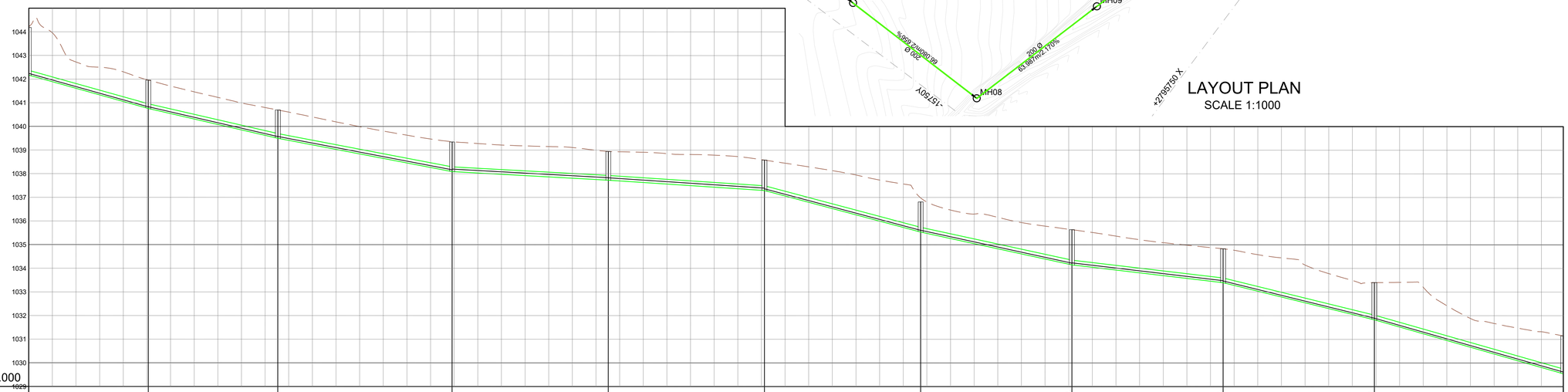
1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

GROUND LEVEL

PIPE

SCALE
Vert 1 : 100
Hor 1 : 1000



Chainage	0.000	50.574	105.380	179.121	245.201	311.281	377.361	441.348	505.336	569.324	649.261
Ground Level	1044.185	1041.958	1040.698	1039.342	1038.943	1038.578	1036.810	1035.637	1034.830	1033.403	1031.147
Manhole Name	MH01	MH03	MH04	MH05	MH06	MH07	MH08	MH09	MH10	MH11	MH12
Inlet Level / Outlet Level	1042.173	1040.762 / 1040.762	1039.502 / 1039.502	1038.093 / 1038.093	1037.731 / 1037.731	1037.266 / 1037.266	1035.541 / 1035.541	1034.152 / 1034.152	1033.401 / 1033.401	1031.829 / 1031.829	1029.551 / 1029.551
Link Type / Link Size	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm
Length / Slope	50.594 m 2.790%	54.821 m 2.300%	73.755 m 1.911%	66.081 m 0.547%	66.081 m 0.658%	66.103 m 2.656%	64.002 m 2.170%	63.993 m 1.175%	64.007 m 2.456%	79.970 m 2.849%	
Flow	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	
Capacity	0.053 m³/s	0.048 m³/s	0.044 m³/s	0.023 m³/s	0.026 m³/s	0.052 m³/s	0.047 m³/s	0.034 m³/s	0.050 m³/s	0.054 m³/s	
Velocity	1.665 m/s	1.551 m/s	1.452 m/s	0.913 m/s	0.979 m/s	1.635 m/s	1.520 m/s	1.215 m/s	1.588 m/s	1.677 m/s	
Hydraulic Elevation	1042.238	1040.831	1039.574	1038.195	1037.828	1037.362	1035.610	1034.234	1033.468	1031.893	1029.624

Manhole MH01 to MH12

No	DATE	REVISION	CONSULT	DIR
B	01/09/25	ISSUED FOR TENDER	BS	
A	05/04/25	DETAIL DESIGN REPORT	BS	

DESIGNED BY: AG
CHECKED BY: BS
DRAWN BY: BM
CHECKED BY: BS 0470

CLIENT

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APPROVED BY

ROAD MANAGER — 05/04/2025 DATE

CONSULTING ENGINEER — 05/04/2025 DATE

CONTRACT NUMBER XXX / XXXX / XX

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

DISCHARGE LINE LONGITUDINAL SECTION

(Full signature)

ROAD MANAGER — 05/04/2025 DATE

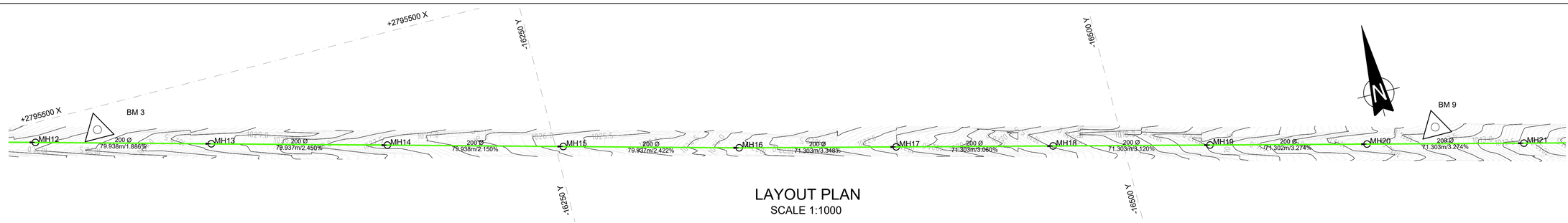
CONSULTING ENGINEER — 05/04/2025 DATE

KUTLO DRAWING NUMBER: K1004-526

ROAD DRAWING NUMBER: -

SHEET 1 OF 5

SCALE
HORIZONTAL SCALE: 1000
VERTICAL SCALE :100



LAYOUT PLAN

SCALE 1:1000

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

GROUND LEVEL

PIPE

SCALE
Vert 1 : 100
Hor 1 : 1000

Datum 1010.000

Chainage	649.261	729.199	809.136	889.075	969.012	1040.314	1111.617	1182.920	1254.222	1325.525
Ground Level	1031.147	1029.240	1027.362	1025.724	1023.741	1021.638	1019.457	1016.908	1014.707	1012.319
Manhole Name	MH12	MH13	MH14	MH15	MH16	MH17	MH18	MH19	MH20	MH21
Inlet Level / Outlet Level	1029.951	1028.044 / 1028.044	1026.985 / 1026.985	1024.366 / 1024.366	1022.230 / 1022.230	1020.042 / 1020.042	1017.861 / 1017.861	1015.536 / 1015.536	1013.302 / 1013.302	1010.967 / 1010.967
Link Type / Link Size	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm
Length / Slope	79.953 m 1.886%	79.961 m 2.450%	79.957 m 2.150%	79.961 m 2.422%	71.343 m 3.348%	71.336 m 3.060%	71.337 m 3.120%	71.341 m 3.274%	71.341 m 3.274%	
Flow	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	
Capacity	0.044 m³/s	0.050 m³/s	0.046 m³/s	0.049 m³/s	0.058 m³/s	0.055 m³/s	0.056 m³/s	0.057 m³/s	0.057 m³/s	
Velocity	1.445 m/s	1.587 m/s	1.515 m/s	1.580 m/s	1.779 m/s	1.722 m/s	1.734 m/s	1.765 m/s	1.765 m/s	
Hydraulic Elevation	1029.624	1028.111	1026.155	1024.434	1022.492	1020.106	1017.924	1015.698	1013.364	1011.028

Manhole MH12 to MH21

No	DATE	REVISION	CONSULT	DIR
B	01/09/25	ISSUED FOR TENDER	BS	
A	05/04/25	DETAIL DESIGN REPORT	BS	

DESIGNED BY: AG
CHECKED BY: BS
DRAWN BY: BM
CHECKED BY: BS 0470

CLIENT

SEKHUKHUNE DISTRICT MUNICIPALITY

3 WEST STREET
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E-Mail .: admin@kutloconsulting.co.za

APPROVED BY

ROAD MANAGER — 05/04/2025 DATE

CONSULTING ENGINEER — 05/04/2025 DATE

CONTRACT NUMBER XXX / XXXX / XX

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

DISCHARGE LINE LONGITUDINAL SECTION

(Full signature)

ROAD MANAGER — 05/04/2025 DATE

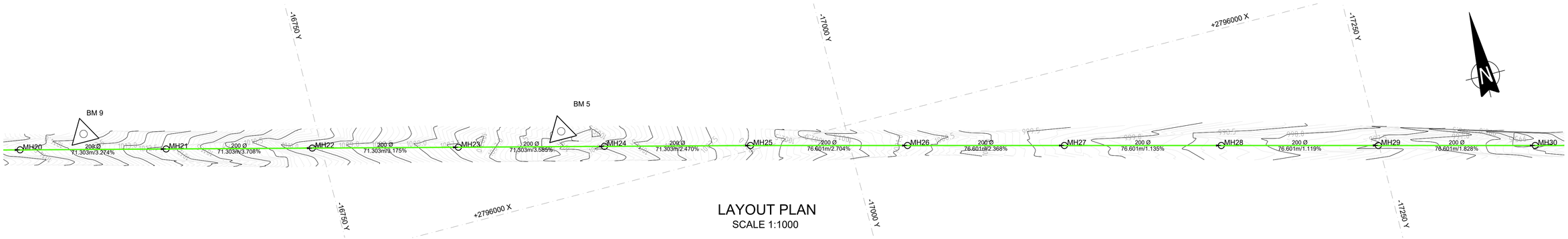
CONSULTING ENGINEER — 05/04/2025 DATE

KUTLO DRAWING NUMBER: K1004-527

ROAD DRAWING NUMBER: -

SHEET 2 OF 5

SCALE
HORIZONTAL SCALE: 1000
VERTICAL SCALE :100



LAYOUT PLAN
SCALE 1:1000

NOTES:

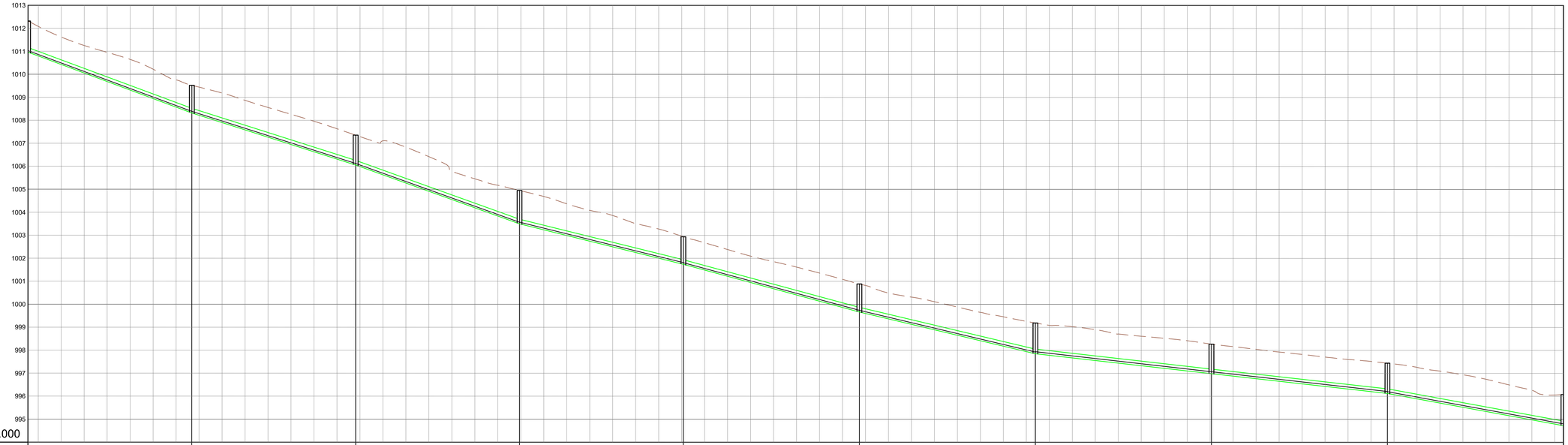
1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

GROUND LEVEL

PIPE

SCALE
Vert 1 : 100
Hor 1 : 1000



Chainage	1925.525		1396.828		1468.130		1539.433		1610.736		1687.337		1763.938		1840.539		1917.141		1993.742		
Ground Level	1012.319		1009.520		1007.355		1004.950		1002.938		1000.884		999.189		998.269		997.443		996.076		
Manhole Name	MH21		MH22		MH23		MH24		MH25		MH26		MH27		MH28		MH29		MH30		
Inlet Level / Outlet Level	1010.967	1008.324		1006.060	1006.060		1003.504	1003.504		1001.742	1001.742		999.671	999.671		997.856	997.856		996.987	996.987		994.729	994.729
Link Type / Link Size	PVC-U 200 mm		PVC-U 200 mm		PVC-U 200 mm		PVC-U 200 mm		PVC-U 200 mm		PVC-U 200 mm		PVC-U 200 mm		PVC-U 200 mm		PVC-U 200 mm		PVC-U 200 mm		
Length / Slope	71.352 m 3.708%		71.339 m 3.175%		71.348 m 3.585%		71.324 m 2.470%		76.629 m 2.704%		76.623 m 2.368%		76.606 m 1.135%		76.606 m 1.119%		76.614 m 1.828%				
Flow	0.014 m³/s		0.014 m³/s		0.014 m³/s		0.014 m³/s		0.014 m³/s		0.014 m³/s		0.014 m³/s		0.014 m³/s		0.014 m³/s				
Capacity	0.061 m³/s		0.056 m³/s		0.060 m³/s		0.050 m³/s		0.052 m³/s		0.049 m³/s		0.034 m³/s		0.034 m³/s		0.043 m³/s				
Velocity	1.845 m/s		1.745 m/s		1.823 m/s		1.591 m/s		1.646 m/s		1.568 m/s		1.199 m/s		1.193 m/s		1.428 m/s				
Hydraulic Elevation	1011.028	1008.386		1006.121	1003.571		1001.808	999.739		997.939	997.071		996.203	994.803							

Manhole MH21 to MH30

No	DATE	REVISION	CONSULT	DIR
B	01/09/25	ISSUED FOR TENDER	BS	
A	05/04/24	DETAIL DESIGN REPORT	BS	

DESIGNED BY AG
CHECKED BY BS
DRAWN BY BM
CHECKED BY BS 0470

CLIENT

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APPROVED BY

ROAD MANAGER 05/04/2025 DATE

CONSULTING ENGINEER 05/04/2025 DATE

CONTRACT NUMBER XXX / XXXX / XX

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

DISCHARGE LINE LONGITUDINAL SECTION

(Full signature)

ROAD MANAGER 05/04/2025 DATE

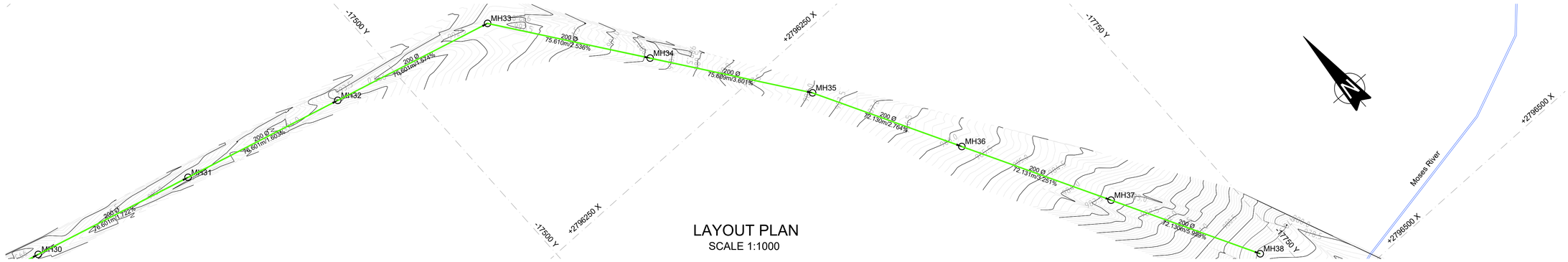
CONSULTING ENGINEER 05/04/2025 DATE

KUTLO DRAWING NUMBER
K1004-528

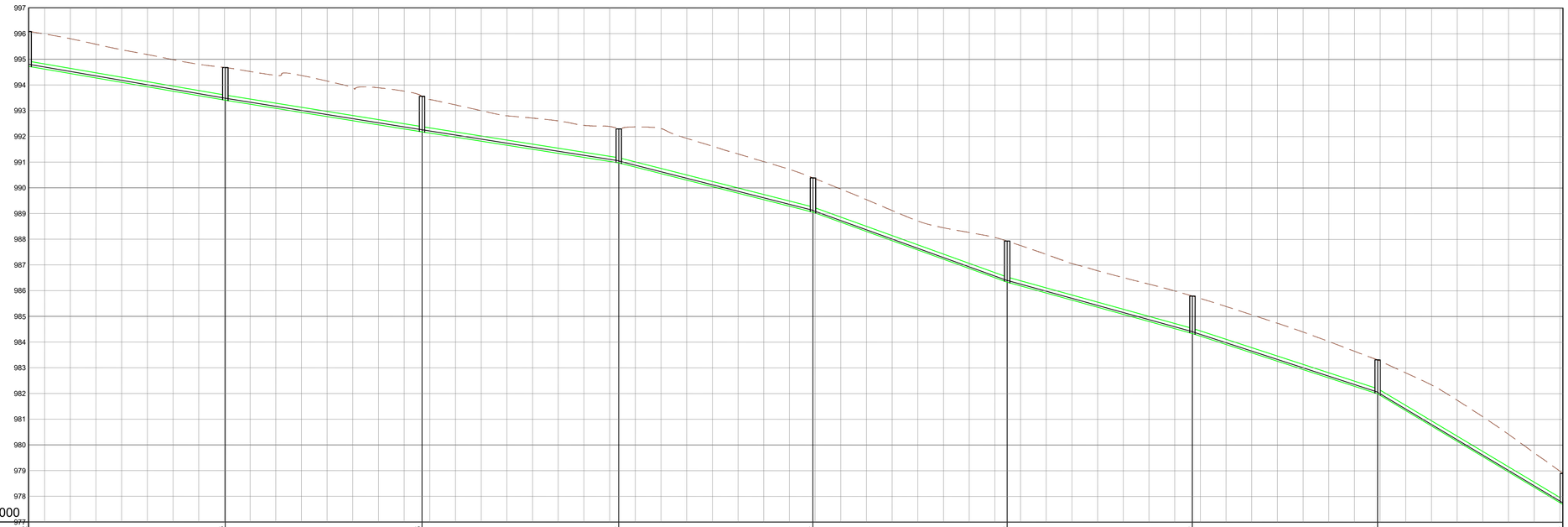
SHEET 3 OF 5

SCALE
HORIZONTAL SCALE: 1000
VERTICAL SCALE :100

ROAD DRAWING NUMBER
-



LAYOUT PLAN
SCALE 1:1000



LEGEND:

GROUND LEVEL

PIPE

SCALE
Vert 1 : 100
Hor 1 : 1000

Chainage	1993.742	2070.343	2146.945	2223.546	2299.155	2374.765	2446.895	2519.026	2591.156
Ground Level	996.076	994.679	993.561	992.294	990.391	987.934	985.796	983.315	978.897
Manhole Name	MH30	MH31	MH32	MH33	MH34	MH35	MH36	MH37	MH38
Inlet Level / Outlet Level	994.729	993.411 / 993.411	992.183 / 992.183	990.978 / 990.978	989.060 / 989.060	986.338 / 986.338	984.344 / 984.344	981.999 / 981.999	977.701 / 977.701
Link Type / Link Size		PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm	PVC-U 200 mm
Length / Slope		76.613 m 1.722%	76.611 m 1.603%	76.611 m 1.574%	75.634 m 2.536%	75.658 m 3.601%	72.158 m 2.764%	72.169 m 3.251%	72.258 m 5.959%
Flow		0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s	0.014 m³/s
Capacity		0.042 m³/s	0.040 m³/s	0.040 m³/s	0.050 m³/s	0.060 m³/s	0.053 m³/s	0.057 m³/s	0.077 m³/s
Velocity		1.397 m/s	1.361 m/s	1.351 m/s	1.607 m/s	1.826 m/s	1.659 m/s	1.760 m/s	2.189 m/s
Hydraulic Elevation	994.803	993.486	992.259	991.044	989.121	986.403	984.406	982.052	977.754

Manhole MH30 to MH38

NOTES:

1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

No	DATE	REVISION	CONSULT	DIR
B	01/09/25	ISSUED FOR TENDER	BS	
A	05/04/25	DETAIL DESIGN REPORT	BS	

DESIGNED BY AG
CHECKED BY BS
DRAWN BY BM
CHECKED BY BS 0470

CLIENT

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APPROVED BY

ROAD MANAGER 05/04/2025 DATE

CONSULTING ENGINEER 04/045/2025 DATE

CONTRACT NUMBER XXX / XXXX / XX

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

DISCHARGE LINE LONGITUDINAL SECTION

(Full signature)

ROAD MANAGER 05/04/2025 DATE

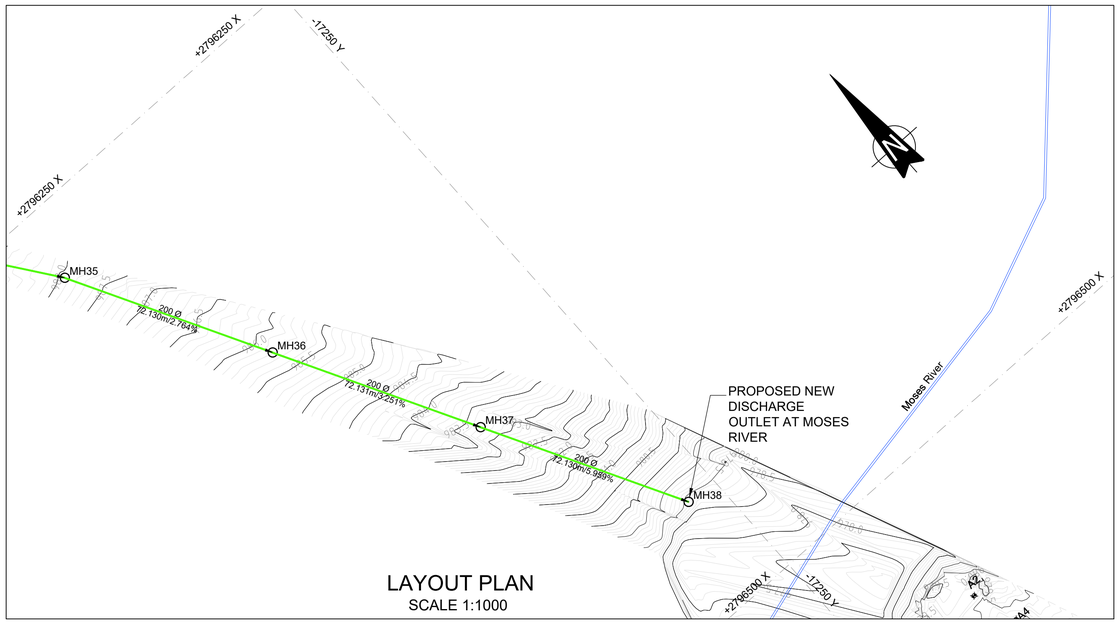
CONSULTING ENGINEER 05/04/2025 DATE

SHEET 4 OF 5

SCALE
HORIZONTAL SCALE: 1000
VERTICAL SCALE :100

KUTLO DRAWING NUMBER
K1004-529

ROAD DRAWING NUMBER
-



LAYOUT PLAN
SCALE 1:1000

NOTES:

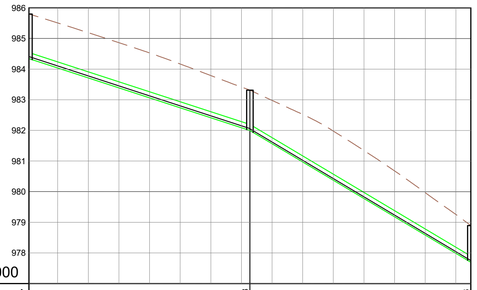
1. ALL PRIMARY PIPES uPVC CLASS 12 TO SABS 966 (PART 1) UNLESS OTHERWISE SHOWN.
2. MINIMUM COVER 1,0m BELOW FINAL FINISHED LEVEL.
3. PIPES TO BE LAID 1,0m FROM BOUNDARY OR AS OTHERWISE SHOWN.
4. FIRE HYDRANT 0.3m FROM ERF BOUNDARY OR AS OTHERWISE SHOWN.
5. PRIMARY CONNECTION SUPPLIED BY LOCAL MUNICIPALITY OF SEKHUKHUNE
6. MINIMUM VALVE SIZE IS 100mm DIAMETER.
7. KERBS TO BE MARKED WITH "W" ON BOTH SIDES OF ROAD CROSSING.
8. ALL WORK MUST BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR MUNICIPAL CIVIL ENGINEERING WORKS (2005).
9. REFER TO PRINCIPLES AND STANDARDS FOR THE DESIGN AND CONSTRUCTION OF WATER AND SANITATION IN THE SEKHUKHUNE LOCAL MUNICIPALITY

LEGEND:

GROUND LEVEL

PIPE

SCALE
Vert 1 : 100
Hor 1 : 1000



Chainage	2500.617	2572.748	2644.878
Ground Level	985.796	983.315	978.897
Manhole Name	MH36	MH37	MH38
Inlet Level / Outlet Level	984.344	981.999 / 981.999	977.701 / 977.701
Link Type / Link Size		PVC-U 200 mm	PVC-U 200 mm
Length / Slope		72.169 m 3.251%	72.258 m 5.959%
Flow		0.014 m³/s	0.014 m³/s
Capacity		0.057 m³/s	0.077 m³/s
Velocity		1.760 m/s	2.189 m/s
Hydraulic Elevation	984.406	982.052	977.754

Manhole MH36 to MH38

No	DATE	REVISION	CONSULT	DIR
B	01/09/25	ISSUED FOR TENDER	BS	
A	05/04/25	DETAIL DESIGN REPORT	BS	

DESIGNED BY AG
CHECKED BY BS
DRAWN BY BM
CHECKED BY BS
0470

CLIENT
SEKHUKHUNE DISTRICT MUNICIPALITY
3 WEST STREET
GROBLERSDAL
Tel No.: (013) 262 7300
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KUTLO CONSULTING ENGINEERS
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THABAZIMBI
0380
Tel No .: (014) 312 0112
Fax No .: 086 730 5765
Cell No .: 079 978 4501
E-Mail .: admin@kutloconsulting.co.za

APPROVED BY
ROAD MANAGER 05/04/2025 DATE
CONSULTING ENGINEER 05/04/2025 DATE

CONTRACT NUMBER XXX / XXXX / XX

UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

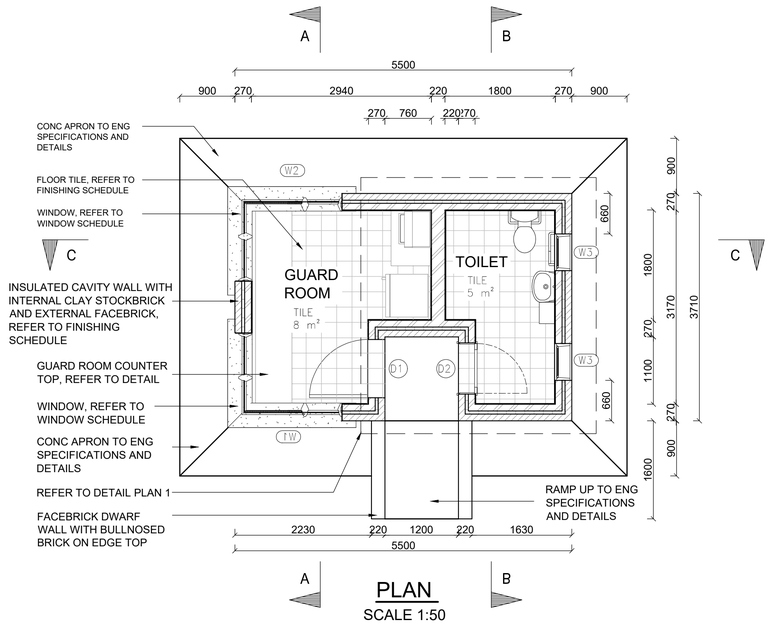
DISCHARGE LINE LONGITUDINAL SECTION

(Full signature)
ROAD MANAGER 05/04/2025 DATE
CONSULTING ENGINEER 05/04/2025 DATE

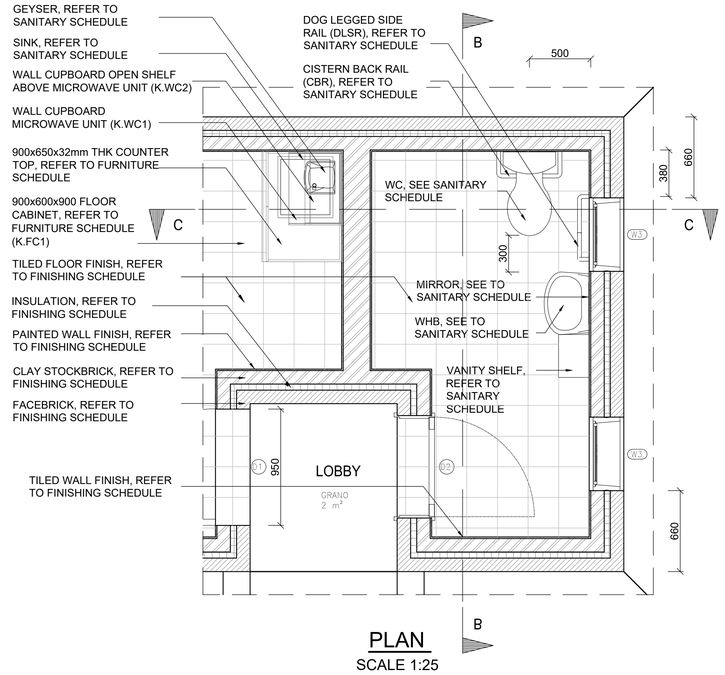
KUTLO DRAWING NUMBER
K1004-530

ROAD DRAWING NUMBER
-

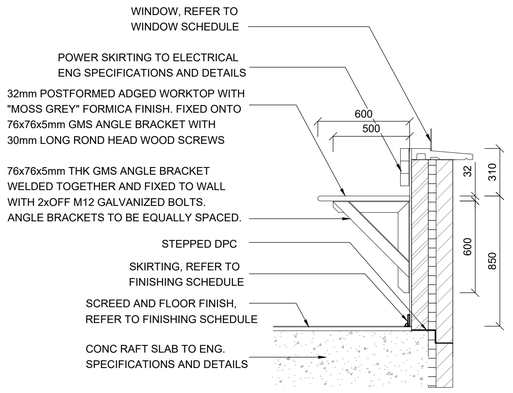
SHEET 5 OF 5
SCALE
HORIZONTAL SCALE: 1000
VERTICAL SCALE :100



PLAN
SCALE 1:50



PLAN
SCALE 1:25



DETAIL A (WORKTOP)
SCALE 1:20

NOTES

- THESE ARCHITECTURAL DRAWINGS ARE PREPARED AS FUNCTIONAL DRAWINGS AND SHOULD BE USED FOR TENDER PURPOSES ONLY AND NOT FOR CONSTRUCTION PURPOSES.
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- ADDITIONALLY THIS DRAWING MUST ALSO BE READ IN CONJUNCTION WITH THE TENDER SPECIFICATIONS AND BOQ.
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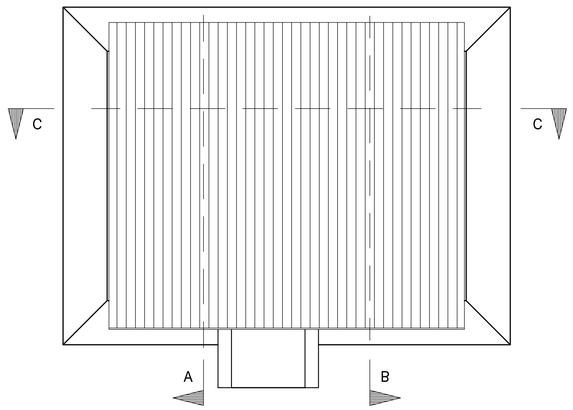
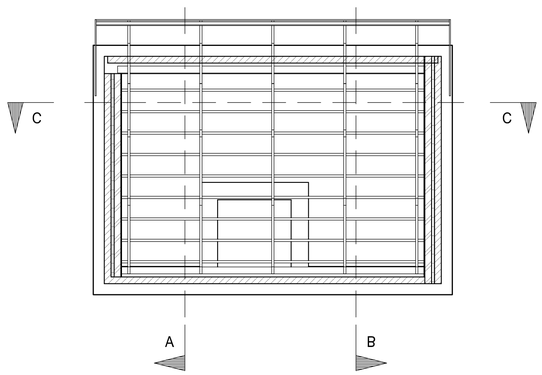
- DETAILED DRAWINGS OF WINDOW AND DOOR SCHEDULES, WHERE APPLICABLE, MUST BE PROVIDED FOR ARCH. APPROVAL.
- ALL OPENINGS, STRUCTURE POSITIONS, EXIST. SEWERAGE POSITIONS, ETC. MUST BE CONFIRMED ON SITE.
- NO WORK MAY COMMENCE UNTIL ALL DRAWINGS HAVE BEEN APPROVED

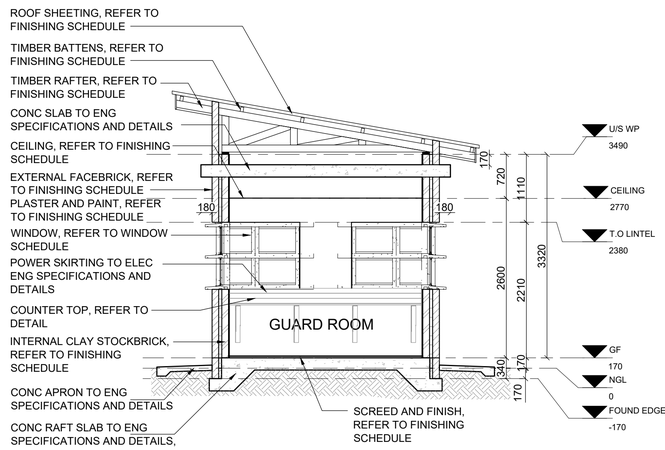
LEGEND:



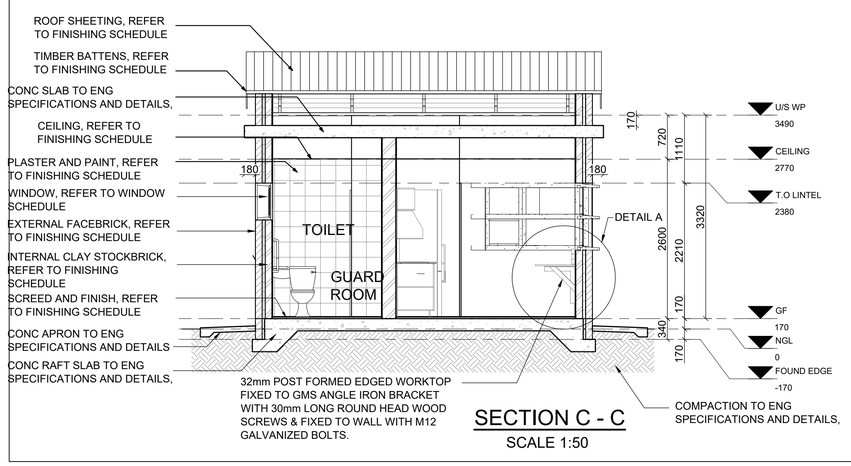
ROOF PLAN
SCALE 1:50



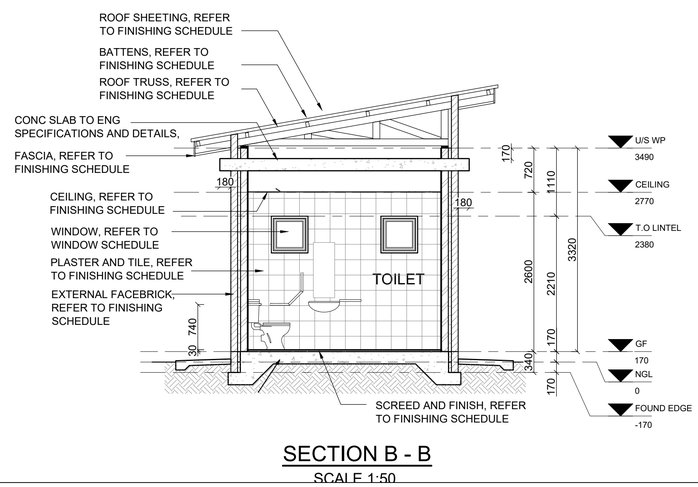
LINTELS LAYOUT
SCALE 1:50



SECTION A - A
SCALE 1:50



SECTION C - C
SCALE 1:50



SECTION B - B
SCALE 1:50

01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS
DATE	NO.	REVISION / VARIATIONS	KC

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY

Sekhukhune DISTRICT MUNICIPALITY

3 WEST STREET
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THABAZIMBI
0380

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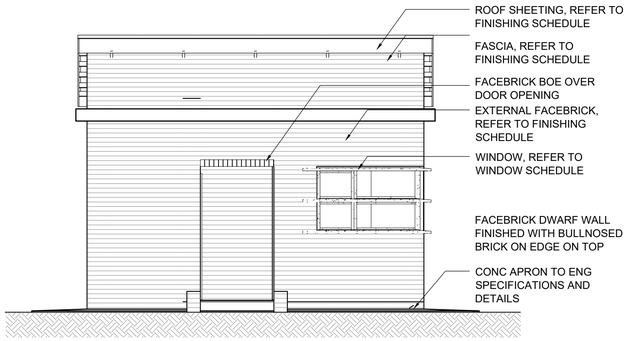
Cell No.: 079 978 4501
E-Mail: admin@kutloconsulting.co.za

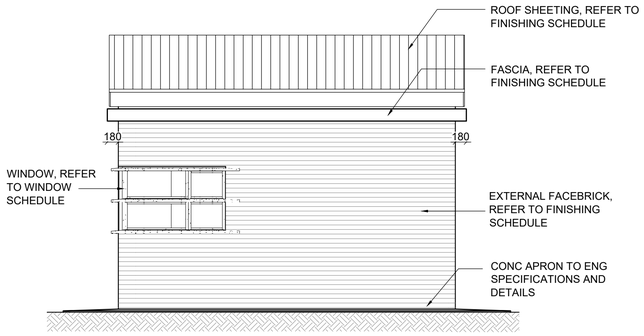
PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
WWTW
PLAN AND SECTIONS OF PROPOSED GUARDHOUSE
SHEET 1 OF 3

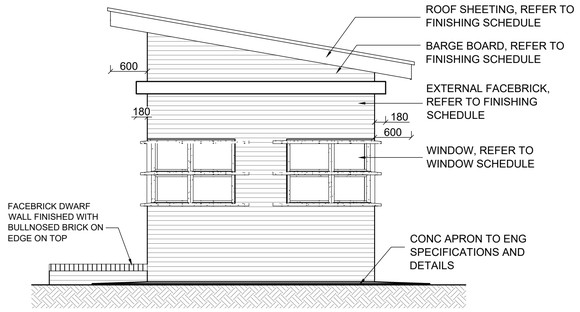
DRAWING No.:	K1004-531		
SCALE: AS SHOWN		DESIGNED:	AG
		DRAWN:	MB
DATE: APRIL 2025		APPROVED:	BS
REV. NO.	A B		



FRONT ELEVATION
SCALE 1:50

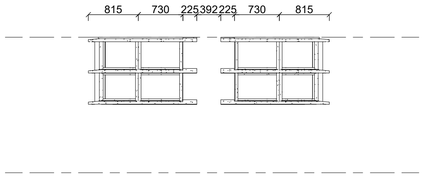


REAR ELEVATION
SCALE 1:50

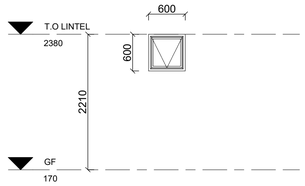


SIDE ELEVATION
SCALE 1:50

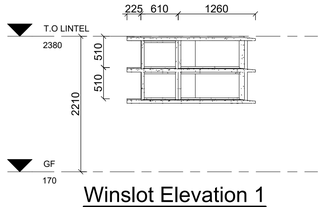
OPPOSITE SIDE ELEVATION
SCALE 1:50



Winslot Elevation 2
SCALE 1:50



Winslot Elevation 3
SCALE 1:50



Winslot Elevation 1
SCALE 1:50

ADDITIONAL DOOR & WINDOW NOTES

IT SHOULD BE NOTED THAT IF THE GUARD HOUSE IS NOT WITHIN A NATIONAL KEY POINT SITE THEN THE FOLLOWING SPECIFICATIONS BE USED FOR THE GUARD ROOM DOOR AND WINDOWS COULD

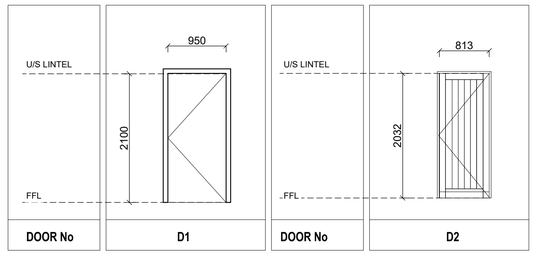
DOOR D1:

- DOOR FRAME: STANDARD STEEL DOUBLE REBATE 1.2mm GUAGE FACTORY PRIMED FRAME TO TAKE SPECIFIED DOOR
- DOOR LEAF: 950x2100x44mm MERANTI FRAMED, LEDGED, BRACED & BOARDED, OPEN BACK DOOR LEAF AS PER MANUFACTURERS SPECIFICATIONS. SPECIFICATIONS TO BE SUBMITTED TO RAND WATER ARCH. FOR APPROVAL PRIOR TO PURCHASING.
- DOOR FINISH: FILL ALL CRACKS, SPLITS & NAIL HOLES WITH SUITABLE FILLER. SANDPAPER SMOOTH, REMOVE ALL DUST AND APPLY 2 COATS VARNISH. SANDPAPER BETWEEN COATS.
- DOOR LEVER FURNITURE, MORTICE LOCK AND CYLINDER PER D2 AS SPECIFICATIONS

WINDOW W1 & W2:

- WINDOW FRAME :
  LOAD BEARING PRECAST CONCRETE BLADES DOUBLING AS SILLS & LINTELS COMPLETE WITH REVEALES AND MULLIONS WHERE REQUIRED. WHERE OPENING WINDOWS ARE INDICATED, TO HAVE ALUMINIUM FRAME AS PER MANUFACTURERS SPECIFICATIONS TO FIT BETWEEN REVEALS & OR MULLIONS & SILLS. COMPLETE AND WORKING INSTALLATION AS PER MANUFACTURERS SPECIFICATION AND DETAILS. ALL OPENING WINDOWS TO BE TOP HUNG PROJECTING OUTWARDS.
- FRAME FINISH
  CONC: AS PER W1 SPECIFICATIONS ALUMINIUM: ALUMINIUM: POWDER COATED AS PER MANUFACUTURERS SPECIFICATIONS AND DETAILS, COLOUR: TO RAND WATER ARCH APPROVAL.

GLAZING:
MIN 6mm THK LAMINATED SAFETY GLASS OR EQUAL AND APPROVED. CONTRTACTOR TO SUPPLY SPECIFICATIONS FOR RAND WATER ARCH APPROVAL PRIOR TO PURCHASING
FURNITURE:
FUNRITURE FOR OPENING WINDOWS TO BE AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS



DOOR No	D1	DOOR No	D2

NOTES

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LEGEND:

01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS
DATE	NO.	REVISION / VARIATIONS	KC

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
3 WEST STREET
GROBLERSDAL
0470
Tel No.: (013) 262 7300
Fax No.: (012) 262 3688

PROJECT ENGINEERS:
KUTLO CONSULTING ENGINEERS
2 HEUWELKRUIN
THABAZIMBI
0380
Tel No .: (014) 312 0112
Fax No .: 086 730 5765
Cell No .: 079 978 4501
E-Mail : admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

TITLE:
WWTW
ELEVATIONS OF PROPOSED OF GUARDHOUSE
SHEET 2 OF 3

DRAWING No.: K1004-532

SCALE: AS SHOWN	DESIGNED: AG
	DRAWN: MB
DATE: APRIL 2025	APPROVED: BS
REV. NO. A B	

WINDOW SCHEDULE

WINDOW No.	No OFF	LOCATION	WINDOW FRAME		GLAZING	FURNITURE	NOTES
			TYPE	FINISH			
W1	1.0000	GUARD ROOM	LOAD BEARING PRECAST CONCRETE BLADES DOUBLING AS SILLS & LINTELS COMPLETE WITH REVEALES AND MULLIONS WHERE REQUIRED. STEEL FRAMED WINDOWS AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS SIZED TO SUIT GLAZING AND TO FIT BETWEEN REVEALS AND OR MULLIONS AND SILLS. COMPLETE AND WORKING INSTALLATION AS PER MANUFACTURERS SPECIFICATION AND DETAILS.	CONC: PATCH UP ALL HOLES AND CHIPS WITH A MIXTURE OF "LATEX" AND CEMENT. SMOOTH BEFORE DRY AND LEAVE NATURAL. STEEL: INSPECT SHOP PRIMER WHERE LOOSE PAINT OR RUST SPOTS OCCUR. WIRE BRUSH DOWN TO A BRIGHT METAL FINISH AND ENSURE THAT ALL AREAS ARE CLEAN DRY AND FREE OF DUST. TOUCH UP WITH METAL PRIMER, APPLY ONE COAT UNIVERSAL UNDERCOAT AND 2 COATS SUPER UNIVERSAL GLOSS ENAMEL PAINT IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. CONTRACTOR TO PROVIDE SPECIFICATIONS FOR RAND WATER ARCH. APPROVAL PRIOR TO PURCHASE. COLOUR TO RAND WATER ARCH. APPROVAL ALL TO RAND WATER ARCH. APPROVAL	MIN LEVEL G4 RATED BULLET RESISTANT GLASS. ALL TO RAND WATER ARCH APPROVAL.	N/A	CONTRACTOR TO CHECK ALL OPENINGS AND WINDOW SWINGS PRIOIR TO INSTALLATION. ALL ALUMINIUM WORK TO COMPLY WITH AAAMSA STANDARDS. SHOP DRAWINGS TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL PRIOR TO PURCHASE. FURNITURE SAMPLES TO BE PROVIDED FOR RAND WATER ARCH APPROVAL PRIOR TO PURCHASE
W2	1.0000	GUARD ROOM	REFER TO W1	REFER TO W1	REFER TO W1	N/A	REFER TO W1
W3	2.0000	TOILET	LOAD BEARING PRESCAST CONCRETE WINDOW SURROUNDS WITH ALUMINIUM FRAMED INSERTS. ALUMINIUM FRAMED INSERTS TO BE FIXED GLAZED UNLESS OTHERWISE INDICATED AS OPENING WINDOWS. OPENING WINDOW INSERTS TO TO BE TOP HUNG OPENING GLAZED FRAMES.	CONC: PATCH UP ALL HOLES AND CHIPS WITH A MIXTURE OF "LATEX" AND CEMENT. SMOOTH BEFORE DRY AND LEAVE NATURAL. ALUMINIUM: POWDER COATED AS PER MANUFACUTURERS SPECIFICATIONS AND DETAILS, COLOUR: TO RAND WATER ARCH APPROVAL. ALL TO RAND WATER ARCH. APPROVAL	MIN 6mm THK SATIN ETCH/MIST GLASS. TO RAND WATER ARCH APPROVAL.	FUNRITURE FOR OPENING WINDOWS TO BE AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS	REFER TO W1

FINISHING SCHEDULE

ROOM / AREA NAME	FLOOR				WALL TYPE			WALL FINISH				CEILING					ROOF		EXTERNAL			
	TYPE	SCREED	FINISH	SKIRTING	INTERNAL	CAVITY	EXTERNAL	NORTH	SOUTH	EAST	WEST	TYPE	FINISH	INSULATION	CORNICE	TRAP DOOR	RAFTER	COVERING	APRON	ROOF FINISH	EAVES OVERHANG	GABLE END
GUARD ROOM	CONC RAFT	SCREED	TILE	SKIRTING 1	CLAY STOCKBRICK	INSULATION	FACEBRICK	PAINT	PAINT	PAINT	PAINT & TILE 2	GYPSUM	PAINT	INSULATION	CORNICE	TRAP DOOR	RAFTER	ROOF SHEETING	APRON	ROOF PAINT	FASCIA	BARGE BOARD
TOILET	CONC RAFT	SCREED	TILE	N/A	CLAY STOCKBRICK	INSULATION	FACEBRICK	TILE 1	TILE 1	TILE 1	TILE 1	GYPSUM	PAINT	INSULATION	CORNICE	N/A	RAFTER	ROOF SHEETING	APRON	ROOF PAINT	FASCIA	BARGE BOARD
LOBBY	CONC RAFT	GRANO	GRANO	N/A	CLAY STOCKBRICK	INSULATION	FACEBRICK	N/A	N/A	N/A	N/A	GYPSUM	PAINT	N/A	CORNICE	N/A	RAFTER	ROOF SHEETING	APRON	ROOF PAINT	FASCIA	N/A

DOOR SCHEDULE

DOOR No:	No. OFF:	DOOR FRAME		DOOR LEAF		IRONMONGERY					NOTES
		FRAME TYPE	FRAME FINISH	DOOR TYPE	DOOR FINISH	LEVER FURNITURE	MORTICE LOCK	CYLINDER	CLOSERS	OTHER	
D1	1.0000	100x50mm MILD STEEL DOOR FRAME SIZED TO SUIT BULLET RESISTANT DOOR, ALL AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS	INSPECT SHOP PRIMER WHERE LOOSE PAINT OR RUST SPOTS OCCUR. WIRE BRUSH DOWN TO A BRIGHT METAL FINISH AND ENSURE THAT ALL AREAS ARE CLEAN DRY AND FREE OF DUST. TOUCH UP WITH METAL PRIMER, APPLY ONE COAT UNIVERSAL UNDERCOAT AND 2 COATS SUPER UNIVERSAL GLOSS ENAMEL PAINT IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. CONTRACTOR TO PROVIDE SPECIFICATIONS FOR RAND WATER ARCH. APPROVAL PRIOR TO PURCHASE. COLOUR TO RAND WATER ARCH. APPROVAL	MIN LEVEL G4 RATED, 950x2100mm HIGH BULLET RESISTANT DOOR INSTALLED AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS, FINISHED IN A VENEER WITH A CLEAR LACQUER. COLOUR TO RAND WATER ARCH. APPROVAL	VENEER WITH CLEAR LACQUER TO BE INSTALLED AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS. COLOUR TO RAND WATER ARCH APPROVAL.	DOOR FURNITURE AS PER DOOR MANUFACTURERS SPECIFICATIONS AND DETAILS. ALL TO RAND WATER ARCH APPROVAL.	MOTICE LOCK AS PER DOOR MANUFACTURERS SPECIFICATIONS AND DETAILS. ALL TO RAND WATER ARCH APPROVAL	CYLINDER AS PER DOOR MANUFACTURERS SPECIFICATIONS AND DETAILS, ALL TO RAND WATER ARCH APPROVAL.	N/A	"(ASSA ABBLOY) UNION" OR EQUAL AND APPROVED,8700SS FLOOR MOUNTED DOOR STOP. INSTALLATION AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS. POSITION TO BE DETERMINED ON SITE, ALL TO RAND WATER ARCH APPROVAL.	CONTRACTOR TO CHECK ALL OPENINGS AND DOOR SWINGS PRIOR TO INSTALLATION. FURNITURE SAMPLES TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL PRIOR TO PURCHASE. REFER TO PLANS FOR ACTUAL DOOR OPENING DIRECTION.
D2	1.0000	STANDARD STEEL DOUBLE REBATE 1.2mm GUAGE FACTORY PRIMED FRAME TO TAKE SPECIFIED DOOR	REFER TO D1	813x2032x44mm MERANTI FRAMED, LEDGED, BRACED & BOARDED, OPEN BACK DOOR LEAF AS PER MANUFACTURERS SPECIFICATIONS. SPECIFICATIONS TO BE SUBMITTED TO RAND WATER ARCH. FOR APPROVAL PRIOR TO PURCHASING.	FILL ALL CRACKS, SPLITS & NAIL HOLES WITH SUITABLE FILLER. SANDPAPER SMOOTH, REMOVE ALL DUST AND APPLY 2 COATS VARNISH. SANDPAPER BETWEEN COATS.	"(ASSA ABBLOY) UNION" OR EQUAL AND APPROVED CB612-05SC PROTEA LEVER FURNITURE (LEVER HANDEL DIRECTION TO SUIT DOOR SWING)	"(ASSA ABBLOY) UNION" OR EQUAL AND APPROVED (L22315-76SS) EURO PROFILE UPRIGHT LOCK CASE	"(ASSA ABBLOY) UNION" OR EQUAL AND APPROVED (2x18SC) EURO PROFILE CYLINDER	N/A	PICTOGRAM: "(ASSA ABBLOY) UNION" OR EQUAL & APPROVED, 152x152mm MODULAR ENGRAVED PLATE (AL5066E-06AS-E12) UNISEX "(ASSA ABBLOY) UNION" OR EQUAL & APPROVED, 152x152mm MODULAR ENGRAVED PLATE (AL5066E-06AS-E14) PARAPLEGIC	REFER TO D1

SANITARY SCHEDULE

TYPE MARK	LOCATION	DESCRIPTION
WC	TOILET	"VAAL" POTTERIES VITREOUS CHINA "PROTEA PAREPLEGIC" 90° OUTLET PAN (CODE 7502) AND MATCHING 9 LITRE CISTERN (CODE 710536) COMPLETE WITH LID, FITMENTS AND PURPOSE-MADE C.P. SIDE FLUSH LEVER MOUNTED ON WALL ADJACENT TO CISTERN (LEFT OR RIGHT). BOTTOM INLET WATER SUPPLY MUST BE ON SAME SIDE AS FLUSH LEVER. INSTALLATION TO BE ACCORDING TO MANUFACTURERS SPECIFICATION, TO BE CONNECTED INTO SOIL & WATER SYSTEM
WHB	TOILET	VAAL HIBISCUS WHITE VITREOUS CHINA WASH HAND BASIN BOLTED TO WALL WITH 2x 8mm PATENTED FIXING BOLTS, FIT 2x OFF ELBOW ACTION PILLARTAP (CHROME PLATED), 1x OFF BASIN WASTE, PLUG, BACKNUT, CHAIN & STAY, ANGLE REGULATING VALVES AND BOTTLE TRAP. INSTALLATION AS PER MANUFACTURERS SPECIFICATIONS. CONTRACTOR TO SUPPLY SPECIFICATIONS FOR RAND WATER ARCH. APPROVAL PRIOR TO PURCHASING.
CBR	TOILET	32mm? O/D 304 STAINLESS STEEL CISTERN BACK GRAB RAIL. 750mm WIDE (CENTRE LINE TO CENTRE LINE) & FROM WALL TO CENTRE LINE OF RAIL 206mm. 90mm O/D FLANGES DRILLED AND COUNTERSUNK FOR 3x FIXING SCREWS (RAILS ARE SUPPLIED WITH S/S SCREWS AND PLASTIC WALL PLUGS. FINISH: SATIN POLISHED.
DLSR	TOILET	304 STAINLESS STEEL DOG LEG SIDE RAIL, 32mm? O/D DOG LEG SIDE RAIL WITH 3x 90mm? O/D S/S FLANGES EACH 3x TIMES SCREWED TO WALL USING SUPPLIED S/S FIXING SCREWS AND PLASTIC WALL PLUGS. SATIN POLISHED FINISH.
VANITY	TOILET	32mm THICK POST FORMED MELAMINE CLAD CHIPBOARD SHELF WITH ALL EDGES CONCEALED, EACH 2x SCREWED (BRASS) TO 150x250mm STAINLESS STEEL GALLOW BRACKETS EACH BOLTED TO WALL, TO RAND WATER ARCH. APPROVAL. SHELF TO BE 820mm FROM FFL TO TOP OF SHELF.
GEYSER	GUARD ROOM	5L UNDER BASIN HIGH PRESSURE STORAGE WATER HEATER, COMPLETE WITH PRESSURE REDUSING & SAFETY VALVES. INSTALLATION TO BE AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS. WATER HEATER MUST BE SUITABLE FOR ANY COMMERCIAL TAP FITTINGS. CONTRACTOR TO PROVIDE SPECIFICATIONS FOR RAND WATER ARCH. APPROVAL PRIOR TO PURCHASING.
SINK	GUARD ROOM	STAINLESS STEEL SINGLE BOWL UNDER COUNTER SINK TO BE FITTED WITH SINGLE TAPHOLE CP. SINK MIXER WITH SWIVEL OUTLET & ANGLE REGULATING VALVES, SINK WASTE PLUG AND CHAIN. SINK TO BE FITTED INTO COUNTER TOP AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS (WORKTOP SURFACE CUTOUT TO SUIT SINK SIZE). CONTRACTOR TO PROVIDE SPECIFICATIONS FOR RAND WATER ARCH. APPROVAL

FLOOR FINISH SPECIFICATIONS

KEY NAME	DESCRIPTION
GRANO	30mm TOTAL THICKNESS STEEL TROWELLED GRANOLITHICFLOOR FINISH, LAID ONTO CONCRETE SURFACE BED BEFORE IT HAS MATURED. PANELS NOT TO EXCEED 9m² AND TO HAVE V~JOINTS. STEPS TO STAIRS AND DOOR THRESHOLDS MUST BE 20mm ROUNDED AND TO BE REEDED NEAR FRONT FOR A WIDTH OF 100mm, STOPPED 100mm FROM SIDES
SCREED	MIN 25mm THK STEEL TROWELED SCREED ON TOP OF CONC. SURFACE BED, PREPARED FOR FINISHING.
SKIRTING 1	75x19mm MERANTI TIMBER SKIRTING WITH TOP ROUNDED EDGE, FIXED TO WALL AT MIN. 800mm CRS. WITH STEEL WEDGE NAILS. ALL NAIL HEADS TO BE PUNCHED IN. SKIRTING SHALL BE CLOSE FITTED AND WITH ALL CORNERS PROPERLY MITRED
TILE	(GRADE A) PORCELAIN FLOOR TILES LAID, CLEANED AND SEALED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS. APPLY CLEAR NON SLIP COATING AS PER MANUFACTURERS SPECIFICATIONS, TILE EDGE TRIMMINGS TO RAND WATER ARCH. APPROVAL. CONTRACTOR TO PROVIDE SAMPLES & SPECIFICATIONS FOR RAND WATER ARCH. APPROVAL PRIOR PURCHASE. (±R200/m²)

WALL SPECIFICATIONS

KEY NAME	DESCRIPTION
CLAY STOCKBRICK	CLAY STOCKBRICKS (SABS APPROVED) WITH ONE COAT CEMENT PLASTER AND ONE COAT SMOOTH SKIM COAT FINISH. PREPARED FOR FINISH. BRICK SAMPLE TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL.
FACEBRICK	COROBRIK MAIZE TRAVERTINE FBS OR EQUAL AND APPROVED FACEBRICK WITH 10mm SQUARE RECESSED AND POLISHED HORIZONTAL AND VERTICAL JOINTS. BRICKFORCE (MIN. 2.5mm ?) AT EVERY 5th COURSE AND EVERY COURSE FOR 3 COURSES OVER OPENINGS, UNLESS OTHERWISE DETAILED. FACEBRICK TO MATCH EXISTS. OFFICE BUILDING SAMPLE TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL.
TILE 1	(GRADE A) CERAMIC WALL TILES GLUED TO WALL WITH TILE ADHESIVE APPLIED AS PER MANUFACTURERS SPECIFICATIONS TO THE HEIGHT AS SPECIFIED IN THE DRAWING. SMOOTH FINISH ALL TILING JOINTS WITH THE GROUT AND FILL JOINTS WHERE TILES MEET SANITARY FITTINGS WITH SILICONE SEALER. STAINLESS STEEL WALL TILE TRIMMINGS AT ALL JUNCTIONS, TO RAND WATER ARCH APPROVAL. SAMPLE TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL (± R200/m²)
TILE 2	(GRADE A) GLAZED CERAMIC WALL TILES (SPLASHBACK), 4x TILES HIGH & FOR FULL WIDTH OF FITTING GLUED TO THE WALL WITH TILE ADHESIVE APPLIED AS PER MANUFACTURERS SPECIFICATIONS. SMOOTH FINISH ALL TILING JOINTS WITH WHITE TILE GROUT AND FILL JOINTS WHERE TILES MEET SANITARY FITTINGS WITH WHITE SILICONE SEALER
WALL INSULATION	INSULATION TO COMPLY WITH REQUIRED R-VALUE, INSTALLED AS PER MANUFACTURERS SPECIFICATIONS & DETAILS. SPECIFICATIONS TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL PRIOR TO PURCHASING.
WALL PAINT	PREPARE TO MANUFACTURERS SPECIFICATION. APPLY PLASTER PRIMER & VELVET SHEEN FINISHED PAINT. COLOUR: TO RAND WATER ARCH. APPROVAL, SAMPLE & SPECIFICATIONS TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL PRIOR PURCHASING.

CEILING SPECIFICATION

A	B
KEY NAME	DESCRIPTION
CEILING PAINT	GYPSUM CEILING: PRIME ALL NAIL HEADS WITH APPROVED UNIVERSAL UNDERCOAT, FILL ALL HOLES WITH POLYCELL FILLER AS REQUIRED, SANDPAPER TO A SMOOTH FINISH. APPLY ONE COAT APPROVED PRIMER. (ALLOW TO DRY) FOLLOWED BY TWO COATS MATT WHITE PAINT.SAMPLE & SPECIFICATIONS TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL PRIOR PURCHASING.
CORNICE	GYPSUM CEILING: PRIME ALL NAIL HEADS WITH APPROVED UNIVERSAL UNDERCOAT, FILL ALL HOLES WITH POLYCELL FILLER AS REQUIRED, SANDPAPER TO A SMOOTH FINISH. APPLY ONE COAT APPROVED PRIMER. (ALLOW TO DRY) FOLLOWED BY TWO COATS MATT WHITE PAINT.SAMPLE & SPECIFICATIONS TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL PRIOR PURCHASING.A
GYPSUM	MIN. 9mm THK GYPSUM CEILING BOARDS WITH PLASTER SKIM COATING & PREPARED FOR PAINTING, COLOUR: TO RAND WATER ARCH. APPROVAL. RECESSED SHADOWLINE WALL ANGLE AT ALL CEILING TO WALL JUNCTIONS IN PLACE OF CORNICES. INSTALLATION AS PER MANUFACTURERS SPECIFICATIONS AT MAX. 150mm CENTRES TO CONCEALED GRID CEILING INSTALLED AS PER MANUFACTURERS SPECIFICATIONS AND DETAILS BY APPROVED INSTALLER. CONTRACTOR TO PROVIDE SPECIFICATIONS AND DETAILS FOR RAND WATER ARCH. AND ENG. APPROVAL PRIOR TO PURCHASING
INSULATION	INSULATION TO COMPLY WITH REQUIRED R-VALUE, INSTALLED AS PER MANUFACTURERS SPECIFICATIONS & DETAILS OVER ENTIRE CEILING SPACE. SPECIFICATIONS TO BE PROVIDED FOR RAND WATER ARCH. APPROVAL PRIOR TO PURCHASING.
TD	800x800mm PREFABRICATED TRAP DOOR WITH STEEL HINGES BUILT INTO CEILING, SUPPORTED BY 76x38mm S.A.PINE SURROUNDS, SECURELY FIXED TO ROOF OR CEILING STRUCTURE.

NOTES

- THESE ARCHITECTURAL DRAWINGS ARE PREPARED AS FUNCTIONAL DRAWINGS AND SHOULD BE USED FOR TENDER PURPOSES ONLY AND NOT FOR CONSTRUCTION PURPOSES.
- THIS DRAWING (INCLUDING ALL DIMENSIONS SHOWN) IS FOR INDICATIVE PURPOSES ONLY. A DETAILED DESIGN AND DRAWINGS MUST BE COMPLETED BY THE CONTRACTORS ARCHITECT AND SUBMITTED TO ARCH. FOR APPROVAL PRIOR TO CONSTRUCTION.
- ALL FURNITURE, EQUIPMENT AND SANITARY FITTINGS INDICATED ARE FOR INFORMATION PURPOSES ONLY FOR THE CONTRACTORS ARCH. TO COMPLETE HIS DESIGNS.
- THE CONTRACTORS ARCH. WILL BE RESPONSIBLE FOR CO-ORDINATION WITH ALL OTHER DISCIPLINE DRAWINGS.
- THIS DRAWING NEEDS TO BE READ IN CONJUNCTION WITH ALL OTHER DISCIPLINE DRAWINGS AND SPECIFICATIONS.
- ADDITIONALLY THIS DRAWING MUST ALSO BE READ IN CONJUNCTION WITH THE TENDER SPECIFICATIONS AND BOQ.
- ALL INSTALLATION TO BE IN STRICT ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS AND DETAILS.
- ALL FINISHES AND FURNITURE MUST BE APPROVED BY ARCH.
- DETAILED DRAWINGS OF WINDOW AND DOOR SCHEDULES, WHERE APPLICABLE, MUST BE PROVIDED FOR ARCH. APPROVAL.
- ALL OPENINGS, STRUCTURE POSITIONS, EXIST. SEWERAGE POSITIONS, ETC. MUST BE CONFIRMED ON SITE.
- NO WORK MAY COMMENCE UNTIL ALL DRAWINGS HAVE BEEN APPROVED

LEGEND:

01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS
DATE	NO.	REVISION / VARIATIONS	KC

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
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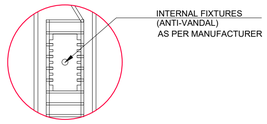
PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT WORKS (WWTW)

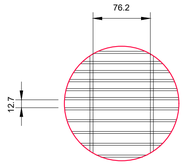
TITLE:
WWTW
PLAN AND SECTIONS OF GUARDHOUSE
SHEET 1 OF 3

DRAWING No.: K1004-533

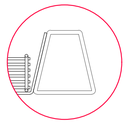
SCALE: AS SHOWN	DESIGNED: AG
	DRAWN: MB
DATE: APRIL 2025	APPROVED: BS
REV. NO. A B	



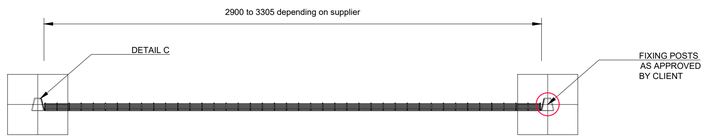
DETAIL A



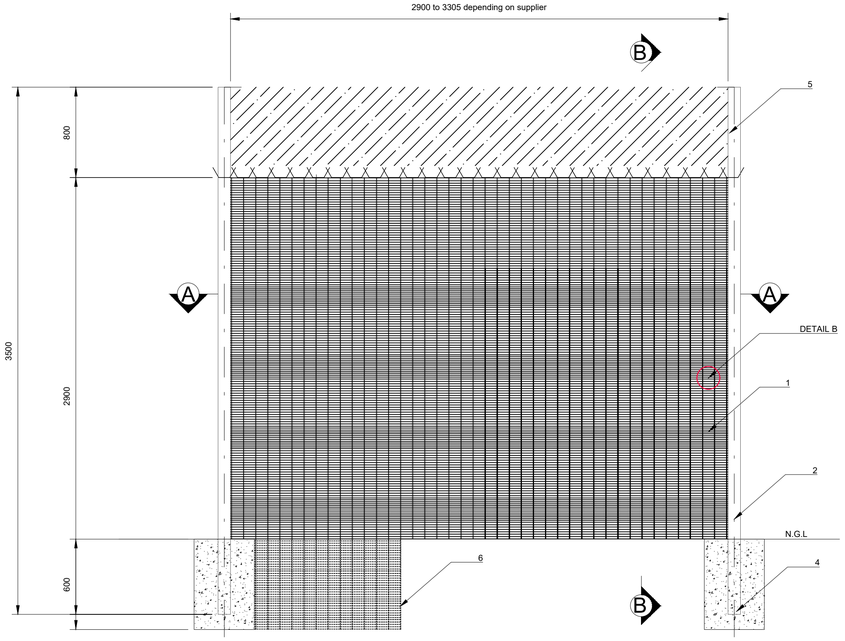
DETAIL B



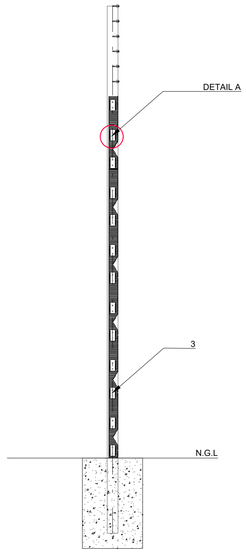
DETAIL C



SECTION A-A
SCALE 1:20



FRONT ELEVATION
SCALE 1:20



SECTION B-B
SCALE 1:20

CLEARVU FENCE SPECIFICATION
(This is a Minimum specification required

ITEM #	DESCRIPTION'	DESCRIPTION'
1	PANEL	2.4m High Security Clearvu or similar approved Galvanized Fence. 76x12.7mm Mesh apperture. Wire diameter of 3mm Horizontal and 4mm Vertical. 4 stiffening wire bend Internal fixtures-Anti Vandal/Climb etc
2	POST	Galvanized Taper Locking Post sealed with steel Cap
3	CLAMPS	Galvanized Single and Double combo Clamp or similar Approved
4	FOUNDATION	400x400x600mm 25 Mpa Concrete Foundation
5	TOPPING	Standard Electric fence complete with Energizers and comply with SANS 10222-3 or Latest Applicable regulation and 100mm high toughened steel shark tooth spike
6	UNDER DIG	600mm under dig/Anti-Burrow Clear VU mesh extension similar to the Fence in all respect

NOTES:

LEGEND:

DATE	NO.	REVISION / VARIATIONS	
01.09.25	A	ISSUED FOR TENDER	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
SEKHUKHUNE District Municipality
3 WEST STREET
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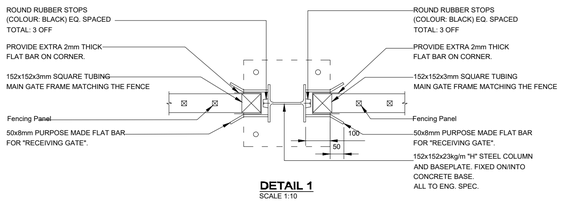
E-Mail .: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT PLANT (WWTP)

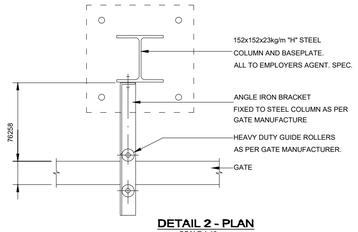
TITLE:
CLEARVU FENCE
LAYOUT 1

DRAWING No.: K1004 - 534

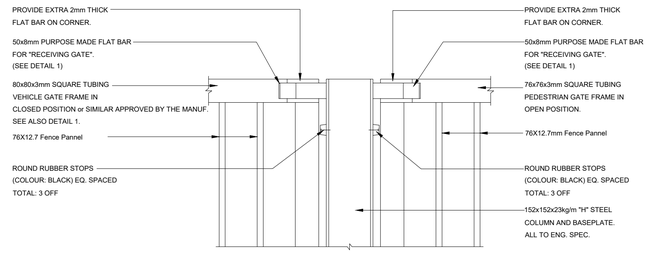
SCALE: N.T.S		DESIGNED:	AG
		DRAWN:	AG
DATE:	APRL 2025	APPROVED:	BS
REV. NO.	A		



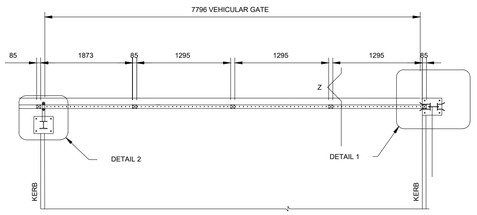
DETAIL 1
SCALE 1:10



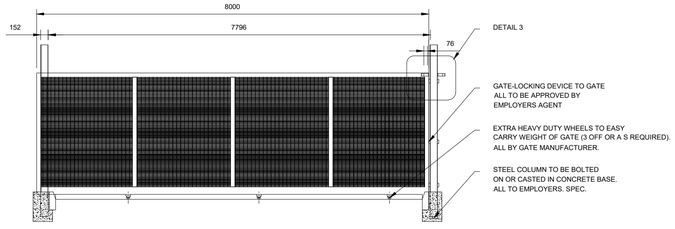
DETAIL 2 - PLAN
SCALE 1:10



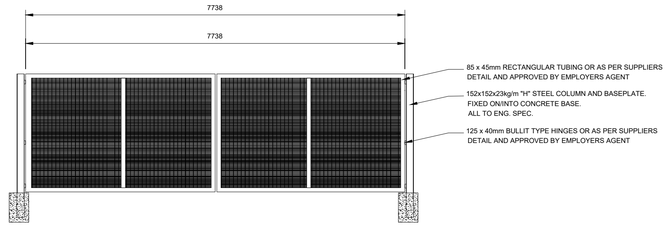
DETAIL 3 - ELEVATION
SCALE 1:10



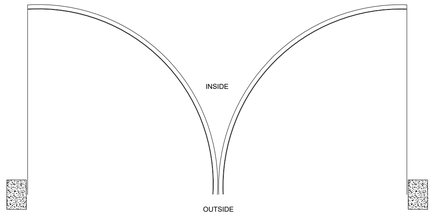
VEHICLE AND PEDESTRIAN GATE PLAN
SCALE 1:50



TYPICAL SLIDING GATE: ELEVATION
SCALE 1:50



TYPICAL DOUBLE SWING GATE: ELEVATION
SCALE 1:50



TYPICAL DOUBLE SWING GATE: PLAN
SCALE 1:50

NOTES:

LEGEND:

DATE	NO.	REVISION / VARIATIONS	
01.09.25	B	ISSUED FOR TENDER	BS
05.04.25	A	DETAIL DESIGN REPORT	BS

CLIENT:
SEKHUKHUNE DISTRICT MUNICIPALITY
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Tel No.: (013) 262 7300
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PROJECT ENGINEERS:
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E-Mail .: admin@kutloconsulting.co.za

PROJECT:
UPGRADING OF DENNILTON WASTE WATER TREATMENT PLANT (WWTP)

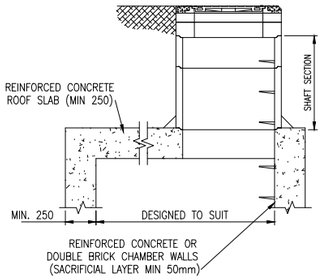
TITLE:
CLEARVU FENCE
SHEET 2 OF 2

DRAWING No.:	K1004 - 535		
SCALE: N.T.S		DESIGNED:	AG
		DRAWN:	AG
DATE:	APRIL 2025	APPROVED:	BS
REV. NO.	A B		

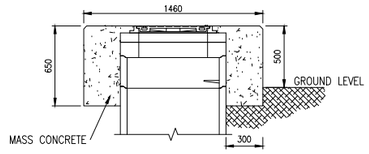
2025/04/09 14:39:42

NOTES :

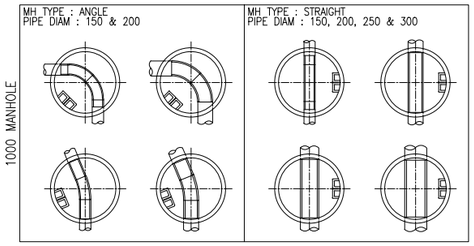
1. PRE-CAST CONCRETE MANHOLES AND SLABS, THE INSTALLATION AND CONSTRUCTION THEREOF TO COMPLY WITH SABS1294 AND SABS1200LD.
2. THE UPPERMOST SECTION OF THE CHAMBER OR SHAFT TO BE A 250mm SECTION.
3. MANHOLE SHAFTS AND STEP IRONS ARE TO BE PLACED OVER THE LARGEST LANDING ON THE DOWNSTREAM SIDE.
4. HORIZONTAL SPACING OF STEPS TO BE 150mm (+/- 12 mm).
5. PIPE SECTIONS AND SLABS TO BE BEDDED ON A 2:1 CEMENT MORTAR GROUT TO FORM A COMPACTED WATER-TIGHT JOINT OF APPROXIMATELY 5mm THICK.
6. MAXIMUM PROTRUSION OF PIPES INTO MANHOLES TO BE 50mm.
7. FOR LARGER PIPE DIAMETERS, DEEP SEWERS AND CHANNEL LAYOUTS NOT FITTING INSIDE STANDARD PRECAST MANHOLE SECTIONS, THE ENGINEER SHALL DESIGN A CHAMBER TO SUIT THE CONDITIONS.
8. MANHOLE COVERS SPECIFIED TO CARRY VEHICLE LOAD IN ROAD RESERVES AND SHALL BE THE POLYMER LOCKABLE TYPE TO RUSTENBURG LOCAL MUNICIPALITY SPECIFICATION AND APPROVAL.
9. IN ROADS, PAVED AREAS OR PEDESTRIAN WALKWAYS, THE TOP OF THE MANHOLE COVER SHALL BE AT THE SAME LEVEL AS THE FINISHED LEVEL OF THE SURROUNDING AREA.
10. THE COVER OF MANHOLES IN UNDEVELOPED AREAS OR MANHOLES ON OUTFALL SEWERS MUST BE +/- 500mm ABOVE NATURAL GROUND LEVEL.
11. MANHOLE CHANNELS ETC. TO BE VITRIFIED CLAY EVEN IF uPVC PIPES ARE USED IN THE RETICULATION.

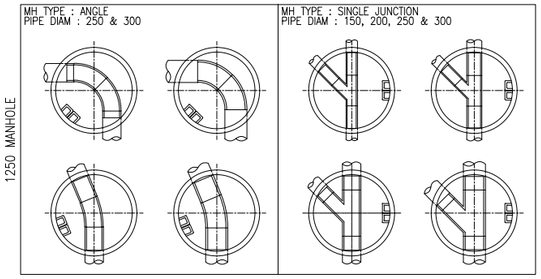


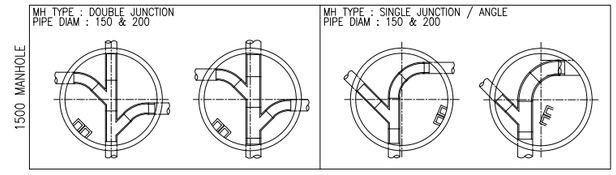
SPECIALLY DESIGNED CHAMBER

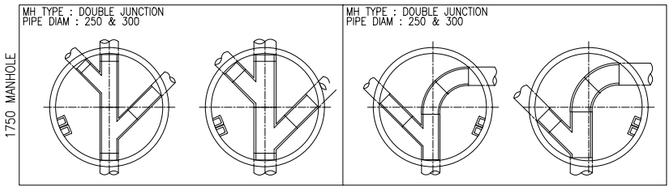


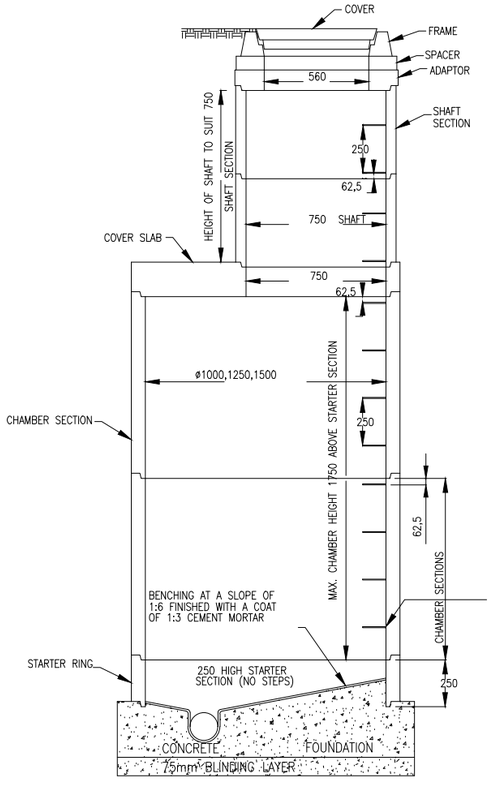
COVER ABOVE GROUND LEVEL



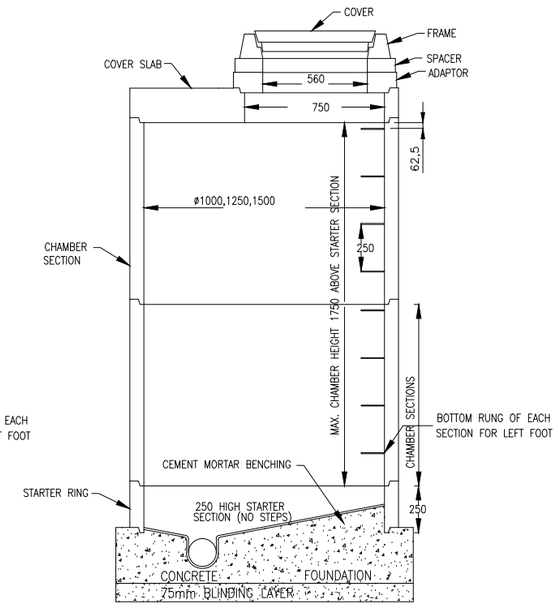








DEEP PRECAST CONCRETE MANHOLE



SHALLOW PRECAST CONCRETE MANHOLE

NOTES:

LEGEND:

DATE	NO.	REVISION / VARIATIONS	
01.09.25	A	ISSUED FOR TENDER	BS

CLIENT:

SEKHUKHUNE DISTRICT MUNICIPALITY

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0470

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PROJECT:

UPGRADING OF DENNILTON WASTE WATER TREATMENT PLANT (WWTP)

TITLE:

STANDARD DRAWING
TYPICAL MANHOLE DETAILS

DRAWING No.: K1004 - STD - 001

SCALE: N.T.S		DESIGNED:	AG
		DRAWN:	AG
DATE:	APRL 2025	APPROVED:	BS
REV. NO.	A		

2025/04/08 10:52:06