



**EXPANDED PUBLIC WORKS PROGRAMME
CONTRIBUTING TO A NATION AT WORK**

BID DOCUMENT FOR:

**REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS
BID NUMBER: VDM/TECH/24/04/2024/01**

CIDB Grade: 7ME or Higher

Closing date: 2 July 2025

Closing time: 12h00

**Venue: Tender box at the entrance of Vhembe District Municipality offices next to Khoroni Hotel
(Former Venda Tusk Hotel)**

Coordinates: 22°58'5.54"S & 30°27'26.62"E

Vhembe District Municipality Supply Chain Management: Contact: Sigida N.P Tel: (015) 960 2000	Vhembe District Municipality Technical Manager: Contact: W. Maluleke Tel: (015) 960 2000
Name of Bidder. Bid Amount (VAT Inclusive)	



PART: A: INVITATION TO BID: MBD1

YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF VHEMBE DISTRICT MUNICIPALITY					
BID NUMBER:	VDM/TECH/ 24/04/2024/01	CLOSING DATE:	02 July 2025	CLOSING TIME:	12:00
BID DESCRIPTION	REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS				
THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (MBD7) or SERVICE LEVEL AGREEMENT OF VHEMBE DISTRICT MUNICIPALITY.					
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT VHEMBE DISTRICT MUNICIPALITY OFFICES NEXT TO KHORONI HOTEL (FORMER VENDA TUSK HOTEL) not later than 12H00 on 02 July 2025 .					
An official and compulsory site inspection will be held on 04 June 2025 at 10H00 . Bidders are requested to meet at the entrance of Vhembe District Municipality, GPS Coordinates <u>22°58'5.54"S & 30°27'26.62"E</u>					
The Bid box is located at the entrance next to Khoroni Hotel (Former Venda Tusk Hotel) and is generally open 24 hours.					
Completed Bid document, fully priced and signed must be sealed in an envelope marked: "VDM/TECH/24/04/2024/01: REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS"					
Bidders should ensure that bids are delivered timeously to the correct address. If the bid is late, it will not be accepted for consideration.					
Bids documents containing the Conditions of Bid and other requirements in terms of the Supply Chain Management Policy will be downloaded from e-tender Publication Portal at www.etenders.gov.za at no fee.					
SUPPLIER INFORMATION					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
TAX COMPLIANCE STATUS	TCS PIN:		OR	CSD No:	
B-BBEE STATUS LEVEL NUMBER	-----		TOTAL BID PRICE		R



B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE [TICK APPLICABLE BOX]	☐ Yes ☐ No	B-BBEE STATUS LEVEL SWORN AFFIDAVIT	☐ Yes ☐ No
[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]			
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]
MINIMUM WORK OPPORTUNITIES TO BE CREATED	N/A	CIDB GRADING	6ME OR HIGHER
SIGNATURE OF BIDDER	.....	DATE	
CAPACITY UNDER WHICH THIS BID IS SIGNED			
BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO:		TECHNICAL INFORMATION MAY BE DIRECTED TO:	
MUNICIPALITY	VHEMBE DISTRICT	MUNICIPALITY	VHEMBE DISTRICT
CONTACT PERSON	SIGIDA. NP	CONTACT PERSON	MALULEKE W
TELEPHONE NUMBER	(015) 960 2000	TELEPHONE NUMBER	(015) 960 2000
FACSIMILE NUMBER	N/A	FACSIMILE NUMBER	N/A
E-MAIL ADDRESS		E-MAIL ADDRESS:	malulekew@vhembe.go v.za
		PRINCIPAL AGENT	MUTEO CONSULTING CC
		CONTACT PERSON	MR H MAKWARELA
		TELEPHONE NUMBER	(015) 291 4065
		E-MAIL ADDRESS:	mail@muteo.co.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:



Volume 1: Tender requirements, Contract and Pricing Data		
Number	Heading	Colour
Part T1: Tendering procedures		
T1.1	Tender Notice and Invitation to Tender	White
T1.2	Tender Data	Pink
T1.3	Standard and Particular Conditions to Tender	Pink
Part T2: Returnable Documents		
T2.1	List of Returnable Documents	Yellow
Part C1: Agreements and Contract Data		
C1.1	Form of Offer and Acceptance	White
C1.2	Contract Data	White
C1.3	Performance Guarantee	White
C1.4	Occupational Health and Safety Agreement	White
C1.5	Agreement with Adjudicator	White
Part C2: Pricing data		
C2.1	Pricing Instructions	Yellow
C2.2	Bill of Quantities	Yellow
Part C3: Scope of Work		
C3.1	Standard Specifications	Blue
C3.2	Project Specifications	Blue
C3.3	Technical Specifications-Mechanical Works Only	Blue
C3.4	Particular specifications	Blue
C3.5	Health and Safety Specification	Blue
Part C4: Site information		
C4	Site Information	Green



VHEMBE DISTRICT MUNICIPALITY

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T1 TENDERING PROCEDURES



T1.1 TENDER NOTICE AND INVITATION TO TENDER

BID NUMBER: VDM/TECH/24/04/2024/01: REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS

DIRECTORATE: TECHNICAL SERVICES

BUSINESS UNIT: ENGINEERING SERVICES

Bids are hereby invited for the REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS

The Council also reserves the right to negotiate further conditions and requirements with the successful bidder.

THIS BID IS SUBJECT TO THE, PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT AND THE PREFERENTIAL PROCUREMENT REGULATION, 2011, AND THE GENERAL CONDITIONS OF CONTRACT FOR CONSTRUCTION WORKS (THIRD EDITION) (2015) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.

The Municipality shall adjudicate and award bids in accordance with B-BBEE status level of contribution on 80/20-point system, 80 points for the price and 20 points for contribution. Prospective bidders must accept that the bid will be adjudicated, according to the said legislation. Bids will remain valid for 90 (ninety) days.

**Mr KUTAMA Z.N
MUNICIPAL MANAGER
PRIVATE BAG X5006
THOHOYANDOU
0950**

RESPONSIVENESS AND EVALUATION CRITERIA

1. RESPONSIVENESS CRITERIA

The Vhembe District Municipality will consider no Bid unless it meets the following responsiveness criteria:

- The bid must be properly received in a sealed envelope clearly indicating the description of the service and the bid number for which the bid is submitted.
- The bid must be deposited in the relevant bid box as indicated on the notice of the bid on or before the closing date and time of the bid.
- A valid CSD number must be submitted with the bid on or before the closing time and date of the bid.
- Copy of the company registration certificate must be submitted with the bid on or before the closing time and date of the bid.
- Submission of a Joint Venture Agreement, where applicable, which has been properly signed by all parties.
- Proof of payment of Municipal Rates and Taxes or letter for Tribal Authority or lease agreement must be attached.
- Complies with the requirements of the bid and technical specifications.
- Registered in the relevant contractor category in the Construction Industry Development Board Register of Contractors (CIDB).
- Adheres to Pricing Instructions.
- Financial ability to execute the contract.
- Comply in full and observe the requirements of the Notice to Bidders.
- Experience with similar work – demonstrate a track record of a similar scope and size

2. EVALUATION OF BIDS

- a) All bids received shall be evaluated in terms of the Supply Chain Management Regulations, Vhembe District Municipality Supply Chain Management Policy (on request from Municipality), the preferential procurement regulation 2011, and other applicable legislations.
- b) The Council reserves the right to accept all, some, or none of the bids submitted – either wholly or in part – and it is not obliged to accept the lowest bid.

By submitting this bid, bidder authorizes the Council or its delegate(s) to carry out any investigation deemed necessary to verify the correctness of the statements and documents submitted and that such documents reasonably reflect the ability of the Bidder to provide the goods and services required by the Council.

PLEASE NOTE

- 1. The Municipal Manager may cancel a contract awarded to a person if:**
 - a) The person committed a corrupt or fraudulent act during the procurement process or in the execution of the contract, or
 - i. An official or other role player committed any corrupt or fraudulent act during the procurement process or in the execution of the contract that benefited that person.
- 2. The Municipal Manager may reject the bid or quote of any person if that person or any of its directors has:**
 - a) Failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months;
 - b) Failed, during the last five years, to perform satisfactorily on a previous contract with the Vhembe District Municipality or any other organ of State after written notice was given to that bidder that performance was unsatisfactory;
 - c) Abused the supply chain management system of the Municipality or have committed any improper conduct in relation to this system;
 - d) Been convicted of fraud or corruption during the past five years;
 - e) Wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
 - f) 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) or has been listed on National Treasury's database as a person prohibited from doing business with public sector.

VHEMBE DISTRICT MUNICIPALITY**T1.2 TENDER DATA****1. CONDITIONS OF TENDER**

The conditions of tender are the Standard Conditions of Tender as contained in Annex F of the CIDB Standard for Uniformity in Construction Procurement (SFU) of May 2010, as published in Government Gazette No 33239, Board Notice 86 of 2010 of 28 May 2010. Those Standard Conditions of Tender remained the same as those published in the previous edition of the SFU as published in Government Gazette No 31823, Board Notice 12 of 2009 of 30 January 2009 - See www.cidb.org.za.

Each Tenderer shall obtain its own copy of the Standard Conditions of Tender.

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

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

Clause number	Tender Data
2. <u>EMPLOYER</u> Cl. F1.1	The "Employer" is "Vhembe District Municipality" The Employer's domicilium citandi et executandi (permanent physical business address) is: Vhembe District Municipality offices next to Khoroni Hotel (Former Venda Tusk Hotel) The Employer's address for communication relating to this project is: Vhembe District Municipality, Private Bag X5006, Thohoyandou, 0950
3. <u>TENDER DOCUMENTS</u> Cl. F.1.2	"The following documents form part of this tender: VOLUME 1 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

Clause number	Tender Data												
	T2.2 Returnable Schedules that will be incorporated into the Contract Part C1 Agreements and Contract Data C1.1 Form of offer and acceptance C1.2 Contract data C1.3 Demand Guarantee and Retention Money Guarantee C1.4 Agreement in terms of Occupational Health and Safety Part C2 Pricing Data C2.1 Pricing Instructions C2.2 Bill of Quantities Part C3 Scope of Work C3.1 Standard Specifications C3.2 Project Specifications C3.3 Technical Specifications-Mechanical Works Only C3.4 Particular Specifications C3.5 Health and Safety Specifications Part C4 Site information C4 Site Information VOLUME 2 The bid does not have new drawings. As built drawings will be updated during construction												
4. <u>EMPLOYER'S AGENT</u> Cl. F.1.4	The Employer's agent is: Principal Agent Muteo Consulting CC <table border="0"> <tr> <td><u>Physical Address:</u></td> <td><u>Postal Address:</u></td> </tr> <tr> <td>39 Grobler Str.</td> <td>P.O. Box 6196</td> </tr> <tr> <td>Polokwane</td> <td>Polokwane North</td> </tr> <tr> <td>0699</td> <td>0750</td> </tr> <tr> <td>Tel.: (015) 291 4065</td> <td>Fax: (015) 291 4043</td> </tr> <tr> <td>E-mail: mail@muteo.co.za</td> <td></td> </tr> </table>	<u>Physical Address:</u>	<u>Postal Address:</u>	39 Grobler Str.	P.O. Box 6196	Polokwane	Polokwane North	0699	0750	Tel.: (015) 291 4065	Fax: (015) 291 4043	E-mail: mail@muteo.co.za	
<u>Physical Address:</u>	<u>Postal Address:</u>												
39 Grobler Str.	P.O. Box 6196												
Polokwane	Polokwane North												
0699	0750												
Tel.: (015) 291 4065	Fax: (015) 291 4043												
E-mail: mail@muteo.co.za													
5. <u>TENDERER'S OBLIGATIONS</u>													
5.1. <u>Eligibility</u> Cl. F.2.1	Only those tenderers who can demonstrate that they will have in their employ management and supervisory staff satisfying the requirement of the scope of work for labour-intensive competencies for supervisory and management staff during the validity of the contract are eligible to submit tenders												
5.2. <u>F2.18</u>	The tenderer must submit to the Employer, 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.												

Clause number	Tender Data
5.3. <u>Site Visit and Clarification Meeting</u> Cl. F.2.7	The arrangements for a compulsory pre-tender meeting are: Location: Vhembe District Municipality offices next to Khoroni Hotel (Former Venda Tusk Hotel) Date:04 June 2025 at 10H00
5.4. <u>Insurance</u> Cl. F.2.9	No insurance cover will be provided by the Employer.
5.5. <u>Alternative Tender Offers</u> Cl. F. 2.12	Unless anything to the contrary has been determined in the Contract Data, a Tenderer may, together with his tender for the original designs contained in the contract documents, submit alternative designs and tender offers for consideration. All designs, calculations, drawings and Operation and Maintenance manuals shall be fully endorsed by a third party registered engineer, accomplished in such specific field of practice and the cost thereof shall be borne solely by the Contractor. Such alternative designs and offers shall be subject to the following conditions and requirements: 5.4.1. <u>Tenders</u> An alternative offer or design will be considered only if the tender for the original items has been fully priced and completed. The alternative tender offer is to be submitted in the same envelope as the main tender offer, together with a schedule that compares the requirements of the tender documents with the alternative requirements the Tenderer proposes. No alternative tender will be considered unless a tender free from qualifications is also submitted. Unless the alternative offer stipulates to the contrary, it shall be assumed that the period for completion of the Works shall be the same as for the original design. Designs, calculations, drawings and a modified schedule of quantities (as determined hereafter) in respect of each alternative offer or design shall accompany the alternative tender offer and shall be endorsed fully by a third party registered engineer, accomplished in such specific field of practice. 5.4.2. <u>Preliminary calculations</u> Preliminary calculations for an alternative design shall be submitted with the tender. Such calculations shall give adequate details so as to enable an assessment to be made of the general efficacy of the design and of its principal elements, also of the degree to which the design prescriptions and codes of the Employer are being complied with. The calculations shall be clear and in a logical sequence and shall clearly reflect all the design assumptions.

Clause number	Tender Data
	5.4.3. <u>Preliminary drawings</u> Preliminary drawings of the alternative designs shall also be submitted with the tender. These drawings shall comprise adequate layout plans, elevations and sections and shall clearly illustrate the general efficacy of the design and its principal elements. 5.4.4. <u>Quantities</u> Each alternative offer shall be accompanied by a modified priced schedule of quantities compiled in accordance with the specifications, in so far as it is applicable, which clearly shows the manner in which the price for the alternative offer has been determined and the items in the original schedule of quantities which fall away or are being changed. In addition to the schedule of quantities, a set of calculations shall be supplied to show how the quantities have been determined. All assumptions in regard to factors which will determine quantities shall be clearly and conspicuously marked by underlining or colouring, and shall indicate whether or not the assumptions have been based on information furnished in the Contract Data (with the necessary references). 5.4.5. <u>Further details</u> Should the Employer's Agent find that the calculations and drawings submitted for alternative designs are not complete enough for proper adjudication of the alternative designs, the Employer reserves to itself the right to call on the Tenderer to submit such further calculations and drawings as may be required. If such further details are not submitted within ten days of having been requested, the alternative designs will not be given further consideration. 5.4.6. <u>Preliminary adjudication of alternative designs</u> The Employer's Agent will undertake a preliminary scrutiny of any alternative designs for compliance with the specified requirements of the Employer. Should he find any mistakes or unsatisfactory aspects, he may afford the Bidder the opportunity to rectify them within a period to be determined by the Employer's Agent. However, it is emphasized that the preliminary scrutiny of the design and tender by the Employer's Agent, by its very nature, cannot be comprehensive, and no guarantee can be given in this regard that all the mistakes made by the Bidder will in fact be detected. Any correction of such mistakes shall be made with the tender price of the bidder being retained, and, wherever necessary, the priced schedule of quantities for the alternative design shall be adjusted accordingly.

Clause number	Tender Data
	5.4.7. <u>Acceptance of alternative design</u> The Bidder shall note that the acceptance of a tender which includes alternative designs shall mean that the alternative designs have been approved in principle only. If the final calculations, drawings and details do not comply with the specified requirements, such alternative designs may be rejected, unless they are suitably amended by the Bidder so as to be acceptable to the Employer. 5.4.8. <u>Final drawings and calculations and the priced schedule of quantities</u> Where a tender with an alternative design has been accepted, the Contractor shall, not less than two (2) months before he intends starting with the construction of such design, submit to the Employer's Agent a complete set of working drawings, detailed calculations and a complete schedule of quantities, for approval. The schedule of quantities shall be based on the preliminary schedule of quantities, but with the necessary adjustments in quantities and prices and with the tendered price for the alternative design being retained. Within three weeks of having received the above, the Employer's Agent will indicate which drawings, calculations, quantities, prices and other particulars are acceptable to him and which not, with reasons furnished. The Contractor shall then submit to the Employer's Agent in good time any modified drawings and other particulars for approval, for which he will require two (2) weeks. Any delay arising from the fact that the amended particulars do not meet the requirements shall be the responsibility of the Contractor. No work which will be affected by an alternative design may be commenced, unless the drawings, schedule of quantities and prices for such alternative design have been approved. Should the Contractor fail to modify any drawings, calculations, quantities, prices or any other particulars to the satisfaction of the Employer's Agent, the alternative design will be rejected and the original design shall be constructed for the same amount as has been tendered for the alternative design. 5.4.9. <u>Responsibility for alternative design</u> The approval of a design by the Employer's Agent shall not in any way relieve the Bidder of his responsibility to produce a design which conforms in all respects to all the specified requirements and which will be suitable for the purpose envisaged. Should it appear later during construction or during the maintenance period that the design does not conform to the specified requirements, the Contractor only, shall be liable for any damage arising there from

Clause number	Tender Data
	and he shall, at his own expense, do all the necessary work to ensure that the Works conforms to all the specified requirements. 5.4.10. <u>Indemnity</u> Once the alternative design has been approved, the Contractor shall indemnify and hold harmless the Employer, its agents and assigns, against all claims howsoever arising out of the said design whether in contract or delict.
5.1. <u>Submitting a Tender Offer</u> Cl. F2.13	5.5.1. <u>Whole of the Works</u> (Cl. F.2.13.1) Tenderers shall offer to provide for the whole of the Works identified. 5.5.2. <u>Original tender documents</u> (Cl. F2.13.3) The original tender document, issued to the Bidder, shall be submitted in its enti. No copies are required. 5.5.3. <u>Marking of Tender Submissions</u> (Cl. F2.13.5) The complete tender documents shall be enclosed and sealed in a single envelope, marked: “BID NO. VDM/TECH/24/04/2024/01: REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS”. The Employer’s address for delivery of tender offers to be shown on each tender submission package is Tender Box located at: Vhembe District Municipality Vhembe District Municipality offices next to Khoroni Hotel (Former Venda Tusk Hotel) 5.5.4. <u>Two (2) envelope system</u> (Cl. F.2.13.6) A two (2)-envelope procedure will not be followed. 5.5.5. <u>Closing time</u> (Cl. F.2.15) The closing time for submission of tender offers is: 12H00 Telegraphic, telephonic, telex, facsimile, e-mail, electronic and late tender offers will not be accepted. 5.5.6. <u>Tender offer validity</u> (Cl. F.2.16) The tender offer validity period is 90 days after tender closing date.

Clause number	Tender Data
	5.5.7. <u>Clarification of tender offer after submission</u> (Cl. F.2.17) Delete the last part of the second sentence, commencing with the word “and”. Furthermore, delete the last two (2) sentences of Cl. F.2.17. Add the following sentence: “The rates stated by the Bidder shall be binding”. 5.5.8. <u>Provide other Material</u> (Cl. F.2.18.1) Upon request by the Employer, the Bidder shall promptly supply any other material that has a bearing on the tender offer, the bidder’s commercial position (including, where applicable, notarized joint venture agreements), Referencing arrangements, or samples of materials, considered necessary by the Employer for the purpose of a full and fair assessment. Should the Bidder not provide the information or material called for, by the time for submission stated in the Employer’s request, the Employer will regard the tender offer as being non-responsive. 5.5.9. <u>Certificates</u> (Cl. F.2.23) The following certificates are to be provided with this tender: a) CSD Report, b) Compensation Fund registration certificate, c) Certificate of Contractor Registration issued by the Construction Industry Development Board or a copy of the application Form for registration in terms of the Construction Industry Development Board Act (Form F006). A minimum grading of 7ME is required. <u>Important Note:</u> Failure to provide the required particulars as per the above-listed certificates implies a non-responsive tender and warrants rejection of the tender on account of non-compliance with the requirements of the Tender Data.
6. <u>EMPLOYER’S UNDERTAKING</u>	
6.1. <u>Opening of Tender Submissions</u> Cl. F.3.4	The time and location for opening of the tender offers are: Time: 02 July 2025 at 12:00 Location: Vhembe District Municipality offices next to Khoroni Hotel (Former Venda Tusk Hotel)
6.2. <u>Arithmetical Errors</u> Cl. F.3.9.1	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

Clause number	Tender Data
	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.
<u>7. ACCEPTANCE</u> <u>OF TENDER OFFER</u> Cl. F3.13	Tender offers will only be accepted if: a) CSD summary report; b) The bidder is registered with the Construction Industry Development Board in an appropriate contractor grading designation. A minimum grading of 6ME is required for the main contractor; c) The bidder has demonstrated previous experience with the type of work required under this contract having successfully completed a project of similar scope and size. d) The bidder or any of its principals 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; and e) The bidder has not abused the Employer's Supply Chain Management System. f) The bidder has not failed to perform on any previous contract. g) Has complete the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the bidder's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.
<u>8. PROVIDE</u> <u>COPIES OF THE</u> <u>CONTRACT</u> <u>DOCUMENT</u> Cl. F.3.18	The number of paper copies of the signed Contract to be provided by the Employer to the successful bidder is one.

T1.3 STANDARD AND PARTICULAR CONDITIONS TO TENDER

ANNEXURE A**SUPPLY CHAIN MANAGEMENT
EVALUATION PROCESS AND CRITERIA**

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

1. Administrative Compliance – Phase One

1.1 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.

1.2 **Critical Criteria:**

The following critical criteria have been identified for this bid and any non-compliance thereto will lead to the bid being regarded as non-responsive and disqualified from further evaluation:

- Provide Central Supplier Database (CSD) number (**Attach CSD registration summary report**)
- All Pages of the Bid document must be initialled.
- Compulsory site inspection attended.
- Completed and signed declaration of interest (**MBD4**)
- Completed and signed declaration on past SCM practices form (**MBD8**)
- Compulsory enterprise questionnaire completed
- Signed J/V agreement must be attached (Where applicable)
- Proof of registration with CIDB attached.
- Complete **MBD 5** and submit audited or reviewed statements (**AFS**) – (only where the tender amount exceeds **R10Mil-** including VAT)
- Proof of Municipal Rates and Taxes or letter for Tribal Authority or lease agreement must be attached (Not older than 3 months).

2. Functionality – Phase Two (2) (100 points allocation)
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The bidders who complied administratively are considered for further evaluation on ability to execute the project. 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 for functionality as per the bid invitation.

2.1 A. Company's Experience & References (30)

No.	Target goals Name reference with contact details (Projects involving water mechanical works/water and waste water treatment works) for the previous five years	Weighting	Score
1.		12	
2.		12	
3.		12	
4		12	
5		12	
	SUBTOTAL: Experience & References	60	

Note: Please attach appointment letters and signed completion certificate issued by the client as proof for having completed such project.

If the service provider is sub contracted the main contractor's appointment letter and completion certificate should be attached, together with the appointment letter of the subcontractor and completion certificate of the work done by the subcontractor

2.2 Representative experience

No.	Target goal (attach CV & Certified copy of Qualifications)	Weighting	Score
1.	Contract manager in involving water mechanical works/ water and waste water treatment works 10 years and above = 4 6-9 years = 3 3-5 years = 2 1-2 years = 1	4	
2.	Site agent in involving water mechanical works/ water and waste water treatment works 8 years and above = 4 5-7 years = 3 3-4 years = 2 1-2 years = 1	4	
3.	Foreman in involving water mechanical works /water and waste water treatment works 5 years and above = 2 4 years = 0.75 3 years = 0.5 1-2=0.5	2	
4.	Health & Safety Officer years' experience as OHS in involving water mechanical works/ water and waste water treatment works 5 years and above = 1 4 years and below=0.75 3yrs=0.5 1-2 yrs =0.25	1	
	SUBTOTAL: Representative experience	11	

Note: Project organogram of the project team must be attached. Curriculum vitae with certified copies of qualifications and contact details should be attached to the tender document for verification by the clients.

NB foreign qualifications certified copies from SAQA must also be attached.

2.3 Representative Qualification

No.	Target goals	Weighting	Score
1.	Contract Manager BSc/B.Tech or higher in mechanical = 4 National Diploma mechanical =3 N6=2 Certificate in mechanical =1	4	
2.	Site Agent National Diploma in mechanical = 4 N6=2 Certificate in mechanical = 1	4	
3	Foreman Artisan (trade test) in mechanical or higher=2 Certificate in mechanical =1	2	
4	Health and Safety National Diploma or higher=1 Certificate in mechanical =0.5	1	
	SUBTOTAL: Representative Qualification	11	

Note: Project organogram of the project team should be attached. Curriculum vitae with certified copies of qualifications and contact details should be attached to the tender document for verification by the clients.

NB foreign qualifications certified copies from SAQA must also be attached.

2.4 Financial Reference

No.	Target goals	Weighting	Score
1.	Tenderer submitted bank details proof attached	2	
2.	Bank rating "C" or better	4	
3.	Registered financial institution's full details as guarantor in the amount of 10% as specification for surety purposes shall be submitted	2	
	SUBTOTAL: Financial references	8	

2.5 Plants & Equipment

No.	Target goals	Weighting	Score
1.	Crane Truck X 1	4	
2.	Jack hammer	1	
3.	TLB X 1	2	
4	LDV	1	
5	8 TON Flatbed	2	
	SUBTOTAL: Plant & equipment	10	

Note: Proof of ownership to be submitted with tender. If plant will be hired, a signed letter from plant Hire Company confirming availability to the service provider for this particular contract and the ownership documents from the hiring company

2.6 Summary of tables 2.1-2.5

No.	Summary of tables	Weighting	Score
1.	Experience & References	60	
2.	Representative experience	11	
3.	Financial references	08	
4.	Representative Qualifications	11	
5.	Plants & Equipment	10	
	Sub-Total	100	
	PRICE	80	
	Specific Goals	20	
	HDI-CSD	10	
	Locality -04 points within the district -02 points within Limpopo province -01 point within south Africa(CSD report will be used to verify the locality of the bidder	4	
	Youth-ID or CSD	02	
	Women –ID or CSD	02	
	Disability(attach proof from the doctor-medical certificate	02	

NB: Functionality will be scored out of 100 and Bidders who do not reach the 70% threshold will not be evaluated further.

2.7 Commercial Risk Analysis

Prior to being recommended for further evaluation, a bid will be subjected to risk analysis to ensure that it would, if accepted, not place the Municipality or the bidder, at undue risk.

A risk analysis will be performed to ascertain if any of the following might present an unacceptable commercial risk to the Municipality:

- Unduly low tendered sums
- Unduly high individual rates
- Unduly low rates
- Imbalances in pricing

It is in the best interests of the Municipality to amend an error which will cause the bid to be rejected on the basis of it presenting an unacceptable commercial risk.

❖ EVALUATION OF BIDS

All bids received shall be evaluated in terms of the Supply Chain Management Regulations, Vhembe District Municipality Supply Chain Management Policy (on request from Municipality), the preferential procurement regulation 2011, and other applicable legislations.

The Council reserves the right to accept all, some, or none of the bids submitted – either wholly or in part – and it is not obliged **to accept the lowest bid**.

- ❖ **By submitting this bid, bidder authorizes the Council or its delegate(s) to carry out any investigation deemed necessary to verify the correctness of the statements and documents submitted and that such documents reasonably reflect the ability of the Bidder to provide the goods and services required by the Council.**

PLEASE NOTE

- ❖ **The Municipal Manager may cancel a contract awarded to a person if:**

The person committed a corrupt or fraudulent act during the procurement process or in the execution of the contract, or

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

- ❖ **The Municipal Manager may reject the bid or quote of any person if that person or any of its directors has:**

- a) Failed to pay municipal rates and taxes or municipal service charges and such rates, taxes and charges are in arrears for more than three months;
- b) Failed, during the last five years, to perform satisfactorily on a previous contract with the Vhembe District Municipality or any other organ of State after written notice was given to that bidder that performance was unsatisfactory;
- c) Abused the supply chain management system of the Municipality or have committed any improper conduct in relation to this system;
- d) Been convicted of fraud or corruption during the past five years;
- e) Wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract during the past five years; or
- f) 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) or has been listed on National Treasury's database as a person prohibited from doing business with public sector.

2.8 Tendered rates

Rates for all the bids which have complied with the bid conditions will be assessed for the following:

- Comparison of rates and amounts with the average tendered amount.
- Sensitivity Analysis of Rates (i.e. whether the rates are balanced, acceptable, etc).
- Expected cash flows requirements.

NB: Bids with unbalanced rates will be disqualified for further evaluation on price and preference points system

3 Business Registration

Prospective bidders shall be registered:

- (a) With the South African Revenue Services for all categories of taxes applicable to it.
- (b) With the Compensation Commissioner
- (c) With the Construction Industry Development Board. (Minimum grading **7ME**).

4 Acceptance of Tender Offer (Cl. F3.13)

Tender offers will only be accepted if:

- a) The bidder has in his or her possession a Central Suppliers Database Registration Number (CSD Number);
- b) The bidder is registered with the Construction Industry Development Board in an appropriate contractor grading designation. (Minimum grading of **7ME** is required);
- c) The bidder or any of its principals 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; and
- d) The bidder has not abused the Employer's Supply Chain Management System.
- e) The bidder has not failed to perform on any previous contract.
- f) has complete the Compulsory Enterprise Questionnaire and there are no conflicts of interest which may impact on the bidder's ability to perform the contract in the best interests of the employer or potentially compromise the tender process.

5. Provide copies of the Contract Document (Cl. F3.18)

The number of paper copies of the signed Contract to be provided by the Employer to the successful bidder is **one**.

ANNEXURE B: Standard Conditions of Tender**F.1 General****F.1.1 Actions**

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.

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 for the calling for expressions of interest, the following definitions apply:

- a) **Comparative offer** means the Tenderer's financial offer after the factors of non-firm prices, all unconditional discounts and any other Tendered parameters that will affect the value of the financial offer have been taken into consideration
- b) **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
- c) **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
- d) **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 read, copied and recorded. Writing 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.2 Tenderer's obligations**F.2.1 Eligibility**

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.2.2 Cost of Tendering

Accept that 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 satisfy requirements.

F.2.3 Check documents

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

F.2.4 Confidentiality and copyright 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

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** Submit alternative tender offer only if a main tender offer, strictly in accordance with all the requirements of the tender document, is also submitted. The alternative tender offer is to be submitted with the main tender offer together with a schedule that compares the requirements of the tender document with the alternative requirements the tenderer proposes.
- 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 a Tender offer 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 in black 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 (2)-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.2.14 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. Proof of posting shall not be accepted as proof of delivery. The employer shall not accept Tender offers submitted by telegraph, telex, facsimile or e-mail, unless stated otherwise in the Tender data.

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

F.2.16 Tender offer validity

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

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

F.2.17 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 total of the prices or substance of the Tender offer is sought, offered, or permitted. The total of the prices stated by the Tenderer shall be binding upon the Tenderer.

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

F.2.18 Provide other material

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

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

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

F.2.19 Inspections, tests and analysis

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

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

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

F.2.21 Check final draft

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

F.2.22 Return of other Tender documents

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

F.2.23 Certificates

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

F.3 The employer's undertakings

F.3.1 Respond to clarification

Respond to a request for clarification received up to five working days before the Tender closing time stated in the Tender Data and notify all Tenderers who drew procurement documents.

F.3.2 Issue Addenda

If necessary, issue addenda that may amend or amplify the Tender documents to each Tenderer during the period from the date that Tender documents are available until seven days before the Tender closing time stated in the Tender Data. If, as a result a Tenderer applies for an extension to the closing time stated in the Tender

Data, the Employer may grant such extension and, shall then notify all Tenderers who drew documents.

F.3.3 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 (2)-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, the total of his prices, preferences claimed and time for completion, if any, 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 (2)-envelope system

F.3.5.1 Where stated in the Tender data that a two (2)-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, on 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) Detrimentially affect the scope, quality, or performance of the works, services or supply identified in the Scope of Work,
- b) 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

F.3.9.1 Check responsive Tender offers for arithmetical errors, correcting them in the following manner:

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

F.3.9.2 Consider the rejection of a Tender offer if the Tenderer does not correct or accept the correction of his arithmetical errors in the manner described in F.3.9.1.

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 it using the Tender evaluation method that is indicated in the Tender Data and described below:

Method 1: Financial offer	1) Rank Tender offers from the most favourable to the least favourable comparative offer.
	2) Recommend highest ranked Tenderer for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 2: Financial offer and preferences	1) Score Tender evaluation points for financial offer.
	2) Confirm that Tenderers are eligible for the preferences claimed and if so, score Tender evaluation points for Preferencing.
	3) Calculate total Tender evaluation points.
	4) Rank Tender offers from the highest number of Tender evaluation points to the lowest.
	5) Recommend Tenderer with the highest number of Tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 3: Financial offer and quality	1) Score quality, rejecting all Tender offers that fail to score the minimum number of points for quality stated in the Tender data.
	2) Score Tender evaluation points for financial offer.
	3) Calculate total Tender evaluation points.
	4) Rank Tender offers from the highest number of Tender evaluation points to the lowest.
	5) Recommend Tenderer with the highest number of Tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
Method 4: Financial offer, quality and preferences	1) Score quality, rejecting all Tender offers that fail to score the minimum number of points for quality stated in the Tender data.
	2) Score Tender evaluation points for financial offer.
	3) Confirm that Tenderers are eligible for the preferences claimed, and if so, score Tender evaluation points for Preferencing.
	4) Calculate total Tender evaluation points.
	5) Rank Tender offers from the highest number of Tender evaluation points to the lowest.

	6) Recommend Tenderer with the highest number of Tender evaluation points for the award of the contract, unless there are compelling and justifiable reasons not to do so.
--	--

Score financial offers, preferences and quality, as relevant, to two (2) decimal places.

F.3.11.2 Scoring Financial Offers

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

$$NFO = W1 \times A$$

where:

- NFO = the number of Tender evaluation points awarded for the financial offer.
- W1 = the maximum possible number of Tender evaluation points awarded for the financial offer as stated in the Tender Data.
- A = a number calculated using either formulas 1 or 2 below as stated in the Tender Data.

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

where:

- P_m = the comparative offer of the most favourable Tender offer.
- P = the comparative offer of Tender offer under consideration.

F.3.11.3 Scoring quality (functionality)

Score quality in each of the categories in accordance with the Tender Data and calculate total score for quality.

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

F.3.13.1 Accept Tender offer only if the Tenderer complies with the legal requirements stated in the Tender Data.

F.3.13.2 Notify the successful Tenderer of the employer's acceptance of his Tender offer by completing and returning one copy of the form of offer and acceptance before the expiry of the validity period stated in the Tender data, or agreed additional period. Providing the form of offer and acceptance does not contain any qualifying

statements, it will constitute the formation of a contract between the employer and the successful Tenderer as described in the form of offer and acceptance.

F.3.14 Notice to unsuccessful Tenderers

After the successful Tenderer, has acknowledged the employer's notice of acceptance, notify other Tenderers that their Tender offers have not been accepted.

F.3.15. Prepare contract documents

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

- a) addenda issued during the Tender period,
- b) inclusion of some of the returnable documents,
- c) other revisions agreed between the employer and the successful Tenderer, and
- d) the schedule of deviations attached to the form of offer and acceptance, if any.

F.3.16 Issue final contract

Prepare and issue the final draft of contract documents to the successful Tenderer for acceptance as soon as possible after the date of the employer's signing of the form of offer and acceptance (including the schedule of deviations, if any). Only those documents that the conditions of Tender require the Tenderer to submit, after acceptance by the employer, shall be included.

F.3.17 Complete adjudicator's contract

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

F.3.18 Provide copies of the contracts

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

A: SCHEDULE OF LABOUR CONTENT

The Tenderer must complete the table below to reflect the labour force anticipated to be employed on this contract, including labour employed by sub-contractors.

The specified target value is **6%** of the contract value

Type of Labour	Man-hours	Minimum Wage Rate per Unit	Total Wage Cost (Excl. VAT)
Permanent Labour			
Temporary Labour			
SMME/HDI's Labour			
TOTAL PERCENTAGE			

Notes to Tenderer:

- (1) Labour is defined as hourly paid personnel.
- (2) The penalty will be applied for non-compliance during the contract or for fraudulent disclosure
- (3) The minimum wage rate to be R191.60 per day

SIGNED ON BEHALF OF THE TENDERER:

B: EMPLOYMENT OF AFFIRMATIVE BUSINESS ENTERPRISE (ABE)

Target values of work to be executed by and goods & services to be procured from ABEs shall be **10%**.

Schedule Item No	Name of ABE	Item Description/ Goods & Services to be provided	Value	
			Rands (Excl VAT)	% of Tender Sum (Excl VAT)
TOTAL				

Notes to tenderer:

1. Regardless whether the tenderer fits the classification of an SMME/PDI, as defined in Section 3.3 of this specification, the tenderer nevertheless retains the obligation to commit to the target values prescribed
2. Tenderers shall insert "unknown" if an SMME/PDI has not been selected prior to tender closing date.
3. The penalty will be applied for non-compliance during the contract or for fraudulent disclosure

SIGNED ON BEHALF OF THE TENDERER

**B.1 EMPLOYMENT OF AFFIRMATIVE BUSINESS ENTERPRISE DECLARATION
AFFIDAVIT (ABE).**

It is understood and agreed that should this contract be awarded to me, an ABE Declaration Affidavit will be completed by each and every ABE employed by me on this contract and will be submitted to the Employer immediately upon demand by the Employer.

SIGNED ON BEHALF OF THE TENDERER

1. TRAINING

Name of Training Institution:.....

Name of Programme:.....

Trainer's Name	Qualification	Subject

Notes to tenderer:
Provide details here, or attach hereto, the subjects to be covered and the manner in which the training is to be delivered.

SIGNED ON BEHALF OF THE TENDERER

2. ENGINEERING STUDENT TRAINING

Name of Training Institution:.....

Name of Programme:.....

Trainer's Name	Qualification	Subject

Notes to tenderer:

- 1. Provide details here, or attach hereto, the subjects to be covered and the manner in which the training is to be delivered.
- 2. Provision should also include on-job student / (in-service) training for the duration of the contract at a monthly stipend of R 4 500.00

SIGNED ON BEHALF OF THE TENDERER

VHEMBE DISTRICT MUNICIPALITY**T2 RETURNABLE DOCUMENTS****T2.1 LIST OF RETURNABLE DOCUMENTS**

The Tenderer must complete the following returnable documents:

1. Returnable Schedules required only for Tender evaluation purposes

- A. Certificate of Authority of Signatory
- B. Certificate of Registration with the Construction Industry Development Board
- C. Certificate of authority for joint ventures (where applicable)
- D. Compulsory Enterprise Questionnaire
- E. Record of Addenda to Tender Documents
- F. Proposed Amendments and Qualifications
- G. Form of Intent to Provide a Demand Guarantee
- H. Schedule of Subcontractors
- I. Schedule of Available Infrastructure, Resources and Experience
- J. Financial Information of the Tenderer
- K. Certificate for Municipal Services and Payments: Annexure C
- L. Authorisation for deduction of outstanding amounts owed to Council: Annexure D
- M. Declaration of interest: MBD4
- N. National industrial participation programme: MBD 5
- O. Declaration for procurement above R10 Million: MBD 5
- P. Preference Points Claim Form In Terms Of The Preferential Procurement Regulations 2022 MBD 6.1
- Q. Declaration certificate for local production and content: MBD 6.2
- R. Declaration of Tenderer's Past Supply Chain Management Practices: MBD 8
- S. Certificate of the Independent Tender Determination: MBD 9
- T. Compliance with OHSA (Act 85 of 1993)
- U. Original Bank rating letter

2. Other documents required only for Tender evaluation purposes

- Compensation Fund Registration Certificate
- Curricula Vitae of Personnel
- Rates of Labour and Materials (Day work Rates)
- CSD Registration
- Valid CSD Number.
- Schedule of Labour Content
- Employment of ABE'S
- ABE Declaration Affidavit
- Generic Training
- Complete MBD 5 where the Tender amount inclusive of VAT exceeds R 10 million:

3. Other documents that will be incorporated into the contract

- 3.1 The offer portion of the C1.1 Offer and Acceptance
- 3.2 C1.2 Contract Data (Part 2)
- 3.3 C2.2 Bills of Quantities

A. CERTIFICATE OF AUTHORITY OF SIGNATORY

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

1	Company	
2	Partnership	
3	Joint Venture	
4	Sole Proprietor	
5	Close Corporation	

1. Certificate for company

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

As witnesses:

1.....	.....
	Chairman
.....	
Print Name	Print Name
2. ....	.....
	Date
.....	
Print Name	

2. Certificate of partnership

We, the undersigned, being the key partners in the business trading as

....., hereby
authorise Mr/Ms, acting
in the capacity of, to sign all documents in
connection with the Tender for Contract, and
any contract resulting from it on our behalf.

Name	Address	Signature	Date

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

3. Certificate for Joint Venture

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

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

Name of Firm	Address	Authorising	
		Signature	Name
Lead Partner			

4. Certificate for sole proprietor

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

As witnesses:-

1.	.....	.....
		Signature: Sole Owner
		
	Print Name	Print Name
2.	.....	.....
		
	Print Name	Date

5. Certificate for Close Corporation

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

Name	Address	Signature	Date

Note: This Certificate is to be completed and signed by each and all of the key members upon whom rests the direction of the affairs of the Close Corporation as a whole.

B. CERTIFICATE OF REGISTRATION WITH THE CONSTRUCTION INDUSTRY DEVELOPMENT BOARD**1. General**

The Register of Contractors is established by the Construction Industry Development Board in terms of the CIDB Act 38 of 2000 and Construction Industry Development Regulations as published in Government Gazette number 26427 of 2004.

The Act makes it mandatory for public sector clients to apply this register when considering Tenders. Any enterprise that submits a Tender or enters into contract for construction works with the public sector, must be registered.

Once-off joint ventures do not have to register, provided that each partner of the joint venture is separately registered.

2. Status

Tenderers shall fill in the following sections of this form, depending on their status:

2.1 Section A

Tenderers who have accomplished registration and can provide proof of their grading designation.

2.2 Section B

Tenderers who are in the process of registration of an update to an existing registration or a renewal.

2.3 Section C

Tenderers who have submitted the first application.

2.4 Section D

Tenderers submitting this Tender offer in Joint Venture and can provide proof that each partner of the Joint Venture is separately registered.

[illegible]

SECTION B

I, acting in capacity of
was authorised to sign all documents in connection with this tender an any contract resulting from
it on

behalf of the following entity:
hereby declare that the above mentioned entity has achieved registration with the Construction In-
dustry Development Board on date, furthermore declare that the
existing grading designation is:

Contract Value	
----------------	--

Type of Work		
--------------	--	--

and the following update has been applied for:

Amendment of category status	
Change of Particulars	
Annual confirmation of Particulars	
Renewal of Registration	

mark with "❄"

.....
Signature of Tenderer

.....
Signature of Witness

.....
Print Name

.....
Print Name

SECTION C

I, acting in capacity of
was authorised to sign all documents in connection with this tender an any contract resulting from
it on

behalf of the following entity:
hereby declare that the above mentioned entity has submitted its FIRST APPLICATION FOR
REGISTRATION with the Contraction Industry Development board on date

I furthermore accept that failure to achieve registration with the Construction Industry Development
Board in a category stipulated in the Tender Data within 10 days from the date of closing this tender,
implies a non-responsive tender and warrants rejection of the Tender on account of non-compliance
with the requirements of the Tender Data.

.....
Signature of Tenderer

.....
Signature of Witness

.....
Print Name

.....
Print Name

SECTION D

I, acting in capacity of the LEAD PARTNER in the Joint Venture

.....
was authorised to sign all documents in connection with this tender and any contract resulting from it, hereby declare that each partner of the Joint Venture is separately registered with the Construction Industry Development Board and declare that the grading designation is reflected in the following **symbols** on the registration certificates:

Name of Lead Partner:		
Contract Value		
Type of Work		

Name of 2 nd Partner:		
Contract Value		
Type of Work		

Name of 3 rd Partner:		
Contract Value		
Type of Work		

.....
Signature of Tenderer

.....
Signature of Witness

.....
Print Name

.....
Print Name

C. CERTIFICATE OF AUTHORITY FOR JOINT VENTURES (WHERE APPLICABLE)

Employer:

Contract Number:

NOTE 1 This form need only be completed in the event of a Joint Venture submitting this Tender.

NOTE 2 Fill in all the information requested in the spaces provided. Attach additional sheets if required.

NOTE 3 Provide a copy of the Joint Venture agreement. Demonstrate that the partners to the Joint Venture share in the ownership, control, management responsibilities, risks and profits of the Joint Venture. The Joint Venture agreement shall include specific details relating to:

- a) the contributions of capital and equipment;
- b) portions of the Contract to be performed by the partner's own resources; and
- c) portions of the Contract to be performed under the supervision of each partner.

NOTE 4 Provide copies of all written agreements between partners concerning the Joint Venture, including those that relate to ownership options and to restrictions/limits regarding ownership and control.

1. Joint Venture Particulars

Name

Postal Address:

Physical Address:.....

.....

Telephone:.....

Fax:.....

Name of authorized representative:.....

2. Identity of Partner No. 1

Name

Postal Address:

Physical Address:.....

.....

Telephone:.....

Fax:.....

Name of authorized representative:.....

3. Identity of Partner No. 2

Name

Postal Address:

Physical Address:.....

.....

Telephone:.....

Fax:.....

Name of authorized representative:.....

4. Identity of Partner No. 3

Name

Postal Address:

Physical Address:.....

.....

Telephone:.....

Fax:.....

Name of authorized representative:.....

5. Description of the role of the partners in the joint venture

Partner No. 1:.....

.....

Partner No. 2:.....

.....

Partner No. 3:.....

.....

6. Ownership of the joint venture

(i) Ownership percentage(s) Partner No. 1%

Partner No. 2%

Partner No. 3%

(ii) Partner percentage in respect of:

a) Profit and loss sharing: Partner No. 1%

Partner No. 2%

Partner No. 3%

b) Initial capital contribution Partner No. 1 R.....

Partner No. 2 R.....

Partner No. 3 R.....

(iii) Anticipated ongoing capital contributions:

Partner No. 1 R.....

Partner No. 2 R.....

Partner No. 3 R.....

(iv) Contributions of equipment (specify types, quality and quantities of equipment) to be provided by each partner:

Partner No. 1:

.....

Partner No. 2:.....

.....

Partner No. 3:.....

7. Recent contracts performed by partners in their own right or as partners in other joint ventures

a) Partner No. 1

(i)

- (ii)
- (iii)
- (iv)
- (v)

b) Partner No. 2

- (i)
- (ii)
- (iii)
- (iv)
- (v)

c) Partner No. 3

- (i)
- (ii)
- (iii)
- (iv)
- (v)

8. Control and participation in the joint venture

(Identify by name and firm those individuals who are, or will be, responsible for, and have authority to engage in the relevant management functions and policy and decision making, indicating any limitations in their authority, for example, co-signature requirements and monetary limits).

a) Joint Venture cheque signing

.....

.....

.....

b) Authority to enter into contracts on behalf of the Joint Venture

.....

.....

-
- c) Signing, co-signing or collateralizing of loans
.....
.....
.....
- d) Acquisition of lines of credit
.....
.....
.....
- e) Acquisition of demand bonds
.....
.....
- f) Negotiating and signing of labour agreements
.....
.....
.....

9. Management of the performance of the Contract
(Fill in the name and firm of the responsible person)

- a) Supervision of field operations.....
.....
- b) Major purchasing.....
.....
- c) Estimating
.....
- d) Technical management.....
.....

10. Management and control of the joint venture

- a) Identify the managing partner
-
-
- b) What authority does each partner have to commit or obligate the other to financial institutions, insurance companies, suppliers, subcontractors or other parties participating in the performance of the contemplated works:
- Partner No. 1:
-
- Partner No. 2:
-
- Partner No. 3:
-
- c) Describe the management structure for the joint venture’s work under this Contract

Management Function/Designation	Name	Partner

11. Personnel

- a) State the approximate number of operative personnel (by trade/function/discipline) needed to execute the Joint Venture contract.

Trade/function/discipline	Number

- b) State the number of operative personnel to be employed on the Contract who are currently in the employ of partners:

.....

- c) State the number of operative personnel who are not currently in the employ of the respective partners and shall be engaged on the project by the Joint Venture:

.....

- d) State the name of the individual who shall be responsible for hiring Joint Venture employees:

.....

- e) State the name of the partner who shall be responsible for the preparation of Joint Venture payrolls:

.....

.....

12. Services

List the firms who provide the following services:

Service	Name	Contact Person	Telephone No.
Accounting			
Auditing			
Banking			
Insurance			
Legal			

13. Control and structure of the Joint Venture

Briefly describe the manner in which the Joint Venture is structured and controlled.

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

The undersigned warrants that he/she is duly authorised to sign this Joint Venture disclosure form and affirms that the foregoing statements are correct and include all the material information necessary to identify and explain the terms and operations of the Joint Venture and the intended participation of each partner in the undertaking.

The undersigned further covenants and agrees to provide the Employer with complete and accurate information regarding actual joint venture work and the payment therefore, and any proposed changes in any provisions of the Joint Venture Agreement, and to permit the audit and examination of the books, records and files of the Joint Venture, or those of each partner relevant to the Joint Venture, by duly authorized representatives of the Employer.

Duly authorized to sign on behalf of.....
(the Joint Venture)

Signature: Print Name:

Address:
.....

Telephone:

Date:

Duly authorized to sign on behalf of.....
(Partner No. 1)

Signature:Print Name:

Address:
.....

Telephone:

Date:

Duly authorized to sign on behalf of.....

(Partner No. 2)

Signature:Print Name:

Address:

.....

Telephone:

Date:

Duly authorized to sign on behalf of.....

(Partner No. 3)

Signature: Print Name:

Address:

.....

Telephone:

Date:

D. COMPULSORY ENTERPRISE QUESTIONNAIRE

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

Section 1: Name of enterprise:

Section 2: VAT registration number, if any:

Section 3: CIDB registration number, if any:

Section 4: Particulars of sole proprietors and partners in partnerships

Name*	Identity number*	Personal income tax number*

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

Section 5: Particulars of companies and close corporations

Company registration number

Close corporation number

Tax reference number

Section 6: 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 entity or constitutional institution within the meaning of the Public Finance Management Act, 1999 (Act 1 of 1999)
☐ a member of any provincial legislature	☐ a member of an accounting authority of any national or provincial public entity
☐ a member of the National Assembly or the National Council of Province	☐ an employee of Parliament or a provincial legislature
☐ a member of the board of directors of any municipal entity	
☐ an official of any municipality or municipal entity	

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

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

*insert separate page if necessary

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

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

☐ a member of any municipal council	ÿ 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	ÿ 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	ÿ an employee of Parliament or a provincial legislature
☐ a member of the board of directors of any municipal entity	
☐ an official of any municipality or municipal entity	

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

*insert separate page if necessary

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

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

Signed		Date	
Name		Position	
Enterprise name			

E. RECORD OF ADDENDA TO TENDER DOCUMENTS

We confirm that the following communications received from the Employer before the submission of this Tender offer, amending the Tender documents, have been taken into account in this Tender offer:			
No.	Date	Title or Details	
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Attach additional pages if more space is required.			
Signed		Date	
Name		Position	
Tenderer			

F. PROPOSED AMENDMENTS AND QUALIFICATIONS

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

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

Page	Clause or item	Proposal	
Signed		Date	
Name		Position	
Tenderer			

G. FORM OF INTENT TO PROVIDE A DEMAND GUARANTEE

If my/our Tender is accepted, I/we will, when required and within the time stipulated, provide a guarantee of

(*) Insurance Company (name).....

(of address)

.....

(*) Commercial Bank (Name).....

(Branch).....

(of address)

.....

to be approved by you, the Employer, for the amount stipulated.

(*): delete whichever is not applicable.

I/we understand that failure to produce an acceptable Demand Guarantee within the stipulated period is a fundamental breach of Contract, entitling the Employer to:

- (i) withhold all payments which may be due to the Contractor pending compliance with the stipulated requirements to produce an acceptable Demand Guarantee.
- (ii) instruct the Contractor to cease all work pending provision of the Demand Guarantee, and
- (iii) cancel the Contract.

Signed	.....	Date	.....
Print Name	.....	Position	.....
Tenderer	.....		

H. SCHEDULE OF SUBCONTRACTORS

We notify you that it is our intention to employ the following Subcontractors 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 Subcontractors in accordance with requirements in the contract for such appointments. If there are no such requirements in the contract, then your written acceptance of this list shall be binding between us.

We confirm that all Subcontractors who are contracted to construct a house are registered as home builders with the National Home Builders Registration Council.

No	Name and address of proposed Subcontractor	Nature and extent of work	Previous experience with Subcontractor.
1.			
2.			
3.			
4.			
5.			
Signed		Date	
Name		Position	
Tenderer			

I. SCHEDULE OF AVAILABLE INFRASTRUCTURE, RESOURCES AND EXPERIENCE**1. Tenderer's List of Third Party Design Engineers**

In the event that the Tenderer desires to design all or part of the Works or submit any alternative, he/she shall list here-following, the Design Engineers, accomplished in the specific field of practice, which he/she proposes to employ for the purpose of third party certification of all works designed by the Tenderer for the Works.

- Notes: (i) All costs of third party designs shall be borne solely by the Tenderer.
(ii) This Schedule must be accurately completed. Phrases such as "to be advised" will not be accepted.

Section of Works	Name and Address of Registered Engineer				ECSA Registration No.

2. Tenderer's Personnel Profile

Key Staff Permanently employed, of foreman level and above	Number of staff
Sub-Total	
Other Permanent Staff	Number of staff
Sub-Total	
Temporary Staff	Number of staff

b-Total	Su
---------	----

3. **List the Firms who provide the following services:**

Service	Name	Contact Person	Telephone
Accounting			
Auditing			
Insurance			
Legal			

4. **Identify any amounts of money loaned to your enterprise, indicating the loan source, date and amount**

Loan Source	Address	Date of Loan	Loan Amount

5. **List a maximum of five contract which your enterprise is engaged in and has not yet completed:**

Contract Description	Location	Client	Contract Amount	Expected Completion (month & year)

6. **List the four largest assignments completed by your enterprise in the last three years:**

Nature of Work Performed	Client	Consultant Contact Person	Telephone No.	Contract Amount

7. **Address of workshop facilities from where maintenance of works will be undertaken:**

.....

.....

Month No. in Contract Period	Estimated amount in Rands (VAT included)			
	a Received	b Payments made	a-b Net cash flow	Cumulative cash flow
1	-		d	j
2			e	k
3			f	l
4			g	m
5			h	n
6			etc.	etc.
7				
8				
9				
10				
11				
12				
Maximum negative cash flow. Take the largest negative number in the last column and write in here → → → → →				
Signed			Date	
Print Name			Position	
Tenderer				

J. FINANCIAL INFORMATION OF TENDERER

This information sheet has to be filled in by the financier of the Tenderer, duly signed and stamped on behalf of the financial institution he represents.

Tenderer Details

Tender Description :

Contract Period :

Name of Tenderer :

Bank Account Number :

Tendered Amount :

Demand Guarantee will be provided by this Bank: YES ☐ NO ☐

If yes, state amount of Demand Guarantee: R

Financial Institution

Name of Commercial Bank :

Branch :

Name of Bank Manager :

Telephone Number :

I / We acting on behalf of the above Commercial Bank confirm that

..... (Tenderer)

has operated an account with us for the last years.

We have been requested to provide a bank rating based in relation to the financial capability of the Tenderer, taking into account directives set out in the following two (2) tables.

Financial Capability	
Maximum value of contract that the Tenderer is considered capable of	Value on which Bank Rating must be used
up to R300 000	R24 000
R1 000 000	R78 000
R3 000 000	R240 000
R5 000 000	R480 000
R10 000 000	R900 000
R30 000 000	R2 400 000
R100 000 000	R7 800 000

BANK RATING	
Bank Code	Description of Bank Code
A	Undoubted for the amount of enquiry
B	Good for the amount of enquiry
C	Good for the amount quoted if strictly in the way of business
D	Fair trade risk for amount of enquiry
E	Figures considered too high
F	Financial position unknown
G	Occasional dishonours
H	Frequent dishonours

The value on which our Bank Rating of the Tenderer is based is R.....

(In words..... only)

ANNEXURE: C

K. CERTIFICATE FOR MUNICIPAL SERVICES AND PAYMENTS

TO: MUNICIPAL MANAGER, VHEMBE DISTRICT MUNICIPALITY

FROM:

(Name of Tenderer)

FURTHER DETAILS OF TENDERER(S); DIRECTORS/SHAREHOLDERS/PARTNERS, ETC.

Directors/shar eholders/Part ner	Physical address of the Business	Municipal Account No.	Physical residential address of the Director/ Shareholder/ Partner	Municipal Account No.

NB: Please attach certified copy of ID document(s)

Signatory

Date

Witnesses

1. _____
Full Names

Signature

Date

2. _____
Full Names

Signature

Date

ANNEXURE: D

L. AUTHORISATION FOR DEDUCTION OF OUTSTANDING AMOUNTS OWED TO COUNCIL

TO: MUNICIPAL MANAGER, VHEMBE DISTRICT MUNICIPALITY

FROM: _____
(Name of the Tenderer or Consortium)

I, _____ the undersigned, hereby authorise the Vhembe District Municipality to deduct the full amount outstanding by the business organisation/Director/Shareholder/Partner, etc. from any payment due by us/me.

Signed at _____ Date _____ Month _____ 20 _____

Print Name: _____

Signature: _____

Thus, done and signed for and on behalf of the Tenderer/Contractor

Signatory

Date

Witnesses

1. _____	_____	_____
Full Names	Signature	Date

2. _____	_____	_____
Full Names	Signature	Date

M. DECLARATION OF INTEREST

1. No Tender will be accepted from persons in the service of the State*.
2. Any person, having a kinship with persons in the service of the State, including a blood relationship, may make an offer/s in terms of this invitation to Tender. In view of possible allegations of favouritism, should the resulting Tender, or part thereof, be awarded to persons connected with or related to persons in service of the State, it is required that the Tenderer or their authorised representative declare their position in relation to the evaluating/adjudicating authority and/or take an oath declaring his/her interest.
3. In order to give effect to the above, the following questionnaire must be completed and submitted with the Tender.

Full Name: _____

Identity No: _____

Company Registration No: _____

Tax Reference No: _____

VAT Registration No: _____

Are you at present in the service of the State? **Yes/No**

If so, furnish particulars

- **Municipal Supply Chain Management Regulation:** "In the service of the State" means to be –

- (a) A member of –
 - (i) Any Municipal council;
 - (ii) Any Provincial legislature; or
 - (iii) The National Assembly or National Council of Provinces
- (b) A member of 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 Parliament or provincial legislature.
- (f) A member of the accounting authority of any national or provincial public entity; or
- (g) An employee of Parliament or a provincial legislature

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

If so, furnish particulars.

Do you have any relationship (family, friend, other) with persons in the service of the State and who may be involved with the evaluation or adjudication of this Tender?

YES/NO

If so, furnish particulars.

Are you aware of any relationship (family, friend, other) between a Tenderer and any persons in the service of the State who may be involved with the evaluation or adjudication of this Tender?

YES/NO

If so, furnish particulars?

Are any of the company's directors, managers, principle shareholders or stakeholders in service of the State?

YES/NO

If so, furnish particulars.

Are any spouses, child or parent of the company's directors, managers, principle shareholders or stakeholders in service of the State?

YES/NO

If so, furnish particulars?

CERTIFICATION

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 Tenderer

This document must be signed and submitted together with your Tender

N. THE NATIONAL INDUSTRIAL PARTICIPATION PROGRAMME

INTRODUCTION

The National Industrial Participation (NIP) Programme, which is applicable to all government procurement contracts that have an imported content, became effective on the 1 September 1996. The NIP policy and guidelines were fully endorsed by Cabinet on 30 April 1997. In terms of the Cabinet decision, all state and parastatal purchases / lease contracts (for goods, works and services) entered into after this date, are subject to the NIP requirements. NIP is obligatory and therefore must be complied with. The Industrial Participation Secretariat (IPS) of the Department of Trade and Industry (DTI) is charged with the responsibility of administering the programme.

1 PILLARS OF THE PROGRAMME

- 1.1 The NIP obligation is benchmarked on the imported content of the contract. Any contract having an imported content equal to or exceeding US\$ 10 million or other currency equivalent to US\$ 10 million will have a NIP obligation. This threshold of US\$ 10 million can be reached as follows:
- (a) Any single contract with imported content exceeding US\$10 million, Or
 - (b) Multiple contracts for the same goods, works or services each with imported content exceeding US\$3 million awarded to one seller over a 2 year period which in total exceeds US\$10 million. or
 - (c) A contract with a renewable option clause, where should the option be exercised the total value of the imported content will exceed US\$10 million. or
 - (d) Multiple suppliers of the same goods, works or services under the same contract, where the value of the imported content of each allocation is equal to or exceeds US\$ 3 million worth of goods, works or services to the same government institution, which in total over a two (2) (2) year period exceeds US\$10 million.
- 1.2 The NIP obligation applicable to suppliers in respect of sub-paragraphs 1.1 (a) to 1.1 (c) above will amount to 30 % of the imported content whilst suppliers in respect of paragraph 1.1 (d) shall incur 30% of the total NIP obligation on a *pro-rata* basis.
- 1.3 To satisfy the NIP obligation, the DTI would negotiate and conclude agreements such as investments, joint ventures, sub-contracting, licensee production, export promotion, sourcing arrangements and research and development (R&D) with partners or suppliers

A period of seven years has been identified as the time frame within which to discharge the obligation.

2. REQUIREMENTS OF THE DEPARTMENT OF TRADE AND INDUSTRY

2.1 In order to ensure effective implementation of the programme, successful Tenderers (contractors) are required to, immediately after the award of a contract that is in excess of **R10 million** (ten million Rands), submit details of such a contract to the DTI for reporting purposes.

2.2 The purpose for reporting details of contracts in excess of the amount of R10 million (ten million Rands) is to cater for multiple contracts for the same goods, works or services; renewable contracts and multiple suppliers for the same goods, works or services under the same contract as provided for in paragraphs 1.1.(b) to 1.1. (d) above.

3 TENDER SUBMISSIONS AND CONTRACT REPORTING REQUIREMENTS OF TENDERERS AND SUCCESSFUL TENDERERS (CONTRACTORS)

3.1 Tenderers are required to sign and submit this Standard Tendering Document (SBD 5) together with the Tender on the closing date and time.

3.2 In order to accommodate multiple contracts for the same goods, works or services; renewable contracts and multiple suppliers for the same goods, works or services under the same contract as indicated in sub-paragraphs 1.1 (b) to 1.1 (d) above and to enable the DTI in determining the NIP obligation, successful Tenderers (contractors) are required, immediately after being officially notified about any successful Tender with a value in excess of R10 million (ten million Rands), to contact and furnish the **DTI with the following information:**

- Tender / contract number.
- Description of the goods, works or services.
- Date on which the contract was accepted.
- Name, address and contact details of the government institution.
- Value of the contract.
- Imported content of the contract, if possible.

3.3 The information required in paragraph 3.2 above must be sent to the Department of Trade and Industry, Private Bag X 84, Pretoria, 0001 for the attention of Mr Elias Malapane within five (5) working days after award of the contract. Mr Malapane may be contacted on telephone (012) 394 1401, facsimile (012) 394 2401 or e-mail at Elias@thedti.gov.za for further details about the programme.

4 PROCESSES TO SATISFY THE NIP OBLIGATION

4.1 Once the successful Tenderer (contractor) has made contact with and furnished the DTI with the information required, the following steps will be followed:

- (a) the contractor and the DTI will determine the NIP obligation;

- (b) the contractor and the DTI will sign the NIP obligation agreement;
- (c) the contractor will submit a performance guarantee to the DTI;
- (d) the contractor will submit a business concept for consideration and approval by the DTI;
- (e) upon approval of the business concept by the DTI, the contractor will submit detailed business plans outlining the business concepts;
- (f) the contractor will implement the business plans; and
- (g) the contractor will submit bi-annual progress reports on approved plans to the DTI.

4.2 The NIP obligation agreement is between the DTI and the successful Tenderer (contractor) and, therefore, does not involve the purchasing institution

Tender number Closing date:.....

Name of Tenderer.....

Postal address

.....

Signature..... Name (in print)

Date.....

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

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

- 1 Are you by law required to prepare annual financial statements for auditing?
 - 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?
 - 2.1 If no, this serves to certify that the Tenderer 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 Tenderer

P. 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.

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	
SPECIFIC GOALS	
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:

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

Where

P_s = Points scored for price of tender under consideration

P_t = Price of tender under consideration

P_{min} = 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:

$$80/20 \quad \text{or} \quad 90/10$$

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

Where

P_s = Points scored for price of tender under consideration

P_t = Price of tender under consideration

P_{max} = 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 (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)

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:	.....
	
	

Q. DECLARATION CERTIFICATE FOR LOCAL PRODUCTION AND CONTENT

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

Before completing this declaration, Tenderers must study the General Conditions, Definitions, Directives applicable in respect of Local Content as prescribed in the Preferential Procurement Regulations, 2011 and the South African Bureau of Standards (SABS) approved technical specification number SATS 1286:201x.

1. General Conditions

- 1.1. Preferential Procurement Regulations, 2011 (Regulation 9. (1) and 9. (3) make provision for the promotion of local production and content.
- 1.2. Regulation 9. (1) prescribes that in the case of designated sectors, where in the award of Tenders local production and content is of critical importance, such Tenders must be advertised with the specific Tendering condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.
- 1.3. Regulation 9. (3) prescribes that where there is no designated sector, a specific Tendering condition may be included, that only locally produced services, works or goods or locally manufactured goods with a stipulated minimum threshold for local production and content, will be considered.
- 1.4. Where necessary, for Tenders referred to in paragraphs 1.2 and 1.3 above, a two (2) stage Tendering process may be followed, where the first stage involves a minimum threshold for local production and content and the second stage price and B-BBEE.
- 1.5. A person awarded a contract in relation to a designated sector, may not sub-contract in such a manner that the local production and content of the overall value of the contract is reduced to below the stipulated minimum threshold.
- 1.6. The local content (LC) as a percentage of the Tender price must be calculated in accordance with the SABS approved technical specification number SATS 1286: 201x as follows:

$$LC = 1 - \left(\frac{x}{y} \right) \times 100$$

Where

x imported content

y Tender price excluding value added tax (VAT)

Prices referred to in the determination of x must be converted to Rand (ZAR) by using the exchange rate published by the South African Reserve Bank (SARB) at 12:00 on the date, one week (7 calendar days) prior to the closing date of the Tender as required in paragraph 4.1 below.

1.7. A Tender will be disqualified if:

- The Tenderer fails to achieve the stipulated minimum threshold for local production and content indicated in paragraph 3 below; and this declaration certificate is not submitted as part of the Tender documentation.

2. Definitions

2.1. **“Tender”** includes advertised competitive Tenders, written price quotations or proposals;

2.2. **“Tender price”** price offered by the Tenderer, excluding value added tax (VAT);

2.3. **“contract”** means the agreement that results from the acceptance of a Tender by an organ of state;

2.4. **“designated sector”** means a sector, sub-sector or industry that has been designated by the Department of Trade and Industry in line with national development and industrial policies for local production, where only locally produced services, works or goods or locally manufactured goods meet the stipulated minimum threshold for local production and content;

2.5. **“Duly sign”** means a Declaration Certificate for Local Content that has been signed by the Chief Financial Officer or other legally responsible person nominated in writing by the Chief Executive, or senior member / person with management responsibility (close corporation, partnership or individual).

2.6. **“imported content”** means that portion of the Tender price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or its subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs, such as landing costs, dock duties, import duty, sales duty or other similar tax or duty at the South African port of entry;

2.7. **“local content”** means that portion of the Tender price which is not included in the imported content, provided that local manufacture does take place;

2.8. **“stipulated minimum threshold”** means that portion of local production and content as determined by the Department of Trade and Industry; and

2.9. **“Sub-contract”** means the primary contractor’s assigning, leasing, making out work to, or employing another person to support such primary contractor in the execution of part of a project in terms of the contract.

3. The stipulated minimum threshold(s) for local production and content for this Tender is/are as follows:

<u>Description of services, works or goods</u>	<u>Stipulated minimum threshold</u>
_____	_____ %
_____	_____ %
_____	_____ %

4. Does any portion of the services, works or goods offered have any imported content?

YES / NO

- 4.1 If yes, the rate(s) of exchange to be used in this Tender to calculate the local content as prescribed in paragraph 1.6 of the general conditions must be the rate(s) published by the SARB for the specific currency at 12:00 on the date, one week (7 calendar days) prior to the closing date of the Tender.

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

Indicate the rate(s) of exchange against the appropriate currency in the table below:

Currency	Rates of exchange
US Dollar	
Pound Sterling	
Euro	
Yen	
Other	

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

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

IN RESPECT OF TENDER No.

ISSUED BY: (Procurement Authority / Name of Municipality / Municipal Entity):

.....

NB The obligation to complete, duly sign and submit this declaration cannot be transferred to an external authorized representative, auditor or any other third party acting on behalf of the Tenderer.

I, the undersigned, (full names), do

hereby declare, in my capacity as

of(name of Tenderer entity), the

following:

- (a) The facts contained herein are within my own personal knowledge.
- (b) I have satisfied myself that the goods/services/works to be delivered in terms of the above-specified Tender comply with the minimum local content requirements as specified in the Tender, and as measured in terms of SATS 1286.
- (c) The local content has been calculated using the formula given in clause 3 of SATS 1286, the rates of exchange indicated in paragraph 4.1 above and the following figures:

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

If the Tender is for more than one product, a schedule of the local content by product shall be attached.

- (d) I accept that the Procurement Authority / Municipality /Municipal Entity has the right to request that the local content be verified in terms of the requirements of SATS 1286.
- (e) I understand that the awarding of the Tender is dependent on the accuracy of the information furnished in this application. I also understand that the submission of incorrect data, or data that are not verifiable as described in SATS 1286, may result in the Procurement Authority / Municipal / Municipal Entity imposing any or all of the remedies as provided for in

Regulation 13 of the Preferential Procurement Regulations, 2011 promulgated under the Policy Framework Act (PPPFA), 2000 (Act No. 5 of 2000).

SIGNATURE: _____

DATE: _____

WITNESS No. 1 _____

DATE: _____

WITNESS No. 2 _____

DATE: _____

R. DECLARATION OF TENDERER'S PAST SUPPLY CHAIN MANAGEMENT PRACTICES

1. This Municipal Tendering Document must form part of all Tenders invited.
2. It serves as a declaration to be used by municipalities and municipal entities in ensuring that when goods and services are being procured, all reasonable steps are to combat the abuse of the supply chain management system.
3. **The of any Tenderer may be rejected if the Tenderer, or any of its directors have:**
 - a) Abused the Municipality's Supply Chain Management System or committed any improper conduct in relation to such system:
 - b) Been convicted for fraud or corruption during the past five years:
 - c) Wilfully neglected, reneged or failed to comply with any government, municipal or public sector contract during the past five years; or
 - d) Been listed in the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corruption 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 Tender.**

ITEM	QUESTION	YES	NO
4.1	Is the Tenderer or any of its directors listed on the National Treasury's database as a company or person prohibited from doing business with the public sector? (Companies or persons who are listed on this database were informed in writing of this restriction by the National Treasury after the audi alteram partem rule was applied).		
4.1.1	If so, furnish particulars:		
4.2	Is the Tenderer or any of its directors listed on the Register for Tender Defaulters in terms of section 29 of the Prevention and Combating of Corruption Activities Act (No 12 of 2004)? (To access this Register, enter the National Treasury's website www.treasury.gov.za, click on the icon "Register for Tender Defaulters" or submit your written request for a hard copy of the Register to facsimile number (012 326 5445).		
4.2.1	If so, furnish particulars:		
4.3	Was the Tenderer or any of its directors convicted by a court of law (including a court of law outside the Republic of South Africa) for fraud or corruption during the past five years?		
4.3.1	If so, furnish particulars:		
4.4	Does the Tenderer or any of its directors owe any municipal rates and taxes or municipal charges to the municipality/municipal entity, or any other municipality/municipal entity, that is in arrears for more than three months?		
4.4.1	If so, furnish particulars:		

4.5	Was any contract between the Tenderer and the municipality/municipal entity or any other organ of state terminated during the past five years on account of failure to perform on or comply with the contract?		
4.5.1	If so, furnish particulars:		

CERTIFICATION

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

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

Signature

Date

Position

Name of Tenderer

S. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

- 1 This Municipal Tendering Document (MBD 9) must form part of all Tenders¹ 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 Tendering (or Tender rigging).² Collusive Tendering is a *pe se* prohibition meaning that it cannot be justified under any grounds.
- 3 Municipal Supply Regulation 38 (1) prescribes that a supply chain management policy must provide measures for the combating of abuse of the supply chain management system, and must enable the accounting officer, among others, to:
 - a. take all reasonable steps to prevent such abuse;
 - b. reject the Tender of any Tenderer if that Tenderer or any of its directors has abused the supply chain management system of the municipality or municipal entity or has committed any improper conduct in relation to such system; and
 - c. cancel a contract awarded to a person if the person committed any corrupt or fraudulent act during the Tendering 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 Tenders are considered, reasonable steps are taken to prevent any form of Tender-rigging.
- 5 In order to give effect to the above, the attached Certificate of Tender Determination (MBD 9) must be completed and submitted with the Tender:

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

² Tender rigging (or collusive Tendering) 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 Tendering process. Tender rigging is, therefore, an agreement between competitors not to compete.

I, the undersigned, in submitting the accompanying Tender:

(Tender Number and Description)

in response to the invitation for the Tender made by:

(Name of Municipality / Municipal Entity)

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

I certify, on behalf of: _____ that:
(Name of Tenderer)

1. I have read and I understand the contents of this Certificate;
2. I understand that the accompanying Tender will be disqualified if this Certificate is found not to be true and complete in every respect;
3. I am authorized by the Tenderer to sign this Certificate, and to submit the accompanying Tender, on behalf of the Tenderer;
4. Each person whose signature appears on the accompanying Tender has been authorized by the Tenderer to determine the terms of, and to sign, the Tender, on behalf of the Tenderer;
5. For the purposes of this Certificate and the accompanying Tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
 - (a) has been requested to submit a Tender in response to this Tender invitation;
 - (b) could potentially submit a Tender in response to this Tender invitation, based on their qualifications, abilities or experience; and
 - (c) provides the same goods and services as the Tenderer and/or is in the same line of business as the Tenderer
6. The Tenderer has arrived at the accompanying Tender independently from, and without consultation, communication, agreement or arrangement with any competitor. However communication between partners in a joint venture or consortium³ will not be construed as collusive Tendering.
7. In particular, without limiting the generality of paragraphs 6 above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - (a) prices;
 - (b) geographical area where product or service will be rendered (market allocation)

- (c) methods, factors or formulas used to calculate prices;
 - (d) the intention or decision to submit or not to submit, a Tender;
 - (e) the submission of a Tender which does not meet the specifications and conditions of the Tender; or
 - (f) Tendering with the intention not to win the Tender.
8. In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications and conditions or delivery particulars of the products or services to which this Tender invitation relates.
9. The terms of the accompanying Tender have not been, and will not be, disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official Tender 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 Tenders and contracts, Tenders that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

.....
Signature

.....
Date

.....
Position

.....
Name of Tenderer

U. COMPLIANCE WITH OHSA (ACT 85 OF 1993)

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

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

Signature of Tenderer: **Date:**

V. ORIGINAL BANK RATING LETTER

Attached the Bank Rating to this Page

W. DAY WORK SCHEDULE

This Day work Schedule shall be used for the valuation of any additional or substituted work which cannot conveniently be valued at the rates and prices submitted in the schedule of quantities.

In respect of labour and materials used in the additional or substituted work not covered in the Day work Schedule the Contractor shall be paid the actual cost plus the percentage allowance stated in the schedule of quantities.

The Tenderer shall quote hereunder rates which shall apply for payment purposes if the Engineer orders additional or substituted work to be carried out on a day work basis and shall therefore be in accordance with the requirements of clause 37(2) of the General Conditions of Contract.

1. LABOUR AND MATERIALS

Rates and prices entered in the schedule shall be held to allow for net cost of labour and materials delivered to site respectively with the percentage allowances stated in the schedule of quantities.

2. PLANT AND EQUIPMENT

The Tenderers shall list all major items of plant and equipment to be used on the works and which may be required for use on day works. The proposed hire rates of these items shall be entered against each type of machine, such rates to include for all relevant costs of plant hire inclusive of fuels and lubricants but exclusive of labour charges for the operators, which will be paid for under sub-clause (1) above.

The rates for plant items not listed in the schedule will be the ruling plant hire rates, inclusive of fuels and lubricants but exclusive of labour charges for the operators, inclusive of a 7,5% handling charge. It is therefore in the Tenderers interest to ensure that the list is complete.

Should there be insufficient space on the pages provided; the Tenderer shall add further pages as required.

THE RATES FOR THE PLANT AND EQUIPMENT MENTIONED IN THE SCHEDULE SHALL BE FILLED IN FOR THE ITEMS REQUESTED. SHOULD AN ITEM BE OMITTED IT SHALL BE DEEMED TO HAVE BEEN INCLUDED IN THE OTHER DAYWORKS RATES.

I. LABOUR

DESIGNATION		RATE	
		R	C
Plant Operators	per hour		
Truck Drivers	per hour		
Labour - unskilled	per hour		
- semi-skilled	per hour		
- skilled	per hour		

II. MATERIALS

DESIGNATION		RATE	
		R	C
Cement	per 50 kg pocket delivered		
Concrete Sand	per m ³ delivered		
Concrete Aggregate	per m ³ delivered		

III. TRANSPORT

DESIGNATION		RATE	
		R	C
Per cubic metre kilometre			

IV. PLANT AND EQUIPMENT

ITEM	DESCRIPTION	NON-WORKING RATE*		OPERATING RATE		PER
		R	c	R	C	UNIT
	Excavator					
	LDV					
	Tipper 10 cubic meter					
	TLB					

*Only applicable on authority of the Employer's Agent.

VHEMBE DISTRICT MUNICIPALITY

C1 PART C1: AGREEMENTS AND CONTRACT DATA

C1.1: FORM OF OFFER AND ACCEPTANCE

C1.2: CONTRACT DATA

C1.3: DEMAND GUARANTEE AND RETENTION MONEY GUARANTEE

**C1.4: AGREEMENT IN TERMS OF SECTION 37(2) OF THE OCCUPATIONAL
HEALTH AND SAFETY ACT No 85 OF 1993**

C1.5: AGREEMENT WITH ADJUDICATOR

VHEMBE DISTRICT MUNICIPALITY

REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS

C1.1 Form of Offer and Acceptance

OFFER

The Employer, identified in the Acceptance signature block, has solicited offers to enter into a contract for the procurement of construction works viz.:

Project Description: _____

Contract No. _____

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

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

The offered total of the prices inclusive of value-added-tax is

.....

..... (Amount in words);

R..... (Amount in figures)

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

Signature(s):

Print Name(s):

Capacity:

For the Tenderer:

(Name and address of organization):

Signature of witness:Date:

Print Name

Important Note: This page to be duly completed by the Tenderer before submitting the Tender.

ACCEPTANCE

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

The terms of the contract are contained in

Part 1: Agreements and Contract Data (which include this Agreement)

Part 2: Pricing Data

Part 3: Scope of Work

Part 4: Site Information

and drawings and documents or parts thereof, which may be incorporated by reference into parts 1 to 4 above.

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

The Tenderer shall, within 7 days of receiving a completed copy of this Agreement (including the Schedule of Deviations, if any), contact the Employer's Agent (whose details are given in the Contract Data) to arrange the delivery of any 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 the 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 copy of this original document, including the Schedule of Deviations (if any). Such date should be confirmed in a manner that can be read, copied and recorded and shall be accepted by the contracting parties as the Commencement Date. This agreement shall constitute a binding contract between the parties.

Signature(s)

Print Name(s)

Capacity

For the Employer
(Name of Organization)

.....
(Address of Organization)

Signature of witness..... Date:

Print Name

SCHEDULE OF DEVIATIONS

The extent of deviations from the Tender documents issued by the Employer before the Tender closing date is limited to those permitted in terms of the Conditions of Tender.

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, be the subject of agreements reached during the process of offer and acceptance, the outcome of such agreement shall be recorded here.

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.

Any change or addition to the Tender documents arising from the above agreements and recorded here shall also be incorporated into the final Contract Document.

- 3.1 Subject.....
 Details.....
- 3.2 Subject.....
 Details.....
- 3.3 Subject.....
 Details.....

By the duly authorized representatives signing this Schedule of Deviations, the Employer and the Contractor agree to and accept the foregoing Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the offer agreed by the Contractor and the Employer in concluding this process of offer and acceptance; in witness thereof the parties hereto have caused this agreement to be executed.

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

Signed by:Signed by:

Print Name:Print Name:

Address:Address:

For and on behalf of the **Employer** in the Presence of

Witness:

For and on behalf of the **Contractor** in the presence of

Witness:

Print Name:

Print Name:

Date:

Date.....

VHEMBE DISTRICT MUNICIPALITY

C1.2 Contract Data

CONTENTS

C.1.2.1	Part 1: Data provided by the Employer
C.1.2.1.1	Conditions of Contract
C.1.2.1.2	Contract-specific Data
C.1.2.1.2.1	Compulsory Data
C.1.2.1.2.2	Variations to the General Conditions of Contract
C.1.2.1.2.3	Additional clauses to the General Conditions of Contract

C1.2.1 Part 1: Data provided by the Employer

C1.2.1.1 Conditions of Contract

The Conditions of Contract are:

- the “General Conditions of Contract” as they appear in the commercially-available publication “General Conditions of Contract for Construction Works, Third Edition, 2015”, hereinafter referred to as “GCC 2015”; and
- Specific data as contained in this Contract Data.

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

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

Tel +27 (0)11 805 5947

The following Notes apply:

Note 1

The GCC 2015 makes several references to the Contract Data.

Each item of data below is cross-referenced to the clause in the Conditions of Contract to which it applies. Notwithstanding anything specified to the contrary, the Contract Data shall take precedence in the interpretation of any ambiguity or inconsistency between it and the GCC 2015.

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

- (a) The Form of Offer and Acceptance.
- (b) Amendments to the General Conditions of Contract within the Contract Data.
- (c) Additional conditions to the General Conditions of Contract within the Contract Data.
- (d) Corrigenda to the General Conditions of Contract.
- (e) The General Conditions of Contract.
- (f) The Specifications, Drawings, Schedules and other documents forming part of the Contract (in that order) contained in the Scope of Work and the Site Information.

If any ambiguity or discrepancy is found in the documents, the Engineer needs to be contacted to issue any necessary clarification or instruction.

Note 2

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

C1.2.1.2 Contract-specific Data

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

C1.2.1.2.1 Compulsory Data

Clause	
1.1.1.13	The Defects Liability Period is 12 months
1.1.1.14	The time for achieving Practical Completion is 06 months
1.1.1.15	The name of the Employer is Vhembe District Municipality
1.1.1.26	The Pricing Strategy of a Re-measurement Contract shall apply
1.2.1.2	The address of the Employer is: Physical address: Vhembe District Municipality, Offices next to Khoroni Hotel (Former Venda Tusk Hotel) Postal address: Private Bag X 5006 Thohoyandou 0950 e-mail address: malulekew@vhembe.gov.za Contact numbers: Corporate: 015 960 2000 Direct: 015 960 2000
1.1.1.16	The name of the Employers Agent is: Muteo Consulting

Clause																																																							
1.2.1.2	The address of the Employers Agent is: <u>Physical address:</u> 39 Grobler Street Polokwane 0699 <u>Postal address:</u> P O Box 6196 Polokwane North 0750 e-mail address: mail@muteo.co.za Contact number: (015) 291 4065 Fax: (015) 291 4043																																																						
3.3.1	The Employers Agent shall obtain the specific approval of the Employer before executing any of his functions or duties according to the following table: <table> <tr> <th>GCC Clause No</th><th>Description</th><th>Requires EWA*</th><th>Delegated to ER*</th></tr> <tr> <td>3.3.1</td><td>Employers Agent's Representative appointment and termination</td><td>Y</td><td></td></tr> <tr> <td>3.3.4</td><td>Employers Agent's Representative acting on Engineer's behalf</td><td>Y</td><td></td></tr> <tr> <td>4.5.4</td><td>Payment for notices and fees</td><td>Y</td><td></td></tr> <tr> <td>4.7.1</td><td>Fossils, etc on Site</td><td>Y</td><td></td></tr> <tr> <td>5.7.2</td><td>Work at night</td><td>Y</td><td></td></tr> <tr> <td>5.7.3</td><td>Acceleration of rate of progress</td><td>Y</td><td></td></tr> <tr> <td>5.7.3</td><td>Payment for acceleration</td><td>Y</td><td></td></tr> <tr> <td>5.9.1</td><td>Instructions and drawings on Commencement Date</td><td></td><td>Y</td></tr> <tr> <td>5.11.1</td><td>Suspension of the Works</td><td></td><td>Y</td></tr> <tr> <td>5.11.3</td><td>Proceeding with Works after suspension</td><td>Y</td><td></td></tr> <tr> <td>5.12.4</td><td>Acceleration instead of extension of time</td><td>Y</td><td></td></tr> <tr> <td>5.13.2</td><td>Reduction in penalty</td><td></td><td>Y</td></tr> </table>			GCC Clause No	Description	Requires EWA*	Delegated to ER*	3.3.1	Employers Agent's Representative appointment and termination	Y		3.3.4	Employers Agent's Representative acting on Engineer's behalf	Y		4.5.4	Payment for notices and fees	Y		4.7.1	Fossils, etc on Site	Y		5.7.2	Work at night	Y		5.7.3	Acceleration of rate of progress	Y		5.7.3	Payment for acceleration	Y		5.9.1	Instructions and drawings on Commencement Date		Y	5.11.1	Suspension of the Works		Y	5.11.3	Proceeding with Works after suspension	Y		5.12.4	Acceleration instead of extension of time	Y		5.13.2	Reduction in penalty		Y
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Clause				
	6.3.1	Variation orders	Y	
	6.3.2.1	Confirmation of a Variation Order	Y	
	6.4.1.4	Day works as a Variation Order	Y	
	6.5.2	Materials for day works	Y	
	6.8.2	Contract Prise Adjustment to apply	Y	
	6.8.3	Price adjustment for special material	Y	
	6.8.4	Costs due to changes in legislation	Y	
	6.11.1	Variations exceeding 20%		Y
	8.2.2.2	Damage due to excepted risks		Y
	10.1.5	Consultation on Contractor's claim	Y	Y
	10.1.5	Ruling on Contractor's claim	Y	N
	*The following abbreviations apply: EAR Employers Agent's Representative EAWA Employers Agent's Written Action N No NA Not Applicable Y Yes			
4.9.1	The Contractor shall deliver to the Employers Agent's, on a monthly basis, a detailed inventory of Construction Equipment kept on Site, full particulars given for each day of the month. Distinction shall be made between Owned Equipment and Hired Equipment as well as Equipment in working order and Equipment out of order. Such inventory shall be submitted by the seventh day of the month following the month to be reported.			
4.10.2	The Contractor shall deliver to the Employers Agent's, on a monthly basis, a return in detail of supervisory staff and the number of categorized classes of labour employed each day for the said period by the Contractor for execution of the Contract. Such return shall be submitted by the seventh day of the month following the month to be reported.			

Clause	
5.3.1	The documentation required before commencement with Works execution are: Health and Safety Plan (Refer to Clause 4.3) A signed Agreement between the Employer and the Contractor for the Works to be completed by the Contractor in terms of the provisions of Section 37(2) of the Occupational Health and Safety Act (Act No.85 of 1993) and the Construction Regulations promulgated thereunder (Refer to Clause 4.3). Proof of payment to the Employer, that the Contractor has paid all contributions required in terms of the Compensation for Occupational Injuries and Diseases Act, No 130 of 1993 (Refer to Clause 4.3). Initial programme (Refer to Clause 5.6). Security (Refer to Clause 6.2). Insurance (Refer to Clause 8.6).
5.3.2	The time to submit the documentation required before commencement with Works execution is 14 Days.
5.4.2	The access and possession of Site shall not be exclusive to the Contractor but shall be as set out elsewhere in the Contract.
5.8.1	The non-working Days are Sundays. The special non-working Days are: Statutory public holidays; and All annual year-end shutdown periods as recommended by the South African Federation of Civil Engineering Contractors (SAFCEC),
	and which commence after the Commencement Date and which commence before the Due Completion Date.
5.13.1	The penalty for failing to complete the Works is 0,1 percent of contract price per calendar day.
5.16.3	The latent defect period is 10 years, commencing on the Day after the date of certification of Practical Completion.
6.5.1.2.3	The percentage allowance to cover overhead charges is: 50 per cent for labour; and 15 per cent for materials.

Clause	
6.8.2	Contract Price Adjustment: The contract shall be subject to Contract Price Adjustment. The value of the certificates issued shall be adjusted in accordance with the Contract Price Adjustment Schedule included in the General Conditions of Contract. The value of "x" is 0.15 The values of the coefficients are: a = 0.25 Labour b = 0.3 Contractor's equipment c = 0.35 Material d = 0.1 Fuel The Province wherein the larger part of the Site is located is at Vhembe District Municipality. The applicable industry for the Producer Price Index for material is Diesel The area for the Producer Price Index for fuel is Example Fuel index area The base month is 02 July 2025.
6.8.3	
6.10.1.5	The percentage advance on materials not yet built into the Permanent Works is 80%. Proof of ownership is required.
6.10.3	The limit of retention money is 10% of the value of the Contract Price. A Retention Money Guarantee is compulsory. A penalty will be applied for non-delivery of the Retention Money Guarantee as required. The penalty will be 10% of the value of the completion Retention Money Amount per calendar month for late delivery of the said Retention Money Guarantee.
8.6.1.1.2	The value of Plant and materials supplied by the Employer to be included in the insurance sum is nil .
8.6.1.1.3	The amount to cover professional fees for repairing damage and loss to be included in the insurance sum is a maximum of 10% (ten percent) of the Contract Sum.
8.6.1.3	The limit of indemnity for liability insurance is equal to the contract amount.
10.5.1	Dispute resolution shall be by standing adjudication, use GCC 2015, Appendix 5.
10.7.1	The determination of disputes shall be by arbitration.

Clause	
	Payment for labour-intensive component of the works <i>Payment for works identified in the Scope of Works 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 payment for such works shall not relieve the Contractor in any way from his obligations either in contract or in delict.</i>
	Linkage of payment for labour-intensive component of works to submission of project data <i>The Contractor's payment invoices shall be accompanied by labour information for the corresponding period in a format specified by the employer. If the contractor chooses to delay submitting payment invoices, labour returns shall still be submitted as per frequency and timeframe stipulated by the Employer. The contractor's invoices shall not be paid until all pending labour information has been submitted.</i>
	Applicable Labour Laws <i>The current Ministerial Determination (also downloadable at www.epwp.gov.za), Expanded Public Works Programmes, issued in terms of the Basic Condition of Employment Act of 1997 by the Minister of Labour in Government Notice, shall apply to works described in the scope of work as being labour-intensive and which are undertaken by unskilled workers.</i>

C1.2.1.2.2 Variations to the General Conditions of Contract

Clause	Data
2.5.1	Cession <i>Amend Clause 2.5.1 as follows:</i> <i>Delete the words "without the written consent of the other"</i>
5.14.5.1	Consequences of Completion <i>Amend Clause 5.14.5.1 as follows:</i> <i>In the second line, substitute the word 'Guarantor' with 'Contractor'.</i>
6.2	Security <i>Replace Sub-Clauses 6.2.1 and 6.2.2 with:</i> "The Contractor shall deliver to the Employer within such time as may be stated in the Contract Data, a Demand Guarantee, of an Insurance Company registered in terms of the Short-term Insurance Act (Act 53 of 1998) or of a registered Commercial Bank, in a sum equal to the amount stated in the Contract Data. The Demand Guarantee shall be issued by an entity subject to the approved of the Employer, and shall conform in all respects to the format contained in the Contract Data. The security to be provided by the Contractor shall be a Demand Guarantee of 10% of the Contract Sum. Wherever a joint venture constitutes the contracting party, the Demand Guarantee shall be issued on behalf of the joint venture. Failure to produce an acceptable Demand Guarantee within the period stated in the Contract Data, is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 with specific reference to Sub-clause 9.2.2.5 as amended in the Contract Data."
6.3	Variations <i>Amend Clause 6.3, as follows:</i> <i>In the first paragraph, third line, after the words "or for any reason appropriate", add the phrase</i> <i>", including the limiting of contract expenditure so as not to exceed the Employer's budgeted project funding, "</i> <i>Add the following phrase to the last paragraph of Clause 6.3.1.6, after the words "ascertaining the amount of the Contract Price":</i> <i>", and no such variation shall give reason for consideration of any claim in terms of Clause 6.11."</i>

Clause	Data
6.3.2	Orders for Variations to be in writing Omit the words “Provided that” under Clause 6.3.2 and omit Clause 6.3.2.1.
6.9.2	Definition of “materials” <i>Amend Clause 6.9.2, as follows:</i> <i>Substitute the word ‘plant’ with ‘Plant’.</i>
6.10.1	Interim Payments <i>Amend Clause 6.10.1.5 as follows:</i> <i>In the third line, add the words ‘not yet’ before the words ‘built into’</i>
6.10.5	Payment of retention money <i>Amend Clause 6.10.5 as follows:</i> <i>In the second line, add the words ‘, if any,’ after the words ‘Defects Liability Period’</i>
6.10.6	Set-off and delayed payments <i>Amend Clause 6.10.6.2 as follows:</i> <i>Delete the words ‘Contractor’s Bank’ and substitute with the words ‘Employer’s Bank’</i>
6.11	Variations exceeding 15 per cent <i>Replace the marginal heading with:</i> “Variations exceeding 20 per cent” <i>Replace “15 per cent” with “20 per cent” in the text of this Sub-Clause</i>
7.8.2	Cost of making good of defects <i>Amend Clause 7.8.2.1 as follows:</i> <i>In the first line, correct the spelling of ‘therefore’.</i>
8.3.1	Excepted risks <i>Amend Clause 8.3.1.12 as follows:</i> <i>In the second line, delete the words ‘Employer or any of their’ and substitute with ‘or any of its’.</i>

Clause	Data
8.6.6	Contractor to produce proof of payment “The Contractor shall before commencement of the Works produce to the Employer’s Agent: 8.6.6.1 The policies by which the insurances are effected, 8.6.6.2 Proof that due payment of all premiums there under, covering the full required period has been made, and 8.6.6.3 Proof of continuity of the policies for the required period.
	Should, during the currency of the Contract, the required period of insurance be extended for any reason, the Contractor shall timeously extend (so as to maintain) the said insurances for the full extended duration. The Employer’s Agent shall be empowered to withhold all payment certificates until the Contractor has complied with his obligations in terms of this Clause 8.6.6.”
8.6.7	Remedy on Contractor’s failure to insure <i>Delete sub-clause 8.6.7 and substitute with:</i> “Failure on the part of the Contractor to effect and keep in force any of the insurances referred to in Clause 8.6.1 and its sub-clauses, is a fundamental breach of Contract, entitling the Employer to cancel the Contract by due notice in terms of Clause 9.2 and with specific reference to sub-clause 9.2.2, as amended in the Contract Data.”
9.1.2	State of emergency <i>In the <u>fourth</u> line, delete the words ‘supply of’ and substitute with ‘availability of’.</i>
9.2	Termination by Employer <i>Delete the contents of Clause 9.2 and substitute with:</i> “9.2.1 The Employer may terminate the Contract by written notice to the Contractor if: 9.2.1.1 Sequestration of the Contractor’s estate is ordered by a Court with due jurisdiction, or 9.2.1.2 The Contractor publishes a notice of surrender or presents a petition for the surrender of his estate as insolvent, or makes a compromise with his creditors, or assigns in favour of his creditors, or agrees to carry out the Contract under the supervision of a committee representing his creditors, or (being a company) goes into liquidation, whether provisionally or finally (other than a voluntary liquidation for the purpose of amalgamation or reconstruction), or if the Contractor assigns the Contract without having first obtained the Employer’s consent in writing, or if execution is levied on his goods, or

Clause	Data
	9.2.1.3 The Contractor, or anyone on his behalf, or in his employ, offers to any person in the employ of the Employer or the Engineer, a gratuity or reward or commission, or 9.2.1.4 The Contractor furnished materially inaccurate information in his Tender, which had a bearing on the award of the Contract, or 9.2.1.5 The Contractor has abandoned the Contract. 9.2.2 If the Contractor: 9.2.2.1 Has failed to commence the Works in terms of Clause 10 hereof, or has suspended the progress of the Works for fourteen (14) days after receiving from the Engineer written notice to proceed, or 9.2.2.2 Has failed to provide the Guarantee in terms of Clause 7 within the time stipulated in the Contract Data, or
	9.2.2.3 Has failed to proceed with the Works with due diligence, or 9.2.2.4 Has failed to remove materials from the Site or to pull down and replace work within fourteen (14) days after receiving from the Engineer written notice that the said materials or work have been condemned and rejected by the Engineer in terms of these conditions, or 9.2.2.5 Is not executing the Works in accordance with the Contract, or is neglecting to carry out his obligations under the Contract, or 9.2.2.6 Has, to the detriment of good workmanship or in defiance of the Engineer's instructions to the contrary, sublet any part of the Contract, or 9.2.2.7 Has assigned the Contract or any part thereof without the Employer's consent in writing, then the Employer may give the Contractor 14 days' notice to rectify the default, and if the Contractor fails to rectify the default in said 14 days, then, without further notice, notify the Contractor in writing of the termination of the Contract and expel the Contractor and order the Contractor to vacate the site within 24 hours of issue of the Notice of Termination and to hand the Site over to the Employer, and the Employer may then enter upon the Site and the Works without affecting the rights and powers conferred on the Employer or the Engineer by the Contract and the Employer may himself complete the Works or may employ another contractor to complete the Works, and the Employer or such other contractor may use for such completion so much of the Construction Equipment, Temporary Works and materials brought onto the Site by the Contractor as the Employer may think proper, and the Employer may at any time sell any of the said Construction Equipment, Temporary Works and unused materials and apply the proceeds of sale towards payment of any sums that may be due or become due to the Employer by the Contractor under the Contract.

Clause	Data
	In such circumstances the Contractor shall forthwith vacate the Site and shall not be entitled to remain on the Site on the grounds that he is entitled to do so on a right of retention until amounts due to him have been paid, neither will the Contractor be entitled to any further payments in terms of this Contract. 9.2.3 If the Contractor, having been given notice to rectify a default in terms of 9.2.2 above, rectifies said default, but later repeats the same or substantially the same default, then the Employer may notify the Contractor of the immediate termination of the Contract, and proceed as stated in the paragraph following the word 'writing' in Clause 9.2.2.7 above. 9.2.4 Should the amounts that the Employer must pay to complete the Works, exceed the sum that would have been payable to the Contractor on due completion by him, then the Contractor shall upon demand pay to the Employer the difference, and it shall be deemed a debt due by the Contractor to the Employer and shall be recoverable accordingly. Provided that should the Contractor on demand not pay the amount of such excess to the Employer, such sum may be determined and deducted by the Employer from any sum due to or that may become due to the Contractor under this or any previous or subsequent contract between the Contractor and the Employer."

C1.2.1.2.3 Additional clauses to the General Conditions of Contract:

Clause	Data
1.1	Definitions <i>Add the following at the end of Sub-Clause 1.1.1:</i> 1.1.1.35 “Client”, as used in the Occupational Health and Safety Act - Construction Regulations, means Employer. 1.1.1.36 “Principal Contractor”, as used in the Occupational Health and Safety Act - Construction Regulations, means Contractor.
4.12	Contractor’s superintendence <i>Add the following sub-clause 4.12.4 to Clause 4.12:</i> “Where a form is included in the Contract Data for this purpose, the Tenderer shall fill in the name of the person he proposes to entrust with the post of Construction Manager on this Contract in the space provided therefore. Previous experience of this person on work of a similar nature during the past five (5) years is to be entered on the form. The Contractor’s Construction Manager shall be on Site at all times when work is being performed. The person shall be subject to approval of the Employers Agent’s in writing and shall not be replaced or removed from Site without the written approval of the Employers Agent’.
5.6	Programme <i>Add the following sub-clause 5.6.6 to Clause 5.6:</i> “Failure on the part of the Contractor to deliver to the Employers Agent, the • programme of the Works in terms of Clause 5.6.1 and • supporting documents in terms of Clause 5.6.2 Within the period stated in the Contract Data, shall be sufficient cause for the Engineer to retain 25 per centum of the value of the Fixed Charge and Value-related items in assessment of amounts due to the Contractor, until the Contractor has submitted aforementioned first Programme of the Works and Supporting Documents”.

Clause	Data
5.9.7	Employers Agent's to approve Contractor's Designs and Drawings <i>Add the following at the end of Sub-Clause 5.9.7</i> "All designs, calculations, drawings and operation and maintenance manuals shall be fully endorsed by a third party registered engineer, accomplished in such specific field of practice and the cost thereof shall be borne solely by the Contractor. Once the alternative design has been approved, the Contractor shall indemnify and hold harmless the Employers Agent's, the Employer, their agents and assigns, against all claims howsoever arising out of the said design, whether in contract or delict".
5.11	Suspension of the Works <i>Add the following sub-clause 5.11.7 to Clause 5.11:</i> "If the Contractor does not receive from the Employer the amount due under an Interim Payment Certificate within 28 days after expiry of the time stated in sub-clause 6.10.4 within which payment is to be made (except for deductions in accordance with sub-clauses 6.10.1.6 and 6.10.1.7), the Contractor may, after giving 14 days' notice to the Employer, suspend the progress of the Works. The Contractor's action shall not prejudice his entitlements to a claim in terms of Clause 10.1 and to cancellation of the Contract in terms of Clause 9.3. If the Contractor subsequently receives full payment of the amount due under such Interim Payment Certificate before giving a notice of cancellation of the Contract, the Contractor shall resume normal working as soon as is reasonably practicable."
5.12	Extension of Time for Practical Completion <i>Add the following at the end of Sub-Clause 5.12.2.2:</i> "The extension of time to be allowed due to abnormal rainfall shall be calculated separately for each calendar month or part thereof in accordance with the following formula: $V = (Nw - Nn) + \frac{Rw - Rn}{x}$ where V = Extension of time in calendar days for the calendar month under consideration Nw = Actual number of days during the calendar month on which a rainfall of 10 mm or more has been recorded

Clause	Data
	R_w = Actual recorded rainfall for the calendar month R_n = Average rainfall for the calendar month, as derived from existing rainfall records x = 20
	The rainfall records which shall provisionally be accepted for calculation purposes are: Based on records taken at: Rainfall Station : Phunda Maria Years of record: 2006 – 2016

RAINFALL RECORDS FOR PERIOD: 2006– 2016**RAINFALL STATION: Phunda Maria La.t: 23.8570 Lon:****29.451 Height 1226 m****Average No of Days with Rainfall exceeding 10mm: 9.8
days/year****Average Rainfall: 488.6 mm/year station no:
0677802BX**

M O N	AV E	ST	N D A Y	N U M	1	5.1	10. 1	20. 1	50. 1	100 .1	MA X R	MAX RAIN
M O N		DE V	RAI N	M O N	5	10	20	50	10 0	900	DA Y	DATE
M O N	AV E	ST	N D A Y	N U M	1	5.1	10. 1	20. 1	50. 1	100 .1	MA X R	MAX RAIN
M O N		DE V	RAI N	M O N	5	10	20	50	10 0	900	DA Y	DATE
JAN	65. 9	39. 3	65.9	11	3.4	2.1	1.3	0.7	0	0	38	1/18/2 013
FEB	47. 3	49. 7	47.3	11	1.6	0.9	1.1	0.6	0	0	49	2/26/2 006
MAR	58. 4	33. 2	58.4	11	3	1.3	1.1	0.7	0.1	0	51.5	3/27/2 006
APR	43. 3	46. 6	43.3	11	1.5	1	0.7	0.5	0.1	0	68	4/4/20 11
MAY	10. 4	14	10.4	11	0.5	0.4	0.3	0.1	0	0	29.2	5/8/20 09
JUN	1.7	3.6	1.7	11	0.3	0	0.1	0	0	0	12	6/10/2 009
JUL	2.4	4.3	2.4	11	0.3	0.1	0.1	0	0	0	12.1	7/4/20 07
AUG	2.3	5.6	2.3	11	0.2	0	0.1	0	0	0	19.2	8/15/2 011
SEP	6.6	8.2	6.6	11	0.4	0.4	0.1	0.1	0	0	22.5	9/4/20 15
OCT	48. 1	29. 5	48.1	11	1.5	0.7	1.4	0.6	0	0	38.2	10/29/ 2009
NOV	97. 7	40. 5	97.7	11	3.1	2	1.3	1.5	0.2	0	65.5	11/12/ 2008

Clause	Data												
	D E C	104 .6	56. 3	104. 6	11	3.8	1	1.7	1.9	0.1	0	55	12/16/ 2014
	Y R	488 .6		67.9		19. 5	9.8	9.2	6.8	0.5	0	488. 6	

Table 1 Rainfall Records for Period: 2006– 2016

	The factor (Nw - Nn) shall be considered to represent a fair allowance for days during which rainfall exceeds 10 mm and the factor (Rw - Rn)/x shall be considered to represent a fair allowance for those days when rainfall does not exceed 10 mm but wet conditions prevent or disrupt work. The total extension of time shall be the algebraic sum of all monthly totals for the contract period, but if the algebraic sum is negative the time for completion shall not be reduced due to subnormal rainfall. Extensions of time for a part of a month shall be calculated using pro rata values of Nn and Rn.” For this project the rainfall formula will only apply as background information, or dispute resolution. Extension of time for rainfall will only be granted on Actual Delays experienced; noted and agreed upon by the engineer.
6.10	Payments <i>Add the following at the end of Sub-Clause 6.10.1:</i> “The Contractor shall complete the ‘Contractor’s Monthly Report Schedule’, which pro forma documentation is obtainable from the Employer’s Agent. Pursuant to Sub-Clause (1), these, duly signed by all concerned, together with the Contractor’s statement and a VAT invoice in original format are to be submitted to the Employer’s Agent. Issue by the Employer’s Agent to the Employer and Contractor of any signed payment certificate is conditional to this information being fully endorsed, accurately and timeously submitted to the Employer’s Agent r”. <i>Add the following at the end of Sub-Clause 6.10.1.5:</i> “All documentary evidence of such materials shall be unambiguous with respect to ownership having fully passed to the Contractor on or before the date of submittal of the Contractor’s monthly statement. Should the Contractor fail to supply unambiguous documentary evidence, he shall, prior to submittal of his monthly statement, deliver to the Employer a Guarantor Guarantee in the form contained in the Appendices to the Contract Data.”

9.3	Termination by the Contractor <i>Add the following at the end of Sub-Clause 9.3:</i> 9.3.5“In addition to, or as an alternative to the rights to termination contained in this Clause 9.3, the Contractor may notify the default to the Employer, with a copy to the Employer’s Agent, and if the default is not rectified within 10 days the Contractor may suspend progress of the works until a date 7 days after the default is rectified. The Contractor shall be entitled to extension of time to the extent of delay caused by or resulting from such suspension, and to payment of additional costs caused by or resulting from the suspension. Such extension of time and additional costs shall be promptly ascertained by the Employer’s Agent, who shall then grant the extension of time and include the additional costs in all future payment certificates. Such suspension, extension of time and/or payment of additional costs, shall not prejudice the Contractor’s rights to cancel the contract.”
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C1.2.2 Part 2: Data provided by the Contractor

The General Conditions of Contract, as specified in Part 1, shall be used as a basis for this Data which is required to be completed.

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

Clause	Data
1.1.1.9	The Name of the Contractor is:
1.2.1.2	The address of the Contractor is: Physical address:

Clause	Data
1.2.1.2	Postal address: e-mail address: Contact numbers: Corporate: Direct: Mobile: Fax:

VHEMBE DISTRICT MUNICIPALITY
(Not to be completed at tender stage)

C1.3 Performance Guarantee

In accordance with clause 6.2.1 of General Conditions of Contract, 3rd Edition 2015

Contract No:

Description of Contract:

GUARANTOR DETAILS AND DEFINITIONS

“Guarantor” means:

..... (Please put name of firm)

Physical address:

Postal address:

Tel:

Fax:

“Employer” means: **VHEMBE DISTRICT MUNICIPALITY.**

“Contractor” means:

----- (Please put name of firm)

“Guarantee sum” means: 10% of the contract amount

“**Employer’s Agent**” means: -----

“**Works**” means: Permanent works together with temporary works

“**Site**” means: The land and other places, made available by the Employer for the purpose of the contract, on under over in or through which the works are to be executed or carried out.

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

“**Contract Sum**” means: The accepted amount inclusive for tax of R-----

Amount in words: -----

“**Expiry Date**” This Guarantee shall expire upon the issue of the **Completion Certificate** issued by Vhembe District Municipality signed by the Director of ENGINEERING Services, as such date is advised to the Guarantor in writing confirmed by the Employer.

CONTRACT DETAILS

Employer’s Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Work as defined in the Contract.

PERFORMANCE GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. Expiry Date" This Guarantee shall expire upon the issue of the final completion certificate issued by Vhembe District Municipality signed by the Director of ENGINEERING Services, as such date is advised to the Guarantor in writing confirmed by the Employer
The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on the Certificate of the works has been issued.
3. The Guarantor hereby acknowledges that:
 - 3.1. Any reference in this performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a surety ship;
 - 3.2. Its obligation under this Performance Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1. A copy of a first written demand issues by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent and/ or Employer in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;
 - 4.2. A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address and / or postal address with a copy to the Contractor stating that period of seven (7) days has elapsed since the first written demand terms of 4.1 and the sum certificate has still not been paid;
 - 4.3. A copy of the aforesaid payment certificate which entails the Employer to receive payment in terms of the Contract sum in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address and/ or postal address calling up this Performance Guarantee, such demand stating that:
 - 5.1. The contractor has been termination due to the Contractor's default and this performance Guarantee is called up in terms of 5; or
 - 5.2. A provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Performance Guarantee is called up in terms of 5; and

- 5.3. The aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional /final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the guarantor.
8. Payment by Guarantor in terms of 5 will only be made against the return of the original Performance Guarantee by the Employer.
9. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from his Performance Guarantee on account alleged to be prejudicial to the Guarantor.
10. The Guarantor chooses the physical address and postal address as stated above for the service of all notices for all purposes in connection herewith.
11. This Performance Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after on claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
12. This Performance Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
13. Where this Performance Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Court Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Sign at -----

Date -----

Guarantor's signatory (1) -----

Capacity -----

Guarantor's signatory (2) -----

Capacity -----

Witness signatory (1) -----

Witness signatory (2) -----

RETENTION MONEY GUARANTEE
(Not to be completed at tender stage)

In accordance with clause 6.2.1 of General Conditions of Contract, 3rd Edition 2015

Contract No: -----

Description of Contract: -----

GUARANTOR DETAILS AND DEFINITIONS

“Guarantor” means: -----

----- (Please put name of
firm)

Please address: -----

Postal address: -----

Tel:-----

Fax: -----

“Employer” means: **VHEMBE DISTRICT MUNICIPALITY.**

“Contractor” means: -----

----- (Please put name of firm)

“Guarantee sum” means: 10% of the contract amount

“**Employer’s Agent**” means: -----

“**Works**” means: Permanent works together with temporary works

“**Site**” means: The land and other places, made available by the Employer for the purpose of the contract, on under over in or through which the works are to be executed or carried out.

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

“**Contract Sum**” means: The accepted amount inclusive for tax of R-----

Amount in words: -----

“**Expiry Date**” This Guarantee shall expire upon the issue of the **Final Completion Certificate** issued by Vhembe District Municipality signed by the Director of ENGINEERING Services, as such date is advised to the Guarantor in writing confirmed by the Employer.

CONTRACT DETAILS

Employer's Agent issues: Interim Payment Certificates, Final Payment Certificate and the Certificate Completion of the Work as defined in the Contract.

RETENTION GUARANTEE

1. The Guarantor's liability shall be limited to the amount of the Guaranteed Sum.
2. Expiry Date" This Guarantee shall expire upon the issue of the final completion certificate issued by Vhembe District Municipality signed by the Director of ENGINEERING Services, as such date is advised to the Guarantor in writing confirmed by the Employer

The Employer's Agent and/or the Employer shall advise the Guarantor in writing of the date on the Certificate of the works has been issued.

3. The Guarantor hereby acknowledges that:
 - 3.1. Any reference in this performance Guarantee to the Contract is made for the purpose of convenience and shall not be construed as any intention whatsoever to create an accessory obligation or any intention whatsoever to create a surety ship;
 - 3.3. Its obligation under this Retention Guarantee is restricted to the payment of money.
4. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor hereby undertakes to pay the Employer the sum certified upon receipt of the documents identified in 4.1 to 4.3:
 - 4.1. A copy of a first written demand issues by the Employer to the Contractor stating that payment of a sum certified by the Employer's Agent and/ or Employer in an Interim or Final Payment Certificate has not been made in terms of the Contract and failing such payment within seven (7) calendar days, the Employer intends to call upon the Guarantor to make payment in terms of 4.2;
 - 4.2. A first written demand issued by the Employer to the Guarantor at the Guarantor's physical address and / or postal address with a copy to the Contractor stating that period of seven (7) days has elapsed since the first written demand terms of 4.1 and the sum certificate has still not been paid;
 - 4.3. A copy of the aforesaid payment certificate which entails the Employer to receive payment in terms of the Contract sum in 4.
5. Subject to the Guarantor's maximum liability referred to in 1, the Guarantor undertakes to pay to the Employer the Guaranteed sum or the full outstanding balance upon receipt of a first written demand from the Employer to the Guarantor at the Guarantor's physical address and/ or postal address calling up this Performance Guarantee, such demand stating that:

- 5.1. The contractor has been terminated due to the Contractor's default and this Retention Guarantee is called up in terms of 5; or
- 5.2. A provisional or final sequestration or liquidation court order has been granted against the Contractor and that the Retention Guarantee is called up in terms of 5; and
- 5.3. The aforesaid written demand is accompanied by a copy of the notice of termination and/or the provisional /final sequestration and/or the provisional liquidation court order.
6. It is recorded that the aggregate amount of payments required to be made by the Guarantor in terms of 4 and 5 shall not exceed the Guarantor's maximum liability in terms of 1.
7. Payment by the Guarantor in terms of 4 or 5 shall be made within seven (7) calendar days upon receipt of the first written demand to the guarantor.
8. Payment by Guarantor in terms of 5 will only be made against the return of the original Retention Guarantee by the Employer.
9. The Employer shall have the absolute right to arrange his affairs with the Contractor in any manner which the Employer may deem fit and the Guarantor shall not have the right to claim his release from his Retention Guarantee on account alleged to be prejudicial to the Guarantor.
10. The Guarantor chooses the physical address and postal address as stated above for the service of all notices for all purposes in connection herewith.
11. This Retention Guarantee is neither negotiable nor transferable and shall expire in terms of 2, where after on claims will be considered by the Guarantor. The original of this Guarantee shall be returned to the Guarantor after it has expired.
12. This Retention Guarantee, with the required demand notices in terms of 4 or 5, shall be regarded as a liquid document for the purposes of obtaining a court order.
13. Where this Retention Guarantee is issued in the Republic of South Africa the Guarantor hereby consents in terms of Section 45 of the Magistrate's Court Act No 32 of 1944, as amended, to the jurisdiction of the Magistrate's Court of any district having jurisdiction in terms of Section 28 of the said Act, notwithstanding that the amount of the claim may exceed the jurisdiction of the Magistrate's Court.

Sign at -----

Date -----

Guarantor's signatory (1) -----

Capacity -----

Guarantor's signatory (2) -----

Capacity -----

Witness signatory (1) -----

Witness signatory (2) -----

C1.4 OCCUPATIONAL HEALTH AND SAFETY AGREEMENT

This agreement is mandatory for all contractors appointed by the Vhembe District Municipality or any other institution that do work for or on behalf of Municipality.

This agreement is between:

THE CONTRACTOR:

Herein represented by.....

In his capacity, asBeing duly authorized hereto hereinafter

Referred to as “contractor”.

Compensation Commissioner Number:
(Attach a copy of the Registration

Certificate to this agreement)

Company : Name:.....

Registration Number:

CEO : Name:.....

ID Number:

Physical Address:

.....

**And the VHEMBE DISTRICT MUNICIPALITY
(Hereinafter referred to as “the Council”)**

1. DEFINITIONS

- 1.1 **CONTRACTOR** Means the “Contractor” as defined in the “Principal Contract”.
Annexed hereto in his capacity as mandatory.
- 1.2 **MANDATORY** Includes an agent, contractor or subcontractor for work to be done or service rendered, but without derogating from his status in his own right as an employer of people or user of equipment, machinery, tools or materials.
- 1.3 **THE PRINCIPAL CONTRACT** Means the contract annexed hereto as annexure “A”.
- 1.4 **COUNCIL** Means the Vhembe District Municipality
- 1.5 **RISK CONTROL OFFICER** A person appointed in writing by Council.
- 1.6 Any definitions contained in any Statute hereinafter mentioned shall have the meaning allocated to it by the specific statute.

2. OBJECTIVE

- 2.1 Whereas Council and the Contractor have entered into a contract for service (work) as fully indicated in the “Principle Contract” and whereas the “Contractor” agreed to indemnify Council against the risks stated hereunder whether foreseeable or not, and, whereas it is agreed between the parties that it is of cardinal importance to safeguard both Council and the Contractor’s obligation in terms of relevant legislation as well as to extend the obligation as a company and/or legal person and/or person as an entity concerned with health, safety and the environment.
- 2.2 These rules are applicable to all contractors performing work for Council within the jurisdictional area of the Council and on any premises, which are owned, rented or developed by the Council.
- 2.3 The Council acts through those officials or persons who are generally or specifically charged with the responsibility, in terms of legislation, as well as any other official or person who is generally or specifically charged with the control and supervision of the project.

IT IS HEREBY AGREED AS FOLLOWS:

3. INDEMNITIES

- 3.1 The “Contractor” hereby indemnifies the “Council” against any loss in respect of all claims, proceeding, damages, costs and expenses arising out of any claim or proceeding pertaining to the non-compliance by the “Contractor” of any statutory requirements and/or requirements regarding the following Acts in particular pertaining to the provisions of:

- 3.1.1 The Occupational Health and Safety Act 85 of 1993 (as amended), including the Construction Regulations, 2014 as promulgated on 7 February 2014, in terms of Section 43 of the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), in Government Gazette No. 25207 and Regulation Gazette No. 7721. See Annexure D.
- 3.1.2 The Health Act 63 of 1977.
- 3.1.3 Road Traffic Act 29 of 1989 (as amended).
- 3.1.4 Environment Conservation Act 73 of 1989.
- 3.1.5 The National Water Act 36 of 1998.
- 3.1.6 The Criminal Procedure Act 51 of 1977.
- 3.1.7 The Explosives Act 26 of 1956.
- 3.1.8 The Arms and Ammunition Act 75 of 1969.
- 3.1.9 Compensation for Occupational Injuries and Diseases Act 130 of 1993.
- 3.1.10 The Labour Relations Act 66 of 1995.
- 3.1.11 The Unemployment Insurance Act 30 of 1966 (as amended).
- 3.1.12 The Basic Conditions of Employment Act 75 of 1997 (as amended).
- 3.1.13 Standards Act 29 of 1993.
- 3.1.14 any statutory provisions in any act and/or any law or bylaw of any local government and/or any published official standard incorporated into any statute or bylaw relating to the completion of the work set out in the "Principal Contract".
- 3.1.15 Any other health and safety standard prescribed by the "Council".
- 3.2 The "Contractor" shall ensure that he familiarizes himself with the requirements of the above legislation and that he, his employees and any subcontractor will comply with all the statutory provisions contained in them.
- 3.3 The "Contractor" shall indemnify the "Council" in respect of any physical loss or damage to any plant, equipment or other property belonging to the "Contractor" or for which he is responsible and he hereby indemnifies the "Council" against any loss in respect of all claims, proceedings, damages, costs and expenses consequent upon the loss of or damage to any plant, equipment or other property belonging to, or which is the responsibility of, any subcontractor, agent or employee of the subcontractor.
- 3.4 The "Contractor" shall and hereby indemnifies the "Council" against any liability, loss, claim or proceedings whatsoever, whether arising in common law or by statute, consequent on personal injuries to or the loss of health or death of any person whosoever arising out of or in the course of or caused by the execution of the "Principal Contract".
- 3.4 The "Contractor" shall and hereby indemnifies the "Council" against any liability, loss, claim or proceedings consequent on loss of or damage to any movable or immovable property arising out of or in the course of or caused by the execution of the "Principal Contract" and due to any act or omission of the "Contractor", his agents, servants or subcontractors.
- 4. PERFORMANCE SAFE WORKING PRACTICE**
- 4.1 The "Council" requires a high standard of safe work performance from all employees and expects that the standard be maintained by the "Contractor" within the "Council's" jurisdictional area or on its premises.

- 4.2 Irrespective of human considerations, the maintaining of these health and safety rules shall be the execution of the prescribed legal requirements. These rules are not to hinder the “Contractor” in rendering services or indemnify the “Contractor” from any legal responsibility to ensure healthy and safe work circumstances.

- 4.2 The “Council” shall assist the “Contractor” in any practical considerations to accommodate the healthy and safe execution of work and therefore require co-operation in the execution of these safety rules.

5. LOCK OUT PROCEDURE

- 5.1 When power or air driven machines or equipment, electrical apparatus or pipe lines are examined, repaired, adjusted, cleaned, lubricated or serviced in any other way than normal servicing, then all isolating switches, -levers, valves or appliances must be put in the “off” or “closed” position and locked.
- 5.2 Should more than one team work on a machine, then each person in control of a team, must put a separate lock on the switch, lever, valve or appliance.

6. CRANES, VEHICLES AND HOISTING

- 6.1 For each crane or hoisting equipment used, the “Contractor” must submit a valid and recent test certificate or other form of the last examination of the machine or equipment, to the “Council”.
- 6.2.1 Only trained personnel with written permission and where determined by Law, with a valid driver’s license, may be allowed to operate any electrical diesel or petrol driver overhead crane, hydraulic or electrical hoisting equipment, self-driven forklift, tractor or any other crane or vehicle. No employee of the “Contractor” may perform any overhead work or work on an overhead crane or hoisting equipment or work near cranes or crane rail, before:
- i) An agreement was concluded with the “Council”.
 - ii) Approval has been obtained from the “Council” to perform the work.
 - iii) All applicable danger – and warning symbolic signs are put into position, or exemption, if applied for, is in operation.
- 6.3 The “Contractor” shall be wholly responsible for any loss or damage to cranes, hoisting equipment, plant, machines or equipment brought onto the work site by the “Contractor”

7. MACHINE VALANCES, PROTECTION AND FENDING

- 7.1 No machine valances, protection or fending may be removed from machines, manholes, etc. without the written permission of “Council” if applicable exemption procedures were not appropriated.

8. SCAFFOLD, LADDERS, TOOLS AND EQUIPMENT

- 8.1 No equipment or appliance belonging to "Council" may be used without written permission from "Council".
- 8.2 Unless prior arranged, "Contractors" must bring sufficient tools and equipment to the site to finish the contract, including offices and storerooms. The mentioned equipment remains the responsibility of the "Contractor" with respect to loss, damage and theft.
- 8.3 In exceptional cases, where tools and equipment belonging to "Council" are used to finish the contract, the said equipment and tools are used on own risk and the "Contractor" indemnifies "Council" from any claims that may arise. The said indemnity must be in writing, as well as information regarding the loan period, identification and condition of tools and equipment. The "Contractor" is responsible for the returning of said tools and equipment in the same condition or better. The "Contractor" is responsible to "Council" for any damage or excessive wear of such tools or equipment and material.

9. EXCAVATIONS

- 9.1 Before any excavations commence, written permission must be obtained from "Council" to confirm the location of existing electrical cables, water pipes, etc.
- 9.2 All excavations and obstructions in floor, tar and dirt surfaces must be fenced effectively and safeguarded between sundown and sunup with a sufficient amount of red/yellow warning lights and symbolic signs.
- 9.3 The surrounding area must be kept clean, safe and tidy during excavation. Excess material may not obstruct unnecessarily.
- 9.4 If any property is in danger during excavation, it must be supported and the proposed support work must be submitted to the Department of Labour (OHS) and "Council" for approval.
- 9.5 Written permission must be obtained from "Council" to grant admittance to restricted areas as well as areas where dangerous or poisonous gases are present.

10. FIRST AID

- 10.1 The "Contractor" must provide and maintain a first aid box equipped according to legal requirement where more than (5) five persons are employed. The first aid box must be in the care of a person with a competency certificate from one of the following organizations:
- (i) SA Red Cross Association;
 - (ii) St Johns Ambulance;
 - (iii) SA First Aid League; or
 - (iv) A person or organization approved by the Chief inspector for this purpose.
- 10.2 A visible notice must be put up on any work premises with the name of the person responsible for first aid. In an emergency "Council's" Ambulance / Fire Department or emergency services may be contacted at (015) 290 2000.

11. FLAMMABLE LIQUIDS

- 11.1 The "Contractor" shall be held responsible for the necessary precautionary fire prevention measures. No smoking signs must be put up where applicable. The "Contractor's" employees must be informed of "Council's" fire prevention measures and evacuation procedures.

12. COMPENSATION BY CONTRACTOR

- 12.1 The "Contractor" shall be held responsible for all loss of and damage to property, the death or injury of persons, the resultant loss or damage suffered as well as all law suits, claims, costs, charges, fines and expenses due to negligence, violation of statutory liability or neglect of the "Contractor" or the "Contractor's" employees.

13. TRANSGRESSION OF RULES AND MISBEHAVIOUR

- 13.1 The "Contractor" is warned that any act(s) leading to damage or loss of employees of the "Contractor" or the "Council" shall not be tolerated. The "Council" may (without any reason) demand that any employee of the "Contractor" be withdrawn from the principal "Contract" or site.

14. INCIDENT REPORTING

- 14.1 All incidents referred to in Section 24 of the Occupational Health and Safety Act and or other incidents shall be reported, by the "Contractor", to the Department of Labour, as well as to the "Council" and should such an incident take place outside normal working hours, on a Saturday, Sunday or Public holiday provided with a written report relating to any incident.
- 14.2 The "Council" will obtain an interest in the issue of any formal inquiry conducted in terms of the Occupational Health and Safety Act in any incident involving the "Contractor" and/or his employees and/or his subcontractors.
- 14.3 The "Contractor" undertakes to report to "Council" anything deemed to be unhealthy and/or unsafe and that he undertakes to verse his employees and/or subcontractors in this regard.

15. LIAISON AND SUPERVISION

- 15.1 The "Contractor" hereby undertakes to liaise on a regular basis with the designated Risk Control Officer and "Council" representative regarding any hazards or incidents that may be identified or encountered during the performance of the "Principal Contract".

16. SERVICE INTERRUPTION

- 16.1 Should any work done by the "Contractor" cause a possible interruption, written permission must be obtained from "Council", before such work commences. The "Contractor" may not switch on or off any compressed air, steam, oxygen, vacuum supply or electrical supply without written permission from the "Council".

17. CONFIDENTIALITY

- 17.1 The "Contractor" and his employees shall regard all data, documentation and information of the contract and related documentation as confidential.
- 17.2 Lost documentation/plans or related documentation shall immediately be reported in writing to the "Council".
- 17.3 The "Contractor" shall not put up any advertisements or billboard at the site without permission.
- 17.4 The "Contractor" shall not take photographs of the contract site or part thereof or any work process or part thereof, without written permission from the "Council", or have photographs taken, published or let it be published.

18. CONTRACT SITE AND PRESERVATION

- 18.1 Employees of the "Contractor" shall not be allowed entrance to the site unless a valid identity document, issued by "Council", is displayed. The mentioned documents shall only be valid for a limited period, where after it must be renewed.

19. COMPLETION OF WORK

- 19.1 The "Contractor" or his employees shall not leave the contract site before the "Council" is satisfied that the contract is completed according to the requirements and standards set out in the contract and that the working site is left in a satisfactory and safe condition.

20. LIQUOR, DRUGS, DANGEROUS WEAPONS AND FIREARMS

- 20.1 The "Contractor" shall ensure that no liquor, drugs, dangerous weapons or firearms be brought onto the premises.

21. SEARCHES

- 21.1 The "Contractor" and any person engaged in the contract work may at any time be searched by "Council" appointed security personnel and all packages, suitcases, etc. must be presented to the access control point for examination prior to them being brought onto the property or leaving the property.

22. GENERAL CONDITIONS

- 22.1 Notwithstanding anything to the contrary in this agreement, it is hereby specifically determined that the "Contractor-"

22.1.1 shall have acquainted himself and be conversant with the contents of all statutory provisions applicable to the health and safety of workers and other persons on the site including the execution of the work, and in particular the conditions contained in the Occupational Health and Safety Act, 1993 (Act 85/1993), and the

regulations promulgated in terms thereof, and shall comply therewith meticulously and in all aspects and/or take care that it is complied with;

22.1.2 shall be obliged to immediately execute all instructions given to him by an authorized representative of "Council" in order to ensure and uphold the implementation and enforcement of the provisions referred to in sub-paragraph 1, to the satisfaction of the said representative;

22.1.3 shall indemnify the "Council" against any or all liability which may be incurred by the "Council" as a result of the omission of the "Contractor", his employees, sub-contractors and/or representatives to comply with the provisions referred to in sub-paragraph 1, or to ensure that it shall be complied with;

22.1.4 shall undertake to pay upon demand any and/or all legal costs and other expenses which "Council" may have incurred as a consequence of any criminal charges or other proceedings pending against, or involving the "Council" as a result of the contravention or non-compliance by the "Contractor", his employees, sub-contractors and/or representative of any of the statutory provisions referred to in sub-paragraph 1.

22.1.5 Should the "Contractor" neglect to immediately execute any health and safety written orders issued to him, or to his employee in charge of the works, in terms of the stipulations of sub-paragraph 2, the "Council" shall be entitled to suspend the execution of the works and take the necessary steps to execute or have such order executed. Under these circumstances the contractor shall be obliged to pay "Council", upon demand, all costs and expenses incurred by "Council", in order to execute or have the said orders executed.

22.1.6 Should the abovementioned steps not establish a healthy and safe work environment the "Council" will be entitled to terminate the contract without incurring any further costs or claims from the contractor?

23. "CONTRACTOR" IDENTIFICATION BOARD

- 23.1 The "Contractor" shall provide on any work premises a temporary identification board containing at all worksites the following information:
- Company name on behalf of which division/department the work is being done.
 - The contact number and name of the person representing the "Contractor".
 - The contact number and name of the person representing "Council"

24. ACKNOWLEDGEMENT

- 24.1 The "Contractor" hereby acknowledges that he has read and received a copy of the "Principal Contract" and agrees to be bound by and undertakes to observe all the terms and conditions of the "Principal Contract". This appointment is made in terms of Section 37(2) of the Occupational Health and Safety Act, 85 of 1993.

25. EXCEPTIONS AND OMISSIONS

26. REMARKS

THE CONTRACTOR

SIGNED AT ON THIS DAY OF

WITNESSES:

.....

THE CONTRACTOR

1.

2.

THE COUNCIL

SIGNED AT ON THIS DAY OF

WITNESSES.....

THE COUNCIL

1.

2.

b) INDEMNITY CERTIFICATE

Contractor.....

Employer: Vhembe District Municipality

Contract.....

I/we

Hereafter the "Contractor"

"Contractor" hereby indemnifies the Vhembe District Municipality (Council) against any claim of whatever sort which may arise directly or indirectly from the execution by me/us of the above-mentioned contract and which may be instituted against "Council", as well as of any loss or damage which the "Council" suffers or expenditure the "Council" incurs to prevent responsibility for such claim, loss or damage, whatever the cause of such claim may be or whatever loss or damage the "Council" suffers.

THUS done and signed at on this..... Day

of..... 20.....

WITNESSES:

1.

CONTRACTOR

2.

COUNCIL

c) ACKNOWLEDGEMENT CERTIFICATE

I, in my capacity as.....

Duly authorized heretorepresenting

.....Contractors, acknowledge receipt of a copy of the Vhembe District Municipality's safety manual for contractors and the under mentioned person as my supervisor regarding all works and services which must be executed by the Contractor. The appointment is done in terms of the Occupational Health and Safety Act, 1993 (Act 85/1993).

SIGNED AT ON..... 200...

I, accept the abovementioned appointment, and declare that I am familiar with the contents of the Vhembe District Municipality's Safety Manual for contractors.

CASUALTIES REGISTRATION NUMBER

SIGNED AT ON..... 200....

SIGNATURE:

WITNESSES: 1.

2.

A copy of this certificate shall be submitted to the "Council" before any work commences.

C1.5 Agreement with Adjudicator

This agreement is made on the.....day of 20.....between:
The Employer

(name of company / organisation)

of (address).....

.....,

and the Contractor

(name of company /organisation)

of (address).....

.....(hereinafter called **the Parties**)

And (name).....

of (address).....

(hereinafter called **the Adjudicator**)

Disputes or differences may arise/have arisen* between the Parties under a Contract
dated.....

and known as Contract No.....

(Contract title)

and these disputes or differences shall be/have been* 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.

(* Delete as necessary)

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.

SIGNED by:

(Signature): (Signature): (Signature):

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
on behalf of the **Second Party**
in the presence of

the **Adjudicator** in the presence
of

Witness: **Witness:** **Witness:**

(Signature): (Signature): (Signature):

Name: Name: Name:

Address:..... Address:..... Address:.....

.....

.....

Date: Date: Date:

C2 PART C2: PRICING DATA

C2.1: PRICING INSTRUCTION

C2.2: BILL OF QUANTITIES

VHEMBE DISTRICT MUNICIPALITY

**PROJECT DESCRIPTION: REFURBISHMENT OF MALAMULELE WATER EAST
WATER TREATMENT**

C2.1 PRICING INSTRUCTIONS

1. GENERAL

The pricing instructions describe the criteria and assumptions which will be assumed in the Contract that the Bidder has taken into account when developing his prices. The Bills of Quantities record the Contractor's rates for providing supplies, services, engineering and construction works in accordance with the Scope of Work.

The terms of payment and the provisions for price adjustment, if applicable, are established in the Contract Data. These items are not described in the Pricing Data.

The Bidder's obligations in pricing the Bidder offer and the Employer's undertakings in the checking and correction of arithmetical errors are dealt with in the Standard Conditions of Bidder contained in Annexure F of SANS 294, as amended in and read in conjunction with the Bidder Data.

2. DOCUMENTS MUTUALLY EXPLANATORY

The documents forming the Contract are to be taken as mutually explanatory of one another. The Bill of Quantities forms an integral part of the Contract Documents and shall be read in conjunction with the Bidder Data, Contract Data, Scope of Work, Site Information General and Special Conditions of Contract, the Specifications and the Drawings.

3. DEFINITIONS

For the purpose 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 Scope of Work and Site Information.
Quantity	:	The number of units of work for each item.
Rate	:	The payment per unit of measurement at which the Contractor Contracts to do the work.
Amount	:	The product of the quantity and the rate Bidded for an item.

Sum : An amount contracted for an item, the extent of which is described in the Bill of Quantities, the specifications or elsewhere but the quantity of work of which is not measured in any units.

4. **DESCRIPTIONS**

Descriptions in the Bill of Quantities are abbreviated and comply generally with those in the Standardised Specifications. Clause 8 of each Standardised Specification, read together with the relevant clauses of the Scope of Work, set out what ancillary or associated activities are included in the rates for the operations specified. Should any requirements of the measurement and payment clause of the applicable Standardised Specification, or the Scope of Work, conflict with the terms of the Bill, the requirements of the Standardised Specification or Scope of Work, as applicable, shall prevail.

5. **REFERENCES**

The clauses in a specification in which further information regarding the schedule item can be obtained appear under "Reference clause" in the Bill. The reference clauses indicated are not necessarily the only sources of information in respect of scheduled items. Further information and specifications may be found elsewhere in the contract documents. Standardised Specifications for this contract is COLTO 1998 Edition.

6. **UNITS OF MEASUREMENT**

The units of measurement indicated in the Bill of Quantities are metric units.

The following abbreviations are used in the Bill of Quantities:

%	=	per cent
hr	=	hour
kg	=	kilogram
kg/m ³	=	kilogram per cubic meter
km	=	kilometre
l	=	litres
m	=	metre
m ²	=	square metre
m ³	=	cubic metre
No.	=	number
Prov Sum	=	Provisional Sum
sum	=	lump sum
t	=	tonne
Note	=	explanation
Set	=	collection
Item	=	article

7. **NET MEASUREMENTS**

Unless otherwise stated, items are measured net in accordance with the drawings, and no allowance is made for off-cuts and waste.

8. QUANTITIES

The quantities set out in these Bills of Quantities are approximate and do not necessarily represent the actual amount of work to be done. The quantities of work accepted and certified for payment will be used for determining payments due and not the quantities given in the Bills of Quantities.

The Contract Amount to be determined in accordance with the conditions of contract identified in the Contract Data shall be computed from the actual quantities of authorized work done, value at rates determined in terms of the Contract Data, against the respective items in the Bill of Quantities.

9. CURRENCY

All rates and sums of money quoted in the Bill of Quantities shall be in Rand and whole cents. Fractions of a cent shall be discounted.

10. VALUE ADDED TAX

Value Added Tax shall be excluded from the rates and sums contracted for the various items of work included in the Bill of Quantities. VAT will be added as a single entry to the summary.

11. RATES AND PRICES

11.1 General

- a) The Contractor must price each item in the Bill of Quantities in BLACK INK. Reproduced computer printouts of the Bills of Quantities will not be acceptable.
- b) The rates and prices to be inserted in the Bill of Quantities shall cover all the services and incidentals for the work described under the several items. Such prices and rates shall cover all costs and expenses that may be required in and for the execution of the work described, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the documents on which the Bidder is based, as well as overhead charges and profit. Reasonable prices shall be inserted as these will be used as a basis for assessment of payment for additional work that may have to be carried out.
- c) Where the Contractor is required to furnish detailed drawings and designs or other information in terms of the Contract Data, all costs thereof shall be deemed to have been provided for and included in the unit rates and sum amounts contracted for the items scheduled in the Bill of Quantities. Separate additional payments will not be made.

- d) A price or rate is to be entered against each item in the Bill of Quantities, whether the quantities are stated or not. An item against which no price is entered will be considered to be covered by the other prices or rates in the Bill. The Contractor will not be paid for items against which no rate or lump sum has been entered in the Bill of Quantities.
- e) Should the Contractor group a number of items and contract one lump sum for such group of items, this single lump sum shall apply to that group of items and not to each individual item.
- f) Should the Contractor indicate against any item that compensation for such item is included in another item, the rate for the item included in another item shall be deemed nil.
- g) A submission may be regarded as non-responsive if any rates or lump sums in the Bill of Quantities are, in the opinion of the Employer, unreasonable or out of proportion.

11.2 "Rate only" items

The Contractor shall fill in a rate (in the rate column) against all items where the words "rate only" appear in the Amount column, which rate will constitute payment for work which may be done in terms of this item. Such "rate-only" items are used where it is estimated that little or no work will be required under the item or where the item is to be considered as an alternative to another item for which a quantity is given.

11.3 Arithmetic

Excepting where Sum Amounts are required or where Provisional Sums have been indicated, the Contractor shall enter an applicable rate in the Rate Column of the Bill of Quantities for each scheduled item. He shall also enter an appropriate sum in the Amount column for each scheduled item, by determining in the applicable line item the product of the Quantity and the Unit Rate.

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

If bills of quantities (or schedule of quantities or schedule of rates) 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.

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.

11.4 Labour Intensive work

Those parts of the contract to be constructed using labour-intensive methods have been marked in the bill of quantities with the letters LI in a separate column or as a prefix or suffix against every item so designated. The works, or parts of the works so designated are to be constructed using labour-intensive methods only. The use of plant to provide such works, other than plant specifically provided for in the scope of works, is a deviation from the contract. The items marked with the letters 'LI' are not necessarily an exhaustive list of all the activities which must be done by hand, and this clause does not over-ride any of the requirements in the generic labour intensive specification in the Scope of Works.

Where minimum labour intensity is specified by the design the contractor is expected to use their initiative to identify additional activities that can be done labour-intensively in order to comply with the set minimum labour intensity target.

Payment for items which are designated to be constructed labour-intensively (either in this schedule or in the Scope of Works) will not be made unless they are constructed using labour-intensive methods. Any unauthorised use of plant to carry out work which was to be done labour-intensively will not be condoned and any works so constructed will not be certified for payment.

12. VARIATION IN TEXT

No alteration, erasure or addition is to be made in the text of the Bill of Quantities. Should any alteration, erasure or addition be made, it will not be recognized; the original wording of the Bill of Quantities will be adhered to.

C2.2: BILL OF QUANTITIES

**VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS**

PRELIMINARY & GENERAL

ITEM	REF	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	SANS 1200A	<u>GENERAL</u>				
1.1		Fixed Charges and Value Related Items				
1.1.1		Contractual Requirements				
1.1.1.1.		a) Providing Sureties as per General Conditions of Contract	Sum	1		
1.1.1.2		Contract Clause 38	Sum	1		
1.1.1.3		c) Damage to Persons and Property as per General Conditions of Contract	Sum	1		
1.1.1.4		d) Third Party Insurance as per General Conditions of Contract	Sum	1		
1.1.2.2		FACILITIES FOR CONTRACTOR				
1.1.2.2.1		a) Offices, stores, workshops	Sum	1		
1.1.2.2.2		b) Housing for staff	Sum	1		
1.1.2.2.3		c) Ablution and latrine facilities	Sum	1		
1.1.2.2.4		d) Fencing off site of construction camp	Sum	1		
1.1.2.2.5		f) Tools and equipment	Sum	1		
1.2		<u>TIME RELATED COSTS</u>				
1.2.1		Operation and Maintenance of Facilities on Site				
		FACILITIES FOR THE CONTRACTOR				
2.1.1		a) Offices, stores, workshops	Sum	1		
2.1.3		b) Housing for staff	Sum	1		
2.1.5		c) Toilets and ablutions	Sum	1		
2.1.7		e) Provision of water, power and communication facilities	Sum	1		
2.1.9		f) Tools and equipment	Sum	1		
TOTAL CARRIED TO SUMMARY						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

TOTAL BROUGHT FORWARD						
2.2		Supervision for duration of construction				
2.2.1		a) Contractors supervision and management	Sum	1		
2.2.2		b) Company and head office overhead costs	Sum	1		
3		<u>PROVISIONAL SUMS</u>				
3.1		Payment of wages owed	Prov Sum	1	130 000.00	130 000.00
3.2		Handling cost in respect of sub-items 3.1	%	130 000.00		
3.3		Provisional sum for CLO officer Employment of full time labour desk officer for the duration of the contract at R 5 500/month	Prov Sum	1	49 500.00	49 500.00
3.4		Handling cost in respect of sub-items 3.3	%	49 500.00		
3.5		Provisional sum for PSC Payment of PSC Members at R200 per sitting	Prov Sum	1	12 600.00	12 600.00
3.6		Handling cost in respect of sub-items 3.5	%	12 600.00		
4		<u>NAMEBOARD</u>				
4.1	PSAB 8.2.2 (a)	Supply and install construction name board approximate size 4m x 3,5m (MIG Specification)	No.	2		
5		<u>PPE</u>				
5.1		Provision of Labourers PPE with EPWP logo	Sum	1		
6	PS A8.7	DAYWORKS <i>(As specified in SANS 1200 A and the Project Specifications.)</i>				
6.1		Labour - Normal Working Hours: [Provisional]				
6.1.1		Skilled Labour (Artisan).	hr	1.00		
6.1.2		Semi-skilled Labour.	hr	1.00		
6.1.3		Unskilled Labour.	hr	1.00		
6.1.4		Foreman.	hr	1.00		
6.2		Plant - Heavy Equipment: [Provisional]				
6.2.1		Excavator - Size Cat 225.	hr	1.00		
6.2.2		Excavator - TLB.	hr	1.00		
6.2.3		Grader 140G or similar.	hr	1.00		
6.2.4		Front end loader - bucket capacity ≤ 1.5 m ³ .	hr	1.00		
6.2.5		Front end loader - bucket capacity ≤ 1.5 m ³ .	hr	1.00		
6.2.6		Tip truck - 5 m ³ capacity.	hr	1.00		
TOTAL CARRIED TO SUMMARY						

**VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS**

TOTAL BROUGHT FORWARD						
6.2.7		Tip truck - 10 m ³ capacity.	hr	1.00		
6.2.8		Vibratory compaction roller - 13.5 ton.	hr	1.00		
6.2.9		Transport cost per any unit of plant to deliver to site and remove from site for items 5.3.1 to 5.3.8	Sum	1.00		
6.3		Plant - Small Equipment: [Provisional]				
6.3.1		Pedestrian roller - BW90 or similar.	hr	1.00		
6.3.2		Vibratory plate compactor.	hr	1.00		
6.3.3		Vibratory rammer.	hr	1.00		
6.3.4		Transport cost per any unit of plant to deliver to site and remove from site for items 5.4.1 to 5.4.3.	Sum	1.00		
TOTAL CARRIED TO SUMMARY						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
2		RAW WATER				
2.1		PUMPS, PIPEWORK AND FITTINGS (RAW WATER)				
2.1.1		Centrifugal pump set, KSB Etanorm 300-250-320, or similar, to replace existing pump, with a duty of 950m³/h (264 l/s) at a speed of 1450 rpm, against a head of 23 metres , and hydraulic efficiency of at least 80% , coupled with a 90 kW Motor (VSD application Motor) at 400V, 4-pole, IP 68, Complete with a cooling jacket and a DN 200 pedestal. The engineer shall give prior approval before a purchase order is placed.	No.	2		
2.1.2		New Baseplate to match new motors and existing pumps including coupling and guard(Coupling to be confirmed by engineer)	No.	2		
2.1.3		Site system curve verification testing, before pump purchase orders are placed.	Sum	2		
2.1.4		Provide reliable pressure gauge	Sum	4		
2.1.5		Clamp-on ultrasonic flow meter for flow measurement, design the system curve verification exercise. The said ultrasonic flow meter shall not form part of permanent works.	Sum	1		
2.1.6		Allow sum for pipework modification, including suction side and delivery side fittings, flanges, fasteners, adapters, to suit the new pump installations.	Sets	2		
2.3		PUMP PROTECTION				
2.3.1		Flow Switch, 3bar, IP68, stainless steel paddle, complete with threaded boss, requisite fabrication and wiring to the MCC.	No.	2		
2.3.2		Pressure Transmitters with alarm contacts, WIKA or equivalent switch with minimum and maximum pressure limits as per the pump head complete with wiring to the MCC and PLC.	No.	2		
2.4		CORROSION PROTECTION				
2.4.1		Preparation of surfaces, fusion-bonded epoxy, 150µm dry film thickness, internal and externally on pipework, pumps and fittings, for installations in the raw water pumpstation.	Sum	1		
2.6		DECOMMISSIONING AND OPERATION OF PLANT				
2.6.1		All removed old equipment shall be handed over to the water treatment works manager, and signed off.	Note			
2.6.2		Maintain raw water pumpstation functionality during construction.	Item	1		
2.7		SIGNAGE				
2.7.1		Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements	Sum	1		
TOTAL CARRIED FORWARD						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
3		CHEMICAL DOSING				
3.1		Supply and install, Dry Lime Feeder, consisting of S/S 304, 0-40kg/hr or 0-120kg/hr, c/w S/S304 - 0,5cu Hopper and 100 Lt S/S304 mixing bowl. The engineer shall give prior approval before purchase order is placed	No.	0		
3.1.1		Class 9, 80 mm PVC pipe	m	3		
3.1.2		Class 9, 80 mm Bends, tees, fittings	Set	1		
3.1.3		Class 9, 80 mm PVC isolating valves	No.	1		
3.1.4		Pipe clamps and holding brackets	Item	1		
3.2		Repairs to lifting equipment				
3.2.1		Shotblast, prime and repaint existing steel structures	m²	12		
3.2.2		New electric motors, SEW-EURODRIVE DRN80M4/FF type, or approved equivalent, rated at 0.75 kW, 230/400 V, 50 Hz, IE3 efficiency class, with a speed of 1440 rpm and continuous duty cycle (S1). Each motor shall be B5 mounted with IEC FF165 flange (200 mm	No.	1		
3.3		Secondary Metering Pump Sets (from storage Tanks to Mixing Chamber)				
3.3.1		New flocculant (polyelectrolyte) dosing pumps, Antech or Grundfos DMX or equivalent, two being duty units and one being standby, each with a dosing range of 2- 60l/hr for liquid of 1200 kg/m³ density at a head capability up to 10 bar. The engineer shall give prior approval	No.	2		
3.3.2		Class 9, 25 mm PVC pipe	m	10		
3.3.3		Class 9, 25 mm PVC isolating valves	No.	4		
3.3.4		Class 9, 25 mm Bends, tees, fittings	Set	4		
3.3.5		10mm Tube	m	75		
3.3.6		Pipe clamps and holding brackets	Item	1		
TOTAL CARRIED FORWARD						

**VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS**

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
3.4		Repairs to piping and fittings at Polyelectrolyte-Storage tanks				
3.4.1		Class 9, 25 mm bends, tees, valves, pipes, including fittings from the storage tanks	Sum	1		
		CHLORINATION				
3.5		Chlorine Injection				
3.5.1		5 kg/h, wall-mounted, vacuum-operated, sonic controlled, chlorinators (injectors), Grundfos, Wallace and Tiernan or equivalent	No.	2		
3.5.2		Heating coils for chlorine line (upstream of chlorinators)	m	10		
3.5.3		Pressure gauge, Wika (100mm dial and filled with glycerine), mounted on the pre-chlorination carrier water piping, with a range from 0 to 500 kPa, complete with ball shut off valve and piping	No.	1		
3.5.4		Isolating ball valve, uPVC, 50NB, class 16	No.	3		
3.5.5		Chlorine solution piping, uPVC, 50NB, complete with fittings, tees, elbows and brackets	m	5		
3.5.6		Manifold, 1/2" NB, Schedule 40, carbon steel, complete with fittings, flanges bolts, as well as a drip leg and heater	m	5		
3.5.7		Manifold isolation valve 1/2" PN40	No.	2		
3.5.8		Pressure gauge, complete with isolating valve	No.	2		
3.5.9		Pressure and vacuum relief valve, 1/2"NB, PN40	No.	2		
3.5.10		Repairs to lifting crane	Sum	1		
TOTAL CARRIED FORWARD						

**VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS**

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
3.6		CARRIER WATER PUMPS				
3.6.1		New carrier water pumpsets, with a duty of 1.7 l/s and a head of 15 metres, complete with requisite pipe fittings, wiring to the MCC.	No.	2		
3.7		EMERGENCY EYE WASH SHOWER & BASIN SINGLE HAND OPERATED STATION				
3.7.3		Stainless steel shower & basin single hand operated	No.	1		
3.8		GENERAL ITEMS				
3.8.1		Breathing Apparatus (BA) set comprising a rescuscitator, air cylinder and mask, complete with wall-mounted cabinet, with a 50 mm minimum roof overhang and with two glass doors in front shall be mounted on the wall just outside the chlorine room.	Sum	1		
3.8.2		Supply, deliver and install single column, stand alone emergency shower with hand operated eye wash, epoxy coated, including connection to water line	Sum	1		
3.9		SIGNAGE				
3.9.1		Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements	Sum	1		
3.10		TESTING AND COMMISSIONING				
3.10.1		Testing and commissioning	Sum	1		
TOTAL CARRIED TO SUMMARY						

**VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS**

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
4						
4.1		PENSTOCKS, CHANNEL GATES & SLUICE GATES				
4.1.1		Stainless steel 750 x 750 manual penstock at flocculation channels for scum removal, PN 16 complete with guide structure, rising spindle and drive train, inclusive of requisite concrete works and sealing structure. The stem, door, frame and fasteners shall be made of 316 stainless	No.	4		
4.1.2		Repair Existing channel gates	Sum	4		
4.2		SIGNAGE				
4.2.1		Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements	Sum	1		
5		SEDIMENTATION TANK				
5.1		Valves				
5.1.1		250NB desludging valves double flanged on sedimentation tanks	No.	12		
5.1.2		Spindle extension on existing and new valves for mounting of actuators, complete with guides, brackets and fasteners	No.	12		
5.2		Piping and Fittings				
5.2.1		Supply and install of the pipes, puddle flanges and couplings	Sum	1		
5.3		Sundries				
5.3.1		Supply and install 1800mm dia glass fibre stilling box	No	6		
5.3.2		Aluminium U-channel sluice Type 2 H-frame	No	6		
TOTAL CARRIED FORWARD						

**VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS**

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
5.3.3		Turbidity meter, complete with a 4-20mA signal, mounted at outlet points of each sedimentation tank (clarifier), including cabling to the control room.	No.	6		
5.4		Name Tagging and Signage	sum	1		
5.5		Testing and commissioning of all sedimentation tanks	Sum	1		
6		FILTRATION (MECHANICAL)				
		Filter bed depth (silica)	m	0.75	Included	
		Filter bed depth (grit)	m	0.1	Included	
		Filter bed depth (gravel)	m	0.15	Included	
		Number of filters	No.	9	Included	
		Density of silica (confirmed)	kg/m ³	2650	Included	
		Density of grit (assumed)	kg/m ³	2000	Included	
		Density of gravel (assumed)	kg/m ³	1650	Included	
		Width of filter bed (along filter gallery)	m	4.4	Included	
		Length of filter bed (transverse to filter gallery)	m	3.78	Included	
		Filter bed area (all filters)	m ²	150	Included	
TOTAL CARRIED FORWARD						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
6.1		Filtration media, laterals and nozzles				
6.1.1		110 mm diameter class 9 uPVC lateral piping, cut to required lengths	m	2200		
6.1.2		110mm uPVC end caps for laterals	No.	1000		
6.1.3		Supply and deliver UV-blocked polypropylene filter nozzles, fitted with air holes. Each nozzle to provide a flow that will meet the backwash flow requirement of 27 m/h at operating conditions. Filter nozzles shall be approved by Engineer, prior to finalisation fo design work by	No.	4630		
6.1.4		Threaded saddles (suitable for 110 dia laterals and nozzles, complete with accessories, and solvent-welded to laterals). Type of nozzles shall be confirmed with the Engineer before placement of order.	No.	4630		
6.1.5		Folded angles and jacking screws	Set	1		
6.1.6		Stainless steel anchors	Set	1		
6.1.7		Gravel, grit, and silica sand layers for mechanical water filtration	Provision sum	1	400 000	400000
6.2		BLOWERS				
6.2.1		New air blower with a flow rate of 401 m³/h and a delivery pressure of 108.5kPa. Volumetric efficiency of at least 82.5% and total efficiency of at least 60%. The engineer shall give prior approval before a purchase order is placed.	No.	1		
6.2.2		New Motor , induction, squirrel cage, foot-mounted, 5.5kW, 400V, 2860 RPM, IP55	No.	2	Included	
6.2.3		Motor slide, rails, V-Belt assembly and drive guard assembly	No.	4	Included	
6.2.4		Combined suction filter and silencer 100NB	No.	2	Included	
6.2.5		Filter restriction inductor	No.	2	Included	
6.2.6		Suction vacuum switch	No.	2	Included	
6.2.7		Combined base-frame and discharge silencer	No.	2	Included	
TOTAL CARRIED FORWARD						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
6.2.8		Pressure relief valve	No.	2	Included	
6.2.9		T- Fitting 100NB Steel	No.	4		
6.2.10		Discharge pressure switch	No.	2		
6.2.11		Non-return valve, 100NB , PN10, flanged to SABS 1123.	No.	2		
6.2.12		SANS 719 Grade C Delivery Steel Pipe, 100 NB, with a wall thickness of 4.5mm, complete with fittings (VJ Couplings, crotch plate, welds, flanges, bolts and end caps); with connected to new and Existing Blower	m	20		
6.2.13		Anti-vibration mountings	Set	2		
6.2.14		Baseplate and plinth (950 x 1400mm; 25MPa reinforced concrete platform)	Sum	2		
6.2.15		Commission and test blower sets	Set	2		
6.3		VALVES, SLUICE GATES AND ACTUATORS				
6.3.1		Stainless steel inlet sluice gate, rising spindle, complete with plate, guides, stem (threaded for multi-turn actuation), fasteners, gaskets. To replace sluice gates at existing filter house	No.	10		
6.3.2		Repair of the existing gate valves and sluice gates	Sum	1		
6.4		PIPING				
		Supply, handle, installation of pipe complete	Sum	1		
TOTAL CARRIED FORWARD						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
6.5		BACKWASH PUMPS				
6.5.1		Supply identical end suction centrifugal backwash pumps complete with motors and base plates, all as specified	No	2		
6.5.2		Supply all pipe-work and fittings, including gate valves and check valves as detailed	Sum	1		
6.6		Name Tagging and Signage				
6.6.1		Name tagging and coding of all equipment including valves, piping, actuators, blowers, pumps, MCCs, wiring, light fittings, HMIs, PLCs	Sum	1		
6.6.2		Safety signs including but not limited to fire fighting, evacuation, floor painting, PPE requirements	Sum	1		
6.7		Ventilation louvres for the filter building, mounted at sidewall and roof levels	Sum	1		
6.8		Testing and commissioning of all filters	Sum	1		
6.9		SIGNAGE				
6.9.1		Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements	Sum	1		
7		HIGH LIFT PUMP STATION				
7.1		PUMPS				
7.1.1		Supply, delivery, installation, testing and commissioning of pumps, pipework, fittings, bends, elbows, reducers and other listed installations, complete with flanges, gaskets, bolts, nuts and washers. New KSB Pump Assy OMEGA 200-670A(GC) centrifugal pumps with a duty of 456 m³/h (127.22l/s) at a speed of 1450 rpm, against a head of 138 metres , and hydraulic efficiency of at least 80% , with Carbon steel shaft; Bronze (BS 1400 PB1) impeller; Mechanical seals: low	No.	2		
7.1.2		Repair existing centrifugal pumps and motors	No.	2		
TOTAL CARRIED FORWARD						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
7.1.3		Motor, induction, squirrel cage, foot-mounted, 280 kW, 380V, 1490 RPM, IP67	No.	2		
7.1.4		HRC Coupling (motor-to-pump)	No.	2		
7.1.5		Baseplate	No.	2		
7.1.6		Machine guards for the new pumpsets on all moving parts, especially gear couplings (pump-to-motor)	No.	2	Included	
7.2		PIPEWORK AND FITTINGS				
7.2.2		Non-return valve, 300 NB, PN25 , tilted disc type with an operating stroke of not more than 40°	No.	4		
7.2.3		Pump Control Valve, 300NB , at least PN25 (Bermad, CLA-VAL or equivalent) , SABS 1123 flanged, complete with controls	No.	4		
7.2.4		Flowmeter, magnetic flow type, DN300, PN 25, Promag 51, or equivalent, for instantaneous and totalised flow readouts in l/s and kl (LCD), 4-20mA, programmable datalogger, SABS 1123 flanged, stainless steel electrodes, 240 VAC, complete with pipe reducers	No.	1		
7.2.5		Air valve, DN25, PN25, Ventomat or equivalent installed on discharge main	No.	3	Included	
7.2.6		400 NB , 45° Long elbow, PN 16, SANS 719 Steel	No.	2	Included	
7.2.7		300 NB , 45° Long elbow, PN 25, SANS 719 Steel	No.	2	Included	
7.2.8		Suction side, 400 NB, PN 16 concentric reducer, SANS 719 Steel	No.	2	Included	
7.3		PUMP PROTECTION				
7.3.1		Temperature sensor, PT100 with 4-20mA signal transmission, for the DE and NDE bearings of each pump (Nipples to be factory fitted on the pumps, no drilling on site)	No.	2		
7.3.2		Vibration sensor, for the DE and NDE bearings of each pump (Nipples to be factory fitted on the pumps, no drilling on site will be acceptable)	No.	2		
TOTAL CARRIED FORWARD						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
7.3.3		No flow switch	No.	2		
7.3.4		Pressure Switch	No.	2		
7.4		PUMP PERFORMANCE MONITORING				
7.4.1		Pressure Transmitter, 4-20mA signal, WIKA or equivalent on the Suction and delivery of each Pumps complete with wiring to the MCC.	No.	4		
7.4.2		Suction Mechanical Pressure Gauge, Wika (100mm dial and filled with glycerine), mounted on each pump suction side for the new pumps with a range from -5 kPa to 200 kPa, complete with ball isolating valve and piping	No.	2		
7.4.3		Delivery Mechanical Pressure Gauge, Wika (100mm dial and filled with glycerine), mounted on each pump delivery piping, for the new pumps, with a range from 0 to 2500 kPa, complete with ball isolating valve and piping	No.	2		
7.5		PEDESTALS				
7.5.1		Suction and Delivery Pressure Gauge Pedestals (PS-1) , Design, issuing of shop drawings, manufacture, deliver, install complete with corrosion protection pressure gauge support frames to suit Specified pressure gauge as detailed on this BOQ.	No.	4		
7.6		CATHODIC ISOLATION				
7.6.1		Cathodic isolation for each pump	No.	2		
7.7		CORROSION PROTECTION				
7.7.1		Painting of pipework, pumps and fittings in line with the set colour-coding convention	No.	1		
7.8		SIGNAGE				
7.8.1		Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements	Sum	1		
7.9		QUALITY ASSURANCE				
7.9.1		Pumps manufacturer's performance testing and issuing of performance certificates as per the Specifications and ISO 9906 Grade 2B , The test is to be conducted at 3 different speeds, namely mean speed, 20% below and above mean speed.	No.	2		
7.9.2		Pressure testing of all pipework and issuing of pressure test certificates.	No.	1		
7.9.3		Site acceptance testing on two new pumps (contractor to supply all necessary equipment for testing)	No.	1		
TOTAL CARRIED TO SUMMARY						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
8		RAW WATER				
8.1		Centrifugal pump set, KSB Etanorm 300-250-320, or similar, to replace existing pump, with a duty of 950m³/h (264 l/s) at a speed of 1450 rpm, against a head of 23 metres, and hydraulic efficiency of at least 80%, coupled with a 90 kW Motor (VSD application motor) at 400V, 4-pole, IP 68. The engineer shall give prior approval before a purchase order is placed.				
8.1.1		Design, Manufacture, deliver, install and commission a new MCC for 90kW Induction Motor for the above installation. Control must be via VSD with overload, overheat, phase failure protection. MCC to communicate with flow and pressure sensors where installed.	Sum	2		
8.1.2		Motor Eathing	No.	2		
8.1.3		Supply Cable, installation, connection, test. (35mm²x4Core PVC/SWA Copper Cable with 25mm² BCEW)	m	100		
8.1.4		Emergency disconnect switch to be installed at the motor within reach.	Sum	2		
8.2		DECOMMISSIONING AND OPERATION OF PLANT				
8.2.1		Dismantle, remove and cart away all redundant equipment.	No.	1		
9		,				
9.1		New flocculant (polyelectrolyte) dosing pumps, Grundfos DMX, or equivalent, two being duty units and one being standby, each with a dosing range of 2- 60l/hr for liquid of 1200 kg/m³ density at a head capability up to 10 bar.				
9.1.1		Control panel for chlorine dosing, carrier water pumps, leak detection	Sum	2	Provisional Sum	124 434.00
9.1.2		Electronic control installation for 3 way operated ball valve plus wiring and cable trays	sum	1		
9.1.3		307 Leak Detector System with 2 Sensors	Sum	1		
9.1.4		Automatic changeover panel (for power supply and control of the 3-way motor-operated ball valve, as per the two pressure switches inouts).	Sum	1		
9.2		De-Commission and removal of reduntant electrical equipment				
9.2.1		Dismantle all redundand equipment, remove and cart away	Sum	1	Provisional Sum	36 000.00
9.3		Existing Electrical installation repairs and replacement (Motors and controls)	Sum	1	Provisional Sum	46 650.00
TOTAL CARRIED TO SUMMARY						

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL BROUGHT FORWARD						
10		FILTRATION				
10.1						
10.1.1		New MCC with VSD Control Motor , induction, squirrel cage, foot-mounted, 5.5kW, 400V, 2860 RPM, IP55	Sum	2		
10.1.2		New supply Cabling with Earth wire, installation, commissioning. (10mm ² PVC SWA Copper Cable and 6mm ² BCEW)	No.	30		
10.2		BACKWASH PUMPS				
10.2.1		New MCC installation for the backwash pumps complete with VSD Control, protection and operational systems interface as designed by the Mechanical engineer	Sum	2	Provisional Sum	765 564.00
10.2.2		New Backwash pump cabling supply and installed	Sum	1	Provisional Sum	78 480.00
10.3		De-commissioning and removal of redundant equipment:				
10.3.1		Dismantle, remove, cart away all de-commissioned equipment	Sum	1		
11		HIGH LIFT PUMP STATION				
11.1		PUMPS				
11.1.1		New centrifugal pumps with a duty of 456 m³/h (127.22l/s) at a speed of 1450 rpm, against a head of 138 metres , and hydraulic efficiency of at least 80% , with Carbon steel shaft: Bronze (BS 1400 PB1) impeller: Motor, induction, squirrel cage, foot-mounted, 280 kW, 380V, 1490 RPM, IP67 - Design, supply, install and commission a completely new MCC for the specified pump set. Control must be via VSD with	No.	2		
11.1.2		New Supply cable for the MCC/Pump set (120mm ² PVC/SWA Copper 4 core cable with 70mm ² BCEW)	m	80		
11.2		Existing infrastructure				
11.2.1		De-commission and remove redundant equipment	No.	1		
12		Small Power Installation - complete plant:				
12.1		Area and outdoor lighting	sum	1	provisional sum	56 000.00
13		Building				
13.1		Check all building distribution boards and repair or replace damaged wiring, loose connections, broken MCB's and E/L units. Label the complete building installation, socket outlets, isolators and DB's. Remove redundant circuits. Test and issue COC.	Per DB	5		
14		Power and Lights				
14.1		Replace all broken, rusted socket outlets and isolators. Check circuit wiring and circuit earthing. Replace extension boxes where required.	Sum	1		
14.2		Replace all lights indoors and outside, wall mounted lights with new LED fittings and lamps. Use Vapour proof/vandal proof lights in the stores and pump stations.	sum	1		
15		Building Earthing and Lightning protection for complete installation.	Sum	1		
16		MCC				
16.1		All existing MCC's that remain and are not set for replacement or upgrade must be tested for correct functionality and proper operation. Repair as needed	Sum	1		
17		Telemetry	Sum	1	provisional	944 269.00
TOTAL CARRIED TO SUMMARY						

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 4</u>			
	<u>MASONRY</u>			
	<u>SUPERSTRUCTURE</u>			
	<u>Brickwork of NFP bricks in class II mortar</u>			
1	Half brick walls in beamfilling. A : 5 B : 5 C : 5 D : 2 E : 0 F : 0 G : 9 H : 0 I : 10 J : 3 K : 3 L : 3 M : 10 N : 7	m2	64	
2	One brick walls A : 0 B : 28 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0	m2	28	
	<u>Joint forming material in movement joints:</u>			
3	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide. A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 20 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0	m2	20	
	<u>Brickwork reinforcement</u>			
4	150mm Wide reinforcement built in horizontally A : 0 B : 336 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0	m	336	
	Carried Forward		R	
	Section No. 2 BUILDING WORK Bill No. 4 Masonry PREPARED BY: MUTEU CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

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PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.5</u>			
	<u>WATERPROOFING</u>			
	<u>DAMP-PROOFING OF WALLS AND FLOORS</u>			
	<u>One layer of 375 micron Consol Plastic Brikgrip DPC"</u> <u>embossed damp proof course</u>			
1	In walls A : 0B : 2C : 0D : 0 E : 0F : 0G : 0H : 0 I : 0J : 0K : 0L : 0 M : 0N : 0	m2	2	
	<u>One layer of 250 micron "Consol Plastic USB Green"</u> <u>waterproof sheeting sealed at laps with "Gunplas</u> <u>Pressure Sensitive Tape"</u>			
2	Under surface beds A : 0B : 46C : 0D : 0 E : 0F : 0G : 0H : 0 I : 0J : 13K : 0L : 0 M : 0N : 0	m2	59	
	<u>JOINT SEALANTS ETC</u>			
	<u>Silicone sealing compound including backing cord, bond</u> <u>breaker, primer, etc</u>			
3	6 x 10mm In expansion joints including raking out of expansion joint filler as necessary (Provisional) A : 0B : 0C : 0D : 0 E : 0F : 0G : 8H : 0 I : 0J : 0K : 0L : 0 M : 0N : 0	m	8	
	<u>WATERPROOFING TO ROOFS, BASEMENTS,</u> <u>ETC</u>			
	Carried Forward			
	Section No. 2 BUILDING WORK Bill No. 5 Waterproofing PREPARED BY: MUTEO CONSULTING		R	

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

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PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.6</u>			
	<u>ROOF COVERINGS ETC</u>			
	<u>REMOVAL OF EXISTING WORK</u>			
1	Remove existing asbestos roof sheeting including cart away debris to a registered asbetos dumping site to the tip provided by the contractor. Note that these works shall be undertaken by a Registered Asbestos Demolition Contractor and the rates shall include the provision of Asbestos Disposal Certificate.	m2	944	
	A : 80 B : 80 C : 113 D : 32 E : 0 F : 0 G : 128 H : 0 I : 158 J : 56 K : 43 L : 32 M : 137 N : 83			
	<u>NEW WORK</u>			
	<u>PROFILED METAL SHEETING AND ACCESSORIES</u>			
	<u>0,58mm "Klip-Lok 700" Chromadek sheet metal roofing finishing colour to be determine by Architect, fixed to roof members as described complete under a five year guarantee by an approved firm of specialists, all in accordance with the materials supplied and methods employed by the manufacturer</u>			
2	Roof covering with pitch not exceeding 50 degrees	m2	944	
	A : 80 B : 80 C : 113 D : 32 E : 0 F : 0 G : 128 H : 0 I : 158 J : 56 K : 43 L : 32 M : 137 N : 83			
3	Ridge capping 550mm girth	m	137	
	A : 16 B : 16 C : 10 D : 0 E : 0 F : 0 G : 15 H : 0 I : 20 J : 8 K : 6 L : 12 M : 20 N : 13			
	Carried Forward to Summary of Section No. 2		R	
	Section No. 2			
	BUILDING WORK			
	Bill No. 6			
	Roof Coveringss, etc			
	PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.7</u>			
	<u>CARPENTRY AND JOINERY</u>			
	<u>ROOFS</u>			
	<u>The following in plate nailed timber roof truss construction</u>			
	The following is applicable in respect of roof trusses			
	The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes			
	Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)			
1	Single pitch approximately 8m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Store Room)	No	1	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 1 H : 0			
	I : 0 J : 0 K : 0 L : 0			
	M : 0 N : 0			
2	Single pitch approximately 32m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Guard House)	No	1	
	A : 0 B : 0 C : 0 D : 1			
	E : 0 F : 0 G : 0 H : 0			
	I : 0 J : 0 K : 0 L : 0			
	M : 0 N : 0			
	Carried Forward			R
	Section No. 2 BUILDING WORK Bill No. 7 Capentry and Joinery PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward							R
3	Double pitch approximately 120m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Pump House)	No	1				
	A : 0 B : 0 C : 0 D : 0						
	E : 0 F : 0 G : 1 H : 0						
	I : 0 J : 0 K : 0 L : 0						
	M : 0 N : 0						
4	Double pitch approximately 158m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Lab Building)	No	1				
	A : 0 B : 0 C : 0 D : 0						
	E : 0 F : 0 G : 0 H : 0						
	I : 1 J : 0 K : 0 L : 0						
	M : 0 N : 0						
5	Double pitch approximately 137m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Phase 2 Building)	No	1				
	A : 0 B : 0 C : 0 D : 0						
	E : 0 F : 0 G : 0 H : 0						
	I : 0 J : 0 K : 0 L : 0						
	M : 1 N : 0						
6	Double pitch approximately 83m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Phase 3 Building)	No	1				
	A : 0 B : 0 C : 0 D : 0						
	E : 0 F : 0 G : 0 H : 0						
	I : 0 J : 0 K : 0 L : 0						
	M : 0 N : 1						
Carried Forward							R
Section No. 2 BUILDING WORK Bill No. 7 Carpentry and Joinery PREPARED BY: MUTEO CONSULTING							

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
7	Double pitch approximately 43m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Dosing Building)	No	1	
	A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 1 L : 0 M : 0 N : 0			
8	Double pitch approximately 32m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Chlorine Building)	No	1	
	A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 1 M : 0 N : 0			
9	Double pitch approximately 56m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (Office Building)	No	1	
	A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 1 K : 0 L : 0 M : 0 N : 0			
10	Double pitch approximately 80m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (House 1&2)	No	2	
	A : 1 B : 1 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0			
Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 7 Carpentry and Joinery PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

	Brought Forward			R
11	Double pitch approximately 113m2 roof timber truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication (House 3)	No	1	
	A : 1 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0			
	<u>EAVES, VERGES, ETC</u>			
	<u>"Everite FC77" pressed fibre-cement</u>			
12	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	400	
	A : 33 B : 33 C : 43 D : 21 E : 0 F : 0 G : 58 H : 0 I : 56 J : 21 K : 26 L : 17 M : 53 N : 38			
	<u>DOORS, ETC</u>			
	<u>Wrought meranti doors hung to steel frames:</u>			
13	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard	No	27	
	A : 4 B : 4 C : 5 D : 2 E : 0 F : 0 G : 2 H : 1 I : 5 J : 3 K : 0 L : 0 M : 0 N : 1			
14	44mm Framed batten door 813 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding including 150mm undercut	No	8	
	A : 1 B : 1 C : 2 D : 0 E : 0 F : 0 G : 0 H : 0 I : 4 J : 0 K : 0 L : 0 M : 0 N : 0			
	Carried Forward			R
	Section No. 2 BUILDING WORK Bill No. 7 Capentry and Joinery PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

	Brought Forward			R
15	44mm Special made Framed batten door 1200 x 1800mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 1 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0	No	1	
16	44mm Framed batten double door 1614 x 2032mm high of 44 x 150mm top rail and stiles, 22 x 150mm middle ledge and braces and 22 x 220mm bottom rail filled in with 22mm V-jointed one side boarding and including weatherboard A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 1 I : 0 J : 0 K : 1 L : 0 M : 1 N : 0	No	3	
Carried Forward to Summary of Section No. 2				R
Section No. 2 BUILDING WORK Bill No. 7 Capentry and Joinery PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.8</u>			
	<u>CEILING , ETC.</u>			
	<u>CEILING CONSTRUCTION, CORNICES, ETC.</u>			
	<u>Insulation</u>			
1	135mm non-combustible light weight fibreglass glass wool thermal insulation blanket to manufacturer's specification, laid on ceiling.	m2	514	
	A : 46 B : 46 C : 56 D : 3			
	E : 0 F : 0 G : 89 H : 0			
	I : 73 J : 27 K : 20 L : 15			
	M : 91 N : 48			
	<u>Sawn softwood</u>			
2	38 x 114mm Ceiling joists (Provisional)	m	25	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 25 H : 0			
	I : 0 J : 0 K : 0 L : 0			
	M : 0 N : 0			
	<u>76 mm Coved cornice fixed to brandering 25mm drywall screws.</u>			
3	76mm Coved cornices	m	483	
	A : 62 B : 63 C : 71 D : 5			
	E : 0 F : 0 G : 47 H : 0			
	I : 74 J : 30 K : 36 L : 16			
	M : 47 N : 33			
	<u>NAILED UP AND SCREWED UP CEILINGS</u>			
	Carried Forward		R	
	Section No. 2 BUILDING WORK Bill No. 8 Ceilings, Partitions and Access Flooring PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
	Everite Nutec 4mm thick plain ceiling boards, manufactured in accordance with SANS 9001:2000 carrying SANS 803:2005 mark, screw fixed to battens at 150mm centres and according to manufacturer's specifications, minimum of 12mm from edge of board. All joints to be covered using H-profile steel jointing strips, all in accordance with the manufacturer's recommendations. Also refer to Ceiling Plan. Cornice: GYPROC 45 x 35mm flush plaster trim (9,5mm thick) plugged. (Code 1972).			
4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails. m2 A : 46 B : 46 C : 56 D : 3 E : 0 F : 0 G : 89 H : 0 I : 73 J : 27 K : 20 L : 15 M : 91 N : 48	514		
5	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening No A : 1 B : 1 C : 1 D : 1 E : 0 F : 0 G : 1 H : 1 I : 1 J : 1 K : 1 L : 1 M : 1 N : 1	12		
Carried Forward to Summary of Section No. 2				R
Section No. 2 BUILDING WORK Bill No. 8 Ceilings, Partitions and Access Flooring PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.9</u>			
	<u>FLOOR COVERINGS</u>			
	<u>FLOOR COVERINGS</u>			
	<u>300 x 300 x 2.5mm SF Hi-veldt vinyl tiles</u>			
1	On floors A : 46B : 46C : 56D : 0 E : 0F : 0G : 0H : 0 I : 60J : 0K : 0L : 0 M : 0N : 0	m2	208	
	<u>COVED VINYL SKIRTING</u>			
	Skirting to be similar to floor taken 200mm up against the wall, complete with FloorworX Extruda Black (Colour code: MCF35) vinyl cove fillet size 26mm high, fixed with FloorworX No. 71 solvent based contact adhesive, spread with a brush onto both material and working surface. FloorworX vinyl capping strip size 6 x 35mm high (colour to Architect's approval, fixed with FloorworX No. 71 solvent based contact adhesive, spread with a brush onto both material and working surface. Also including a taper end piece inserted 150 mms prior to the doorway. Glue to wall with an approved adhesive all in accordance with manufacturer's specifications.			
2	100mm High vinyl skirting A : 62B : 63C : 71D : 0 E : 0F : 0G : 0H : 0 I : 53J : 0K : 0L : 0 M : 0N : 0	m	250	
	<u>POLISH, SEALERS, ETC</u>			
	Carried Forward		R	
	Section No. 2 BUILDING WORK Bill No. 9 Floor Coverings PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

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PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.10</u>			
	<u>IRONMONGERY</u>			
	<u>LOCKS</u>			
	<u>"Dormakaba"</u>			
1	Dormakaba Cylinder Sash Lock. Case dimensions (mm) 116.5H x 78D. Forend dimensions (mm) 168H x 22W. Backset 57mm. Centres 61mm. Code D036S SS	No	31	
	A : 4 B : 4 C : 5 D : 2			
	E : 0 F : 0 G : 3 H : 2			
	I : 5 J : 3 K : 1 L : 0			
	M : 1 N : 1			
2	Dormakaba Bathroom WC indicator (Red and White) and turnknob. Stainless Steel. Code: DWC-005	No	8	
	A : 1 B : 1 C : 2 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 4 J : 0 K : 0 L : 0			
	M : 0 N : 0			
	<u>Handles</u>			
3	Dormakaba Lever handle on 170x170 plate with Cylinder cutout. Code: TH120 BP Cyl S.S	No	31	
	A : 4 B : 4 C : 5 D : 2			
	E : 0 F : 0 G : 3 H : 2			
	I : 5 J : 3 K : 1 L : 0			
	M : 1 N : 1			
	Carried Forward			
	Section No. 2			
	BUILDING WORK			
	Bill No. 10			
	Ironmongery			
	PREPARED BY: MUTE0 CONSULTING			
			R	

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>Cylinders</u>				
4	Dormakaba 63mm - 31.5+31.5mm Europrofile Nickel Plated E-SP 5 Pin Double Cylinder - Master Keyed. Code: DDC206301 MK	No	31	
	A : 4 B : 4 C : 5 D : 2			
	E : 0 F : 0 G : 3 H : 2			
	I : 5 J : 3 K : 1 L : 0			
	M : 1 N : 1			
<u>Door Closers</u>				
5	Dormakaba EN 2-4 Regular Arm NON HOLD OPEN Door Closer - Adjustable Strength, Hydraulic Speed Control. Pull Side Fixing EN2 750-850, EN3 850-950, EN4 950-1100. Silver. Code: TS73V - SL	No	5	
	A : 1 B : 1 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 2 J : 0 K : 0 L : 0			
	M : 0 N : 0			
<u>SUNDRIES</u>				
6	Dormakaba Hat and Coat Hook with rubber buffer. Stainless Stel. Code: DHC-SS-031B	No	5	
	A : 1 B : 1 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 2 J : 0 K : 0 L : 0			
	M : 0 N : 0			
Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 10 Ironmongery PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward			R
<u>LETTERS, NAMEPLATES, ETC</u>			
7	Dormakaba 150x150mm MALE sign. Stainless Steel. Code DSS-130 M.	No	5
	A : 1 B : 1 C : 1 D : 0 E : 0 F : 0 G : 0 H : 0 I : 2 J : 0 K : 0 L : 0 M : 0 N : 0		
8	Dormakaba 150x150mm FEMALE sign. Stainless Steel. Code DSS-131 F.	No	5
	A : 1 B : 1 C : 1 D : 0 E : 0 F : 0 G : 0 H : 0 I : 2 J : 0 K : 0 L : 0 M : 0 N : 0		
9	Dormakaba 150x150mm Fire extinguisher sign. Stainless Steel. Code DSS-146	No	15
	A : 1 B : 1 C : 1 D : 1 E : 0 F : 0 G : 2 H : 0 I : 2 J : 2 K : 2 L : 1 M : 2 N : 0		
<u>BATHROOM FITTINGS</u>			
10	Kimberly-Clark® Professional SQ3 toilet tissue dispenser colour White (code: SA405607), overall size 130 x 135 x 360mm high, installed by a Kimberly Clark® installation team.	No	5
	A : 1 B : 1 C : 1 D : 0 E : 0 F : 0 G : 0 H : 0 I : 2 J : 0 K : 0 L : 0 M : 0 N : 0		
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 10 Ironmongery PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

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PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO. 11</u>			
	<u>METALWORK</u>			
	<u>STEEL BALUSTRADING</u>			
	<u>GALVANISED STEEL AT SETTLING TANK</u>			
1	Welded single balustrades similar to match existing on site bolted to brickwork or concrete. A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 24	m	24	
2	600mm Wide galvanized steel step ladder to fit 900mm high walls. A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 1	No	1	
3	900mm Wide x 1000mm high galvanized steel access gate. A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 1	No	1	
	<u>PRESSED STEEL DOOR FRAMES</u>			
	<u>1.2mm Double rebated frames suitable for one brick walls</u>			
4	Frame for door 813 x 2032mm high A : 4 B : 4 C : 5 D : 2 E : 0 F : 0 G : 2 H : 2 I : 5 J : 3 K : 1 L : 0 M : 1 N : 1	No	30	
	Carried Forward		R	
	Section No. 2 BUILDING WORK Bill No. 11 Metalwork PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

	Brought Forward		R
5	Special made frame for door 1200 x 1800mm high A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 1 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0 <u>SHOWER CUBICLE DOORS</u> <u>"Showerflex" epoxy powder coated aluminium shower cubicle doors with sliding gear, cleats, stops, etc and 4mm toughened obscure safety glass, fixed to tiled walls</u>	No	1
6	Sliding door in three panels 750 x 1800mm high overall A : 1 B : 1 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 1 J : 0 K : 0 L : 0 M : 0 N : 0 <u>PRESSED STEEL TRANSFORMER ROOM DOORS AND FRAMES</u> <u>Transformer doors etc</u>	No	3
7	Double door 1614 x 2032mm high with rebated frame suitable for one brick wall A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 1 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0 <u>STEEL COLUMNS</u> <u>Allowance of steel columns and etc</u>	No	1
8	Allow an amount of R 15 000 (Fifteen Thousand Rand) for steel columns at verandah. <u>STEEL ROLLER SHUTTERS ETC</u>	Item	15 000.00
Carried Forward			R
Section No. 2 BUILDING WORK Bill No. 11 Metalwork PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>"Thermotek" or Equal Approved Industrial roller shutters fixed to brickwork or concrete</u>				
9	Industrial roll up shutter door to suit opening size 2500 x 3000mm high button or remote operated, including roller box and opening mechanism, rubber weather strips, handles, Roll-A-Guides, hinges, fixing bolts, tracks, 2 no bolts and pad locks, etc, fixed to brickwork or concrete with a minimum of 100mm side room and 350mm headroom and pre-paint to match roof sheeting..	No	1	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 0 J : 0 K : 1 L : 0			
	M : 0 N : 0			
Carried Forward to Summary of Section No. 2				R
Section No. 2				
BUILDING WORK				
Bill No. 11				
Metalwork				
PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u> <u>BUILDING WORK</u> <u>BILL NO. 12</u> <u>PLASTERING</u> <u>SCREEDS</u> <u>Screeds on concrete</u>			
1	30mm Thick on floors A : 0 B : 46 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 13 K : 0 L : 0 M : 0 N : 0	m2	59	
	<u>INTERNAL PLASTER</u> <u>Cement plaster on brickwork</u>			
2	On walls A : 0 B : 28 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0	m2	28	
	<u>EXTERNAL PLASTER</u> <u>Cement plaster on brickwork</u>			
3	On walls A : 5 B : 33 C : 5 D : 2 E : 0 F : 0 G : 9 H : 0 I : 10 J : 3 K : 3 L : 3 M : 10 N : 7	m2	92	
	Carried Forward to Summary of Section No. 2			R
	Section No. 2 BUILDING WORK Bill No. 12 Plastering PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.13</u>			
	<u>TILING</u>			
	<u>WALL TILING</u>			
	<u>Gloss White glazed ceramic wall tiles, size 300 x 300mm, fixed to wood floated Class II mortar plaster backing with approved tile adhesive mixed with bonding liquid in lieu of water, with 3mm joints continuous in both directions grouted with tile grout (elsewhere specified) with minimum 5mm expansion joints at perimeter, all structural expansion and construction joints and maximum 5m centres internally and at 3m centres externally, in both directions. Tile walls to door height, except in Lab where 3x rows of tiles to be installed wherever worktop meets with wall</u>			
1	On walls A : 13 B : 13 C : 22 D : 0 E : 0 F : 0 G : 0 H : 55 I : 74 J : 0 K : 0 L : 0 M : 23 N : 0	m2	199	
2	On walls in isolated panels, splashbacks, etc. A : 0 B : 0 C : 0 D : 0 E : 0 F : 15 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0	m2	15	
3	On narrow widths A : 0 B : 0 C : 0 D : 0 E : 0 F : 8 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0	m2	8	
	Carried Forward		R	
	Section No. 2 BUILDING WORK Bill No. 13 Tiling PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>FLOOR TILING</u>				
<u>300x300mm porcelain tile in large areas >25m² and 300x300 porcelain tile in large areas <25m², to be installed with Tylon or TAL 6 hour rapid set adhesive, and grout or similar approved. Floor to be properly prepared. Tiles to be bedded to a true and even surface on a screed and fixed with "Tal-Quickset Goldstar 6 " adhesive all as per manufacturer, with joints not exceeding 3mm wide. After the tiles have been allowed to set for a period of not less than 12 hours, the joints shall be completely cleaned to the minimum thickness of the tile and grouted in with "Tal-Cement, 2 part epoxy grout " or similar approved. Tile sizes and layout to Architects detail. The tiles shall be grouted with care in order not to stain the surface of tiles. 8mm Movement joints to be provided around the perimeter of the floor and around all protrusions through the tiling and as indicated on the relevant drawings.</u>				
4	On floors and landings	m2	10	
	A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 10 J : 0 K : 0 L : 0 M : 0 N : 0			
<u>MOSAIC TILING</u>				
<u>50 x 50mm Square Mosaic tiles (PC amount of R350/m2 for supply and delivered to site, nett,) bedded in 3:1 plaster bedding, with grout in even joints in both directions:</u>				
5	Floors to currents and falls	m2	6	
Carried Forward to Summary of Section No. 2				R
Section No. 2				
BUILDING WORK				
Bill No. 13				
Tiling				
PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u>			
	<u>BUILDING WORK</u>			
	<u>BILL NO.14</u>			
	<u>PLUMBING AND DRAINAGE</u>			
	<u>RAINWATER DISPOSAL</u>			
	<u>Galvanised Pipes</u>			
1	100 x 75mm gutter including fixing brackets fixed to carport	m	246	
	A : 19 B : 19 C : 21 D : 9			
	E : 0 F : 0 G : 35 H : 0			
	I : 40 J : 13 K : 12 L : 12			
	M : 40 N : 26			
2	100mm Diameter rainwater pipe fixed to wall with brackets, including sealing joints	m	144	
	A : 10 B : 10 C : 10 D : 0			
	E : 0 F : 0 G : 6 H : 0			
	I : 14 J : 22 K : 12 L : 16			
	M : 23 N : 20			
3	Extra over eaves gutter for closed ends	No	42	
	A : 4 B : 4 C : 4 D : 2			
	E : 0 F : 0 G : 6 H : 0			
	I : 2 J : 4 K : 4 L : 4			
	M : 4 N : 4			
4	Extra over eaves gutter outlet	No	44	
	A : 4 B : 4 C : 4 D : 2			
	E : 0 F : 0 G : 6 H : 0			
	I : 4 J : 4 K : 4 L : 4			
	M : 4 N : 4			
	Carried Forward			
	Section No. 2			
	BUILDING WORK			
	Bill No. 14			
	Plumbing and Drainage			
	PREPARED BY: MUTEO CONSULTING			
			R	

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

				Brought Forward				R
5	Ditto,for shoe.				No	44		
	A : 4	B : 4	C : 4	D : 2				
	E : 0	F : 0	G : 6	H : 0				
	I : 4	J : 4	K : 4	L : 4				
	M : 4	N : 4						
<u>SANITARY FITTINGS</u>								
<u>"Franke" stainless steel</u>								
6	Franke Trendline Model 1000x460 SEB Grade 304 18/10 polished stainless steel single end bowl drop on sink (Code: 311050), overall size 1000 x 460mm with one 350 x 460 x 140mm deep bowl, fitted onto cupboard (elsewhere specified) including PVC trap (trap elsewhere specified) with 38mm waste fitting.				No	4		
	A : 1	B : 1	C : 1	D : 0				
	E : 0	F : 0	G : 0	H : 0				
	I : 1	J : 0	K : 0	L : 0				
	M : 0	N : 0						
<u>"Vaal"</u>								
7	Vaal Sanitaryware Daisy vitreous china wall mounted basin colour White (Code: 7008), size 510 x 400mm with two tapholes, including integrated overflow and chainstay hole bolted to wall with two 10mm bolts (Code: 8448Z0) and sealed with silicone sealant where basin meets wall. Or similar and approved				No	1		
	A : 0	B : 0	C : 0	D : 0				
	E : 0	F : 0	G : 0	H : 0				
	I : 1	J : 0	K : 0	L : 0				
	M : 0	N : 0						
				Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 14 Plumbing and Drainage PREPARED BY: MUTEO CONSULTING								

REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Carried Forward

Section No. 2
BUILDING WORK
Bill No. 14
Plumbing and Drainage
PREPARED BY: MUTEO CONSULTING

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>"Marley"</u>				
12	40mm Flexi butyl rubber trap with reseal "P" trap	No	4	
	A : 1 B : 1 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 1 J : 0 K : 0 L : 0			
	M : 0 N : 0			
13	COBRA 345/50 bottle trap	No	1	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 1 J : 0 K : 0 L : 0			
	M : 0 N : 0			
14	40mm "Cobra Watertech" Rough brass shallow seal shower P-trap with FI outlet and chrome plated grating (Code 373)	No	3	
	A : 1 B : 1 C : 0 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 1 J : 0 K : 0 L : 0			
	M : 0 N : 0			
15	15mm "Cobra Watertech Type 431" undertile shower set consisting of 1 pair undertile stoptaps No. 128 Nova, overhead shower arm No. 027 and one Concord shower rose No. 068BJ	No	3	
	A : 1 B : 1 C : 0 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 1 J : 0 K : 0 L : 0			
	M : 0 N : 0			
<u>TAPS, VALVES, ETC</u>				
Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 14 Plumbing and Drainage PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>"Cobra Watertech"</u>				
16	15mm Star code 166/041 -S041 Sink mixer with overarm swivel outlet and adjustable wall flanges	No	4	
	A : 1 B : 1 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 1 J : 0 K : 0 L : 0			
	M : 0 N : 0			
17	15mm Diameter basin mixer	No	2	
	A : 0 B : 0 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 1 J : 0 K : 0 L : 0			
	M : 0 N : 0			
18	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	12	
	A : 3 B : 3 C : 2 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 4 J : 0 K : 0 L : 0			
	M : 0 N : 0			
19	15mm x 450mm Flexi braided pipe connector.	No	4	
	A : 1 B : 1 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 1 J : 0 K : 0 L : 0			
	M : 0 N : 0			
<u>SANITARY PLUMBING</u>				
<u>uPVC pipes</u>				
20	50mm Pipe	m	7	
	A : 2 B : 2 C : 2 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 2 J : 0 K : 0 L : 0			
	M : 0 N : 0			
Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 14 Plumbing and Drainage PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>Extra over uPVC pipes for fittings</u>				
21	50mm Bend	No	9	
	A : 2 B : 2 C : 2 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 3 J : 0 K : 0 L : 0			
	M : 0 N : 0			
22	50mm Access bend	No	5	
	A : 1 B : 1 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 2 J : 0 K : 0 L : 0			
	M : 0 N : 0			
23	110mm Access bend	No	5	
	A : 1 B : 1 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 2 J : 0 K : 0 L : 0			
	M : 0 N : 0			
24	110mm Pan Connector	No	5	
	A : 1 B : 1 C : 1 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 2 J : 0 K : 0 L : 0			
	M : 0 N : 0			
<u>Sundries</u>				
25	Testing waste pipe system	Item		
	A : 0.00 B : 0.00 C : 0.00 D : 0.00			
	E : 0.00 F : 0.00 G : 1.00 H : 0.00			
	I : 0.00 J : 0.00 K : 0.00 L : 0.00			
	M : 0.00 N : 0.00			
<u>WATER SUPPLIES</u>				
Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 14 Plumbing and Drainage PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>Class 0 copper pipes</u>				
26	15mm Pipes	m	3	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 3 J : 0 K : 0 L : 0			
	M : 0 N : 0			
<u>Extra over class 0 copper pipes for capillary fittings</u>				
27	15mm Fittings	No	2	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 2 J : 0 K : 0 L : 0			
	M : 0 N : 0			
<u>Sundries</u>				
28	Testing water pipe system	Item		
	A : 0.00 B : 0.00 C : 0.00 D : 0.00			
	E : 0.00 F : 0.00 G : 1.00 H : 0.00			
	I : 0.00 J : 0.00 K : 0.00 L : 0.00			
	M : 0.00 N : 0.00			
<u>FIRE APPLIANCES ETC</u>				
<u>'Chubb'</u>				
29	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	15	
	A : 1 B : 1 C : 1 D : 1			
	E : 0 F : 0 G : 2 H : 0			
	I : 2 J : 2 K : 2 L : 1			
	M : 2 N : 0			
Carried Forward to Summary of Section No. 2				R
Section No. 2				
BUILDING WORK				
Bill No. 14				
Plumbing and Drainage				
PREPARED BY: MUTEO CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u> <u>BUILDING WORK</u> <u>BILL NO. 15</u> <u>GLAZING</u> <u>TOPS, SHELVES, DOORS, MIRRORS, ETC</u> <u>Quality mirror complete with beveled edges installed on wall tiles Plug and screw to wall with x4 chromed mirror screws with dome caps. Also see room elevations for exact position.</u>			
1	Mirror 450mm x 600mm High			
	A : 0 B : 0 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 1 J : 0 K : 0 L : 0 M : 0 N : 0	No	1	
	Carried Forward to Summary of Section No. 2 Section No. 2 BUILDING WORK Bill No. 15 Glazing PREPARED BY: MUTEO CONSULTING		R	

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Item No		Quantity	Rate	Amount
	<u>SECTION NO.2</u> <u>BUILDING WORK</u> <u>BILL NO. 16</u> <u>PAINTWORK</u> <u>PAINTWORK ETC TO NEW WORK</u> <u>ON FLOATED PLASTER</u> The surface of plaster shall be steel trowelled to a smooth and even finish. All plasterwork shall be done in one operation with no joint marks. Form V-joints in plasterwork at joints with other materials. Where plastering is applied above face brickwork, the face brick must be protected against damage and blemishes. Apply one coat Pigmented Acrylic Sealer to manufacturer 's specifications and finish with two coats of interior velvet sheen, stain resistant paint			
1	On internal walls A : 0 B : 28 C : 0 D : 0 E : 0 F : 0 G : 0 H : 0 I : 0 J : 0 K : 0 L : 0 M : 0 N : 0	m2	28	
	Carried Forward		R	
	Section No. 2 BUILDING WORK Bill No. 16 Paintwork PREPARED BY: MUTEO CONSULTING			

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>All plasterwork shall be done in one operation with no joint marks. Form V-joints in plasterwork at joints with other materials. Water Based pure acrylic paint to interior cement plaster. Surface to be clean, dry and dust free with a moisture content of less than 15%. Prime surface with one coat e Plaster Primer with an overcoating time of 4 hours and finish with two coats pure acrylic paint with an overcoating time of 4 hours, all to manufacturers specifications</u>				
2	On external walls	m2	92	
	A : 5 B : 33 C : 5 D : 2 E : 0 F : 0 G : 9 H : 0 I : 10 J : 3 K : 3 L : 3 M : 10 N : 7			
<u>ON FIBRE-CEMENT</u>				
<u>Apply one coat pigmented acrylic sealer and finish with two coats of interior velvet sheen, stain resistance paint colour white. Screw heads and jointing strips to be primed with suitable steel primer before being finished as described above.</u>				
3	On ceilings and cornices	m2	514	
	A : 46 B : 46 C : 56 D : 3 E : 0 F : 0 G : 89 H : 0 I : 73 J : 27 K : 20 L : 15 M : 91 N : 48			
4	On fascias and barge boards	m2	204	
	A : 17 B : 17 C : 22 D : 11 E : 0 F : 0 G : 30 H : 0 I : 28 J : 11 K : 13 L : 9 M : 27 N : 20			
<u>ON METAL</u>				
Carried Forward				R
Section No. 2 BUILDING WORK Bill No. 16 Paintwork PREPARED BY: MUTEO CONSULTING				

REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Wash down thoroughly with degreaser and rinse with water removing all traces of degreaser. Allow to dry and prime with one coat primer and two coats polyurethane enamel paint on steel:

5	On steel door and door frames				m2	41
	A : 4	B : 4	C : 5	D : 2		
	E : 0	F : 0	G : 10	H : 2		
	I : 5	J : 3	K : 1	L : 0		
	M : 1	N : 1				

6	On gutters and down pipes				m2	64
	A : 4	B : 4	C : 4	D : 2		
	E : 0	F : 0	G : 7	H : 0		
	I : 6	J : 9	K : 5	L : 7		
	M : 9	N : 8				

Stop, fill, sand down and prepare wood surfaces and apply one undercoat and two coats polyurethane enamel paint:

7	On doors	m2	151
	A : 18	B : 18	C : 25
	E : 0	F : 0	G : 12
	I : 32	J : 11	K : 7
	M : 7	N : 4	L : 0

ON FLOATED PLASTER

Section No. 2
BUILDING WORK
Bill No. 16
Paintwork
PREPARED BY: MUTEO CONSULTING

REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

The surface of plaster shall be steel trowelled to a smooth and even finish. All plasterwork shall be done in one operation with no joint marks. Form V-joints in plasterwork at joints with other materials. Where plastering is applied above face brickwork, the face brick must be protected against damage and blemishes. Apply one coat Pigmented Acrylic Sealer to manufacturer's specifications and finish with two coats of interior velvet sheen, stain resistant paint

All plasterwork shall be done in one operation with no joint marks. Form V-joints in plasterwork at joints with other materials. Water Based pure acrylic paint to interior cement plaster. Surface to be clean, dry and dust free with a moisture content of less than 15%. Prime surface with one coat e Plaster Primer with an overcoating time of 4 hours and finish with two coats pure acrylic paint with an overcoating time of 4 hours, all to manufacturers specifications

9	On external walls				m2	1 678
	A : 103	B : 102	C : 131	D : 58		
	E : 0	F : 0	G : 114	H : 0		
	I : 182	J : 269	K : 227	L : 61		
	M : 236	N : 197				

Section No. 2
BUILDING WORK
Bill No. 16
Paintwork
PREPARED BY: MUTEO CONSULTING

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward							
	<u>Prepare surfaces and remove all loose material, and rinse. Apply flexible crackfiller to holes and cracks, one coat plaster primer and two coats Plascon Professional Copolymer Acrylic paint</u>						
10	On ceilings, beams, walls and columns	m2	140				
	A : 0 B : 0 C : 0 D : 0						
	E : 0 F : 0 G : 0 H : 94						
	I : 0 J : 26 K : 20 L : 0						
	M : 0 N : 0						
	<u>FLOOR AND WALL SEALERS</u>						
	<u>Minimum two coats approved epoxy coat</u>						
11	On screed	m2	190				
	A : 0 B : 0 C : 0 D : 0						
	E : 0 F : 0 G : 0 H : 82						
	I : 0 J : 53 K : 40 L : 15						
	M : 0 N : 0						
	<u>ON FIBRE-CEMENT</u>						
	<u>Apply one coat pigmented acrylic sealer and finish with two coats of interior velvet sheen, stain resistance paint colour white. Screw heads and jointing strips to be primed with suitable steel primer before being finished as described above.</u>						
12	On fibre cement cill	m2	17				
	A : 1 B : 1 C : 1 D : 0						
	E : 0 F : 0 G : 0 H : 0						
	I : 2 J : 12 K : 0 L : 0						
	M : 0 N : 0						
13	On brick window cill.	m2	17				
	A : 1 B : 1 C : 1 D : 0						
	E : 0 F : 0 G : 0 H : 0						
	I : 2 J : 12 K : 0 L : 0						
	M : 0 N : 0						

ON METAL

Carried Forward

Section No. 2
BUILDING WORK
Bill No. 16
Paintwork

PREPARED BY: MUTEU CONSULTING

R

R

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

Brought Forward				R
<u>Wash down thoroughly with degreaser and rinse with water removing all traces of degreaser. Allow to dry and prime with one coat primer and two coats polyurethane enamel paint on steel:</u>				
14	On door and window frames	m2	241	
	A : 17 B : 17 C : 24 D : 0			
	E : 0 F : 0 G : 31 H : 17			
	I : 37 J : 25 K : 6 L : 0			
	M : 37 N : 30			
15	On steel beam	m2	14	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 14 H : 0			
	I : 0 J : 0 K : 0 L : 0			
	M : 0 N : 0			
16	On steel pipes	m2	43	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 6 H : 0			
	I : 0 J : 0 K : 0 L : 0			
	M : 22 N : 15			
<u>Sand down allow to dry and prime with one coat primer and two coats stainless steel paint on steel:</u>				
17	On steel balustrading	m2	803	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 11 H : 0			
	I : 0 J : 0 K : 55 L : 0			
	M : 696 N : 42			
18	On steel step ladder	m2	66	
	A : 0 B : 0 C : 0 D : 0			
	E : 0 F : 0 G : 0 H : 0			
	I : 0 J : 0 K : 66 L : 0			
	M : 0 N : 0			
Carried Forward to Summary of Section No. 2				R
Section No. 2				
BUILDING WORK				
Bill No. 16				
Paintwork				
PREPARED BY: MUTEU CONSULTING				

PROVISIONAL BILLS OF QUANTITIES
REFURBISHMENT OF MALAMULELE WATER TREATMENT WORKS

[illegible]

**VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS**

Item No	Description of Work	Unit	Quantity	Rate (R)	Amount (R)
C1	Demolish and remove leaking inlet pipeline (150mm Diameter Steel Pipe)	m	50		
C2	Install new 150mm dia uPVC pipeline including excavation and backfill	m	120		
C3	Refurbish sluice gates at sedimentation tanks	No	8		
C4	Replace puddle flanges and couplings at sedimentation tanks	No	10		
C5	Install fiberglass stilling boxes at sedimentation outlets	No	2		
C6	Install manually operated penstocks at flocculation channels	No	6		
C7	Repair floor joints with flexible waterproof sealant	m	80		
C8	Supply and install stainless steel access ladders into tanks	No	2		
C9	Install galvanized handrails and access steps	m	60		
C10	Concrete apron reinstatement around tanks	m ²	150		
C11	Excavate and compact fill around pipelines	m ³	60		
C12	Replace existing 315mm PVC pipeline with 315mm steel pipeline with corrosion protection (Rate to Include Excavation (1m width * 1.5m deep), pipe bedding, backfilling, compaction and installation of valve chambers @ 250m intervals)	m	4500		
TOTAL CARRIED TO SUMMARY					

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

Item No	Description of Work	Unit	Quantity	Rate (R)	Amount (R)
S1	Concrete patch repairs to deteriorated tanks	m ²	250		
S2	Epoxy crack injection repairs to accommodation units	m	30		
S3	Structural stitching to cracked masonry walls	m	40		
S4	Construction of new reinforced concrete plinths	No	6		
S5	Fabricate and erect galvanized staircases and landings	t	2		
S6	Shotblast, prime and repaint existing steel structures	m ²	400		
S7	Surface levelling and screeding inside filter rooms	m ²	200		
S8	Structural strengthening of settling tank walls using CFRP	m ²	80		
TOTAL CARRIED TO SUMMARY					

VHEMBE DISTRICT MUNICIPALITY
REFURBISHMENT OF MALAMULELE EAST WATER TREATMENT WORKS

ITEM	DESCRIPTION	AMOUNT
P	Preliminary & General Items	
M	Mechanical Works	
E	Electrical Works	
B	Building works	
C	Civil Works	
S	Structural Works	
Sub-Total 1		
Contigencies @ 10%		
Sub-Total 2 (Construction Cost)		
Vat @ 15%		
Total Project Cost (Incl VAT)		

VHEMBE DISTRICT MUNICIPALITY

PROJECT DESCRIPTION: REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS

C3: SCOPE OF WORK

C3.1 STANDARD SPECIFICATIONS

C3.2 PROJECT SPECIFICATIONS

PART A: GENERAL

PS-1	Project Description
PS-2	Description of the Site and Access
PS-3	Details of the Works
PS-4	Construction Management Requirements
PS-5	Security Clearance of Personnel
PS-6	Subcontractors
PS-7	Supply of Materials
PS-8	Execution of Works

PART B: AMENDMENTS TO THE STANDARD SPECIFICATIONS

C3.3 TECHNICAL SPECIFICATIONS-MECHANICAL WORKS ONLY

C3.4 PARTICULAR SPECIFICATIONS

SECTION PC	Trimming of Site
SECTION PC	Maintenance
SECTION PE	Contingencies
SECTION PG	Generic Labour-Intensive Specification
SECTION POHS	OHS 1993 Safety Specification

C3.5 HEALTH AND SAFETY SPECIFICATIONS

VHEMBE DISTRICT MUNICIPALITY

PROJECT DESCRIPTION: REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT

C3 SCOPE OF WORK

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

1 DESCRIPTION OF THE WORKS

1.1 Employer’s objectives

The employer’s objectives are to deliver public infrastructure using labour intensive methods in accordance with EPWP Guidelines

Labour-intensive works

Labour-intensive works shall be constructed/maintained using local workers who are temporarily employed in terms of this Scope of Work.

Labour-intensive competencies of supervisory and management staff

Contractors shall engage supervisory and management staff in labour-intensive works that have completed the skills programme including Foremen/Supervisors at NQF “National Certificate: Supervision of Civil Engineering Construction Processes” and Site Agent/Manager at NQF level 5 “Manage labour-intensive Construction Processes” or equivalent QCTO qualifications.

1.2 Overview of the works

The work will be carried using Labour- Intensive approach as much as possible. Labour-intensive works comprise the activities described in SANS 1921-5, Earthworks activities which are to be performed by hand, and its associated specification data. Such works shall be Constructed using local workers who are temporarily employed in terms of this Scope of Work.

1.3 Extent of the works

The REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT WORKS which includes the following:

- **1.3.1 Mechanical Works**

Replacement and Refurbishment of Equipment

Includes the replacement and/or refurbishment of pumps, valves, pipework, fittings, instrumentation, feeders, and water treatment filters. Also covers repairs

and upgrades to the high lift pump station, chemical dosing systems, and filtration units.

Installation of New Equipment

Supply, installation, testing, and commissioning of new mechanical equipment, including pumps, baseplates, flow meters, pressure gauges, ultrasonic flow meters, and other specified mechanical items.

Pipework and Fittings

Modification and replacement of existing pipelines, including bends, tees, isolating valves, clamps, and brackets, as required for the works.

- **1.3.2 Electrical Works**

Supply and Installation

Supply, installation, and connection of new electrical panels, wiring, and instrumentation equipment for the mechanical systems, ensuring integration with existing electrical systems.

Testing and Commissioning

Comprehensive testing and commissioning of all electrical components, including verification of controls, alarms, and interlocks for safe and reliable plant operation.

- **1.3.3 Civil Works**

Pipeline Works

Demolition and removal of existing pipelines where necessary, installation of new pipelines, refurbishment of sluice gates, replacement of puddle flanges, couplings, and other civil appurtenances.

Concrete Works

Repairs to floor joints, installation of stilling boxes, penstocks, and other necessary civil works to support the mechanical installations.

- **1.3.4 Structural Works**

Concrete and Masonry Repairs

Concrete patch repairs to tanks, epoxy crack injection repairs, and structural stitching to cracked masonry walls.

New Structural Elements

Construction of new reinforced concrete plinths, fabrication, and erection of galvanized staircases and platforms.

Protective Coatings

Surface preparation and repainting of existing steel structures.

Strengthening Works

Surface levelling and screeding in filter areas, structural strengthening of settling tank walls to improve structural integrity.

- **1.3.5 Building Works**

Access and Safety Provisions

Installation of access ladders, handrails, and steps to facilitate safe maintenance and operational activities.

Minor Building Repairs

Repairs to building elements affected by the refurbishment works, ensuring safe and functional operation in compliance with health and safety requirements.

- **1.3.6 Testing and Commissioning**

System Integration

Testing and commissioning of all refurbished and new systems, including mechanical, electrical, civil, and structural elements, to ensure full operational readiness.

Compliance Testing

System verification, calibration of instruments, and demonstration of performance in accordance with the project specifications

1.3 Location of the Works

The limits of the project are within the Vhembe district municipality, including the raw water abstraction works at the banks of Luvuvhu River. Coordinates of the water treatment works and the abstraction point are as indicated in the table below.

Village name	Latitude	Longitude
Water Treatment Works	22°57'12,57"(S)	30°39'01,60 (E)
Abstraction Point	22°57'11,19"(S)	30°38'53,56"(E)

The site shall not only include the works area for the construction of the new services, but shall be extended in the broader sense to take account of all areas occupied by the Contractor, be it deliberate or unintentional, in the execution of the contract..

1.5 General Information**1.5.1 Labour Regulations****1.5.1.1. Payment for the labour-intensive component of the works**

Payment for works identified in clause 2.3 “the Extent of the Project” in the Project Specifications 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.

1.5.1.2 Applicable labour laws

The Ministerial Determination for Special Public Works Programmes, issued in terms of the Basic Conditions of Employment Act of 1997 by the Minister of Labour in **Government Notice N° R949 in Government Gazette 33665 of 22 October 2010**, as reproduced below, shall apply to works described in the scope of work as being labour intensive and which are undertaken by unskilled or semi-skilled workers.

1.5.1.3 Introduction

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

In this document –

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

1.5.1.4 Terms of Work

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

1.5.1.5 Normal Hours of Work

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.
- (d) 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.
- (e) 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.

1.5.1.6 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.

1.5.1.7 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 (2) breaks of at least 30 minutes each.

1.5.1.8 Daily Rest Period

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

1.5.1.9 Weekly Rest Period

- (a) Every worker must have two (2) 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").

1.5.1.10 Work on Sundays and Public Holidays

- (a) A worker may only work on a Sunday or public holiday to perform emergency or security work.
- (b) Work on Sundays is paid at the ordinary rate of pay.
- (c) A task-rated worker who works on a public holiday must be paid –
 - i. the worker's daily task rate, if the worker works for less than four hours;
 - ii. double the worker's daily task rate, if the worker works for more than four hours.
- (d) A time-rated worker who works on a public holiday must be paid –
 - i. the worker's daily rate of pay, if the worker works for less than four hours on the public holiday;
 - ii. double the worker's daily rate of pay, if the worker works for more than four hours on the public holiday.

1.5.1.11 Sick Leave

- (a) Only workers who work four or more days per week 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 (2) consecutive days; or
 - ii. absent from work on more than two (2) occasions in any eight-week period.
- (i) 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.
- (j) 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.

1.5.1.12**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 –
 - if a medical practitioner, midwife or certified nurse certifies that it is necessary for the health of the worker or that of her unborn child; or
 - if agreed to between employer and worker; or
 - 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.
- (i) A worker who returns to work after maternity leave, has the right to start a new cycle of twenty-four months employment, unless the SPWP on which she was employed has ended.

1.5.1.13 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 –
 - (i) the employee's spouse or life partner;
 - (ii) the employee's parent, adoptive parent, grandparent, child, adopted child, grandchild or sibling.

1.5.1.14 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 SPWP;
- (b) the tasks or job that the worker is to perform; and
- (c) the period for which the worker is hired or, if this is not certain, the expected duration of the contract;
- (d) the worker's rate of pay and how this is to be calculated;
- (e) the training that the worker will receive during the SPWP.
- (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.

1.5.1.15 Keeping Records

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

- (a) the worker's name and position;
- (b) in the case of a task-rated worker, the number of tasks completed by the worker;
- (c) in the case of a time-rated worker, the time worked by the worker;
- (d) payments made to each worker.
- (e) the employer must keep this record for a period of at least three years after
- (f) the completion of the SPWP.

1.5.1.15 Payment

- (a) An employer must pay all wages at least monthly in cash or by cheque or into a bank account.
- (b) A task-rated worker will only be paid for tasks that have been completed.
- (c) 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.
- (d) A time-rated worker will be paid at the end of each month.
- (e) Payment must be made in cash, by cheque or by direct deposit into a bank account designated by the worker.
- (f) Payment in cash or by cheque must take place –

- i. at the workplace or at a place agreed to by the worker;
- ii. during the worker's working hours or within fifteen minutes of the start or finish of work;
- iii. in a sealed envelope which becomes the property of the worker.

1.5.1.17 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.
- (f) 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
- (g) 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.

1.5.1.18 **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 –
 - i. repay any payment except an overpayment previously made by the employer by mistake;
 - ii. state that the worker received a greater amount of money than the employer actually paid to the worker; or
 - iii. pay the employer or any other person for having been employed.

1.5.1.19 **Health and Safety**

- (a) Employers must take all reasonable steps to ensure that the working environment is healthy and safe.
- (b) A worker must –
 - i. work in a way that does not endanger his/her health and safety or that of any other person;
 - ii. obey any health and safety instruction;
 - iii. obey all health and safety rules of the SPWP;
 - iv. use any personal protective equipment or clothing issued by the employer;
 - v. report any accident, near-miss incident or dangerous behaviour by another person to their employer or manager.

1.5.1.20 Compensation for Injuries and Diseases

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

1.5.1.21 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 for the balance of the 24-month period.
- (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 for the balance of the 24-month period.

1.5.1.22 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 SPWP on which the worker worked;
- (d) the work performed by the worker;
- (e) any training received by the worker as part of the SPWP;
- (f) the period for which the worker worked on the SPWP;
- (g) any other information agreed on by the employer and worker.

1.5.1.23 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.

1.5.1.24 Provision of Hand tools

- (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

1.5.1.25 Reporting

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

- (a) Signed Muster rolls/pay sheets of temporary workers and permanent staff detailing the number, category, gender, rate of pay and daily attendance.
- (b) Copies of identity documents of workers
- (c) Number of persons who have attended training including nature and duration of training provided
- (d) Assets created, rehabilitated or maintained in accordance with indicators in the EPWP M&E framework
- (e) Plant utilization returns
- (f) Progress report detailing production output compared to the programme of works

C2.2 STANDARD SPECIFICATIONS

The following SANS mechanical specifications shall apply for the Installation and construction of the works:

ID	Standard ID	Title
1	SANS 1123-2017	Pipe Flanges
2	SANS 62-1:2013	Steel pipes Part 1: Pipes suitable for threading and of nominal size not exceeding 150 mm
3	SANS 62-2:2013	Steel pipes Part 2: Screwed pieces and pipe fittings of nominal size not exceeding 150 mm
4	SANS 664-1:2011	Wedge gate and resilient seal valves for waterworks Part 1: General
5	SANS 664-1:2011	Wedge gate and resilient seal valves for waterworks Part 2: Wedge gate valves
6	SANS 719:2011	Electric welded low carbon steel pipes for aqueous fluids (large bore)
7	SANS 767	Earth leakage protection units

PROJECT DESCRIPTION: REFURBISHMENT OF MALAMULELE WATER EAST WATER TREATMENT

C3.2 PROJECT SPECIFICATIONS

STATUS

The Project Specification, consisting of two (2) parts, forms an integral part of the contract and supplements the Standard Specifications.

Part A contains a general description of the works, the site and the requirements to be met.

Part B contains variations, amendments and additions to the Standardized Specifications and, if applicable, the Particular Specifications.

In the event of any discrepancy between a part or parts of the Standardized or Particular Specifications and the Project Specification, the Project Specification shall take precedence. In the event of a discrepancy between the Specifications, (including the Project Specifications) and the drawings and / or the Bill of Quantities, the discrepancy shall be resolved by the Engineer before the execution of the work under the relevant item.

The standard specifications which form part of this contract have been written to cover all phases of work normally required for civil contracts, and they may therefore cover items not applicable to this particular contract.

C2.3 PROJECT SPECIFICATIONS**PART A: GENERAL****PS1 PROJECT DESCRIPTION**

Malamulele area falls under Collins Chabane Local Municipality under Vhembe District Municipality in the Limpopo Province. From Giyani one drives north on R81 and travels 40km to start of the project area in Malamulele (22.953444°S, 30.650202°E).

The limits of the project are within the Malamulele Water Treatment Works, including the raw water abstraction works at the banks of Luvuvhu River. Coordinates of the water treatment works and the abstraction point are as indicated in the table below.

Village name	Latitude	Longitude
Water Treatment Works	22°57'12,57"(S)	30°39'01,60 (E)
Abstraction Point	22°57'11,19"(S)	30°38'53,56"(E)

The site shall not only include the works area for the construction of the new services, but shall be extended in the broader sense to take account of all areas occupied by the Contractor, be it deliberate or unintentional, in the execution of the contract..

PS2 DESCRIPTION OF THE SITE AND ACCESS**C2.3.1 Access to site**

Access to the site can be obtained via the public streets within the perimeter of the site of works.

The contractor shall be responsible for the maintenance and reinstatement of damage caused by him or his agents/deliveries to any property (Private or State Owned), fauna and flora and rights of way.

The contractor shall take cognisance of the aforementioned items and should allow in his rates tendered for any costs that could be incurred due to damages by the contractor.

PS3 DETAILS OF THE WORKS**C2.3.2 Detailed description of the works**

The mechanical scope of work forms part of the refurbishment of the Malamulele Water East Water Treatment which will include the replacement of pumps, pipework and fittings for the raw water treatment, feeder for lime and lifting equipment motor, secondary metering pump sets for the chemical dosing (from storage tank to mixing chamber), Penstocks, channel gates & sluice gates for the flocculation channel, valves for the sedimentation tank, installation of blowers, valves, sluice gates and actuators, piping and pumps and lifting equipment accessories for the filtration system. Installation of pumps, pipework, fittings, pump protection and lifting equipment accessories for the high lift pump station and lifting equipment accessories.

Replace equipment and re-construct building works of the existing plant, as guided by the bill of quantities contained in C1.2- Bill of quantities separate document, where the mechanical, electrical, structural and civil scope of work can be summarised as follows:

C2.3.2.1 RAW WATER PUMPING

Supply, delivery, installation, testing and commissioning of pumps, pipework, fittings, bends, elbows, reducers and other listed installations, complete with flanges, gaskets, bolts, nuts and washers.

Pumps, Pipework and Fittings (Raw Water)

- a) Replace two (2) existing pump centrifugal pump set with KSB Etanorm 300-250-320, or similar with a duty of 950m³/h (264 l/s) at a speed of 1450 rpm, against a head of 23 metres, and hydraulic efficiency of at least 80%, coupled with a 90 kW Motor (VSD application Motor) at 400V, 4-pole, IP 68. **The engineer shall give prior approval before a purchase order is placed.**
- Include baseplates to match new motors and existing pumps
 - Include machine guards for pumpset couplings
 - Include couplings (pump-to-motor), coupling type **to be confirmed with Engineer before placement of order.**
- b) Do site system curve verification testing, before pump purchase orders are placed.
- c) Supply and install pressure gauges for suction and delivery side of pump sets
- d) Supply and install one (1) clamp-on ultrasonic flow meter for flow measurement. **The said ultrasonic flow meter shall not form part of permanent works.**
- e) Allow sum for pipework modification, including suction side and delivery side fittings, flanges, fasteners, adapters, to suit the new pump installations.

Pump Protection

- a) Replace two (2) flow switches, 3bar, IP68, stainless steel paddle, complete with threaded boss, requisite fabrication and wiring to the MCC.

- b) Replace two (2) pressure transmitters with alarm contacts, WIKA or equivalent switch with minimum and maximum pressure limits as per the pump head complete with wiring to the MCC and PLC.

Corrosion Protection

- a) For preparation of surfaces, use fusion-bonded epoxy, 150µm dry film thickness, internal and externally on pipework, pumps and fittings, for installations in the raw water pumpstation.
- b) Painting of pipework, pumps and fittings in the pump station in line with the set colour-coding convention as required by the Engineer.

Decommissioning and operation of plant

- a) Note: All removed old equipment shall be handed over to the water treatment works manager and signed off.
- a) Maintain raw water pumpstation functionality during construction.

Signage

- a) Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), firefighting, evacuation, floor painting, PPE requirements

C2.3.2.2 CHEMICAL DOSING

Lime Feeder Volumetric Powder Feeder

- a) Supply and install, Dry Lime Feeder, consisting of S/S 304, 0-40kg/hr or 0-120kg/hr, c/w S/S304 - 0,5cu Hopper and 100 Lt S/S304 mixing bowl. The engineer shall give prior approval before purchase order is placed
- b) Class 9, 80 mm PVC pipe
- c) Class 9, 80 mm PVC isolating valves
- d) Class 9, 80 mm Bends, tees, fittings
- e) 10mm Tube
- f) Pipe clamps and holding brackets

Repairs to lifting equipment

- a) Supply and install new electric motors, SEW-EURODRIVE DRN80M4/FF type, or approved equivalent, rated at 0.75 kW, 230/400 V, 50 Hz, IE3 efficiency class, with a speed of 1440 rpm and continuous duty cycle (S1). Each motor shall be B5 mounted with IEC FF165 flange (200 mm diameter) and a 19x40 mm output shaft. Motors shall have an IP55 degree of protection, thermal class 155(F) (max winding temperature 155°C), and be coated in high-visibility orange suitable for industrial environments. **The engineer shall give prior approval before a purchase order is placed.**

- b) Shotblast, prime and repaint existing steel structures completed on crane.

Secondary Metering Pump Sets (from storage Tanks to Mixing Chamber)

- a) Supply and install new flocculant (polyelectrolyte) dosing pumps, Grundfos DMX, or equivalent, two (2) being duty units and one being standby, each with a dosing range of 2- 60l/hr for liquid of 1200 kg/m³ density at a head capability up to 10 bar. Replacing existing dosing pumps **The engineer shall give prior approval before a purchase order is placed.**
- Class 9, 25 mm PVC pipe
 - Class 9, 25 mm PVC isolating valves
 - Class 9, 25 mm Bends, tees, fittings
 - 10mm Tube
 - Pipe clamps and holding brackets

Repairs to piping and fittings at polyelectrolyte storage tanks

- a) Class 9, 25 mm bends, tees, valves, pipes, including fittings from the storage tanks

CHLORINATION (Chlorine Injection)

- a) Replace 5 kg/h, wall-mounted, vacuum-operated, sonic controlled, chlorinators (injectors), Grundfos, Wallace and Tiernan or equivalent
- b) Heating coils for chlorine line (upstream of chlorinators)
- c) Replace Pressure gauge, Wika (100mm dial and filled with glycerine), mounted on the pre-chlorination carrier water piping, with a range from 0 to 500 kPa, complete with ball shut off valve and piping
- d) Replace isolating ball valve, uPVC, 50NB, class 16
- e) Replace chlorine solution piping, uPVC, 50NB, complete with fittings, tees, elbows and brackets
- f) Repairs of leaks to a 50NB, Class 16 uPVC carrier water pipe.

CHLORINE CYLINDER ROOM

- a) Supply and install new electronic scale assembly, with a capacity of 3000 kg, complete with stand and trunnions, 4-20mA signal output capable, and a local LCD display.
- b) Remote vacuum regulator, PN 40, complete with a drip leg and heater (Grundfos or equivalent)
- c) Flexible connector, 3/8" NB, Type K, zinc plated copper, (between chlorine cylinder and manifold), complete with fittings
- d) 3-way motor-operated valve, PN 40 (for automatic changeover)

- e) Automatic changeover panel (for power supply and control of the 3-way motor-operated ball valve, as per the two (2) pressure switches inputs).
- f) Manifold, 1/2" NB, Schedule 40, carbon steel, complete with fittings, flanges bolts, as well as a drip leg and heater
- g) Manifold isolation valve 1/2" PN40
- h) Pressure gauge, complete with isolating valve
- i) Pressure and vacuum relief valve, 1/2"NB, PN40
- j) Repairs to lifting crane

CARRIER WATER PUMPS

- a) Supply and install new carrier water pump sets, with a duty of 1.7 l/s and a head of 15 metres, complete with requisite pipe fittings, wiring to the MCC.

EMERGENCY EYE WASH SHOWER & BASIN SINGLE HAND OPERATED STATION

- a) Supply and install Stainless steel shower & basin single hand operated complete with paint work

GENERAL ITEMS

- Control panel for chlorine dosing, carrier water pumps, leak detection
- 307 Leak Detector System with 2 Sensors
- Breathing Apparatus (BA) set comprising a rescuscitator, air cylinder and mask, complete with wall-mounted cabinet, with a 50 mm minimum roof overhang and with two (2) glass doors in front shall be mounted on the wall just outside the chlorine room.
- Supply, deliver and install single column, stand alone emergency shower with hand operated eye wash, epoxy coated, including connection to water line
- Power cabling, complete with cable trays
- Control and instrumentation baling, complete with cable trays

SIGNAGE

- a) Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements

TESTING AND COMMISSIONING

- a) Testing and commissioning

C2.3.2.3 FLOCCULATION CHANNELS

Penstocks,Channel Gates & Sluice Gates

- a) Stainless steel 750 x 750 manual penstock at flocculation channels for scum removal, PN 16 complete with guide structure, rising spindle and drive train, inclusive of requisite concrete works and sealing structure. The stem, door, frame and fasteners shall be made of 316 stainless steel
- b) Repair Existing channel gates

Signage

- a) Ensure Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements.

C2.3.2.4 SEDIMENTATION

Valves

- a) Replace 250NB desludging valves double flanged on sedimentation tanks
- b) Replace Spindle extension on existing and new valves for mounting of actuators, complete with guides, brackets and fasteners

Piping and Fittings

- a) Supply and install of the pipes, puddle flanges and couplings

Sundries

- a) Supply and install 1800mm dia glass fibre stilling box
- b) Aluminium U-channel sluice Type 2 H-frame
- c) Turbidity meter, complete with a 4-20mA signal, mounted at outlet points of each sedimentation tank (clarifier), including cabling to the control room.
- d) Name Tagging and Signage.
- e) Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), firefighting, evacuation, floor painting, PPE requirements.
- f) Testing and commissioning of all sedimentation tanks.

C2.3.2.5 FILTRATION

Supply, delivery, installation, testing and commissioning of blower, motors pipework, valves, fittings, bends, elbows, reducers and other listed installations, complete with flanges, crotch plates, welds, gaskets, bolts, nuts and washers.

- Filter bed depth (silica)
 - Filter bed depth (grit)
 - Filter bed depth (gravel)
 - Number of filters
 - Density of silica (confirmed)
 - Density of grit (assumed)
 - Density of gravel (assumed)
 - Width of filter bed (along filter gallery)
 - Length of filter bed (transverse to filter gallery)
 - Filter bed area (all filters)
- a) Number of laterals for all filters (full width)
 - b) Filtration media, laterals and nozzles
 - c) 110 mm diameter class 9 uPVC lateral piping, cut to required lengths
 - d) 110mm uPVC end caps for laterals
 - e) Supply and deliver UV-blocked polypropylene filter nozzles, fitted with air holes. Each nozzle to provide a flow that will meet the backwash flow requirement of 27 m/h at operating conditions. Filter nozzles shall be approved by Engineer, prior to finalisation of design work by Contractor.
 - f) Threaded saddles (suitable for 110 dia laterals and nozzles, complete with accessories, and solvent-welded to laterals). Type of nozzles shall be confirmed with the Engineer before placement of order.
 - g) Folded angles and jacking screws
 - h) Stainless steel anchors
 - i) 150mm deep (after backwash and commissioning) gravel bed, of grain size 2 to 2.7mm
 - j) 100mm deep (after backwash and commissioning) grit layer, of grain size 2.4 to 4.8mm
 - k) 750mm deep (after backwash and commissioning) silica sand layer of grain size 0.6 to 1.18mm dia.

Blowers

- a) Supply and install new air blower with a flow rate of 401 m³/h and a delivery pressure of 108.5kPa. Volumetric efficiency of at least 82.5% and total efficiency of at least 60%. The engineer shall give prior approval before a purchase order is placed.
- b) Supply and install new Motor, induction, squirrel cage, foot-mounted, 5.5kW, 400V, 2860 RPM, IP55
- c) Motor slide, rails, V-Belt assembly and drive guard assembly
- d) Combined suction filter and silencer 100NB
- e) Filter restriction inductor
- f) Suction vacuum switch
- g) Combined base-frame and discharge silencer
- h) Pressure relief valve
- i) T- Fitting 100NB Steel
- j) Pressure gauge set, Wika (100mm dial and filled with glycerine) with a range from 0 to 200 kPa
- k) Discharge pressure switch

- l) Non-return valve, 100NB , PN10, flanged to SABS 1123.
- m) SANS 719 Grade C Delivery Steel Pipe, 100 NB, with a wall thickness of 4.5mm, complete with fittings (VJ Couplings, crotch plate, welds, flanges, bolts and end caps); with connected to new and Existing Blower.
- n) Anti-vibration mountings.
- o) Baseplate and plinth (950 x 1400mm; 25MPa reinforced concrete platform)
- p) Commission and test blower sets.

Valves, Sluice Gates And Actuators

- a) Replace Stainless steel inlet sluice gate, rising spindle, complete with plate, guides, stem (threaded for multi-turn actuation), fasteners, gaskets. To replace sluice gates at existing filter house.
- b) Repair of the existing gate valves and sluice gates.

Piping

- a) Supply, handle, installation of pipe complete.

Backwash Pumps

- a) Supply identical end suction centrifugal backwash pumps complete with motors and base plates, all as specified
- b) Supply all pipe-work and fittings, including gate valves and check valves as detailed"
- c) Name Tagging and Signage
- d) Name tagging and coding of all equipment including valves, piping, actuators, blowers, pumps, MCCs, wiring, light fittings, HMIs, PLCs
- e) Safety signs including but not limited to fire fighting, evacuation, floor painting, PPE requirements
- f) Ventilation louvres for the filter building, mounted at sidewall and roof levels
- g) Testing and commissioning of all filters

Signage

- a) Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements

C2.3.2.6 HIGH LIFT PUMP STATION**Pumps**

- a) Supply, delivery, installation, testing and commissioning of pumps, pipework, fittings, bends, elbows, reducers and other listed installations, complete with flanges, gaskets, bolts, nuts and washers.
- b) New centrifugal pumps with a duty of 456 m³/h (127.22l/s) at a speed of 1450 rpm, against a head of 138 metres, and hydraulic efficiency of at least 80%, with Carbon steel shaft; Bronze (BS 1400 PB1) impeller; Mechanical seals: low maintenance, low wear mechanical cartridge-type, pre-assembled unit, independent of direction of rotation, corrosion resistant, balanced, dynamically-loaded o-ring, Graphite Cast iron casing, The engineer shall give prior approval before a purchase order is placed.
- c) Repair existing centrifugal pumps and motors
- d) Motor, induction, squirrel cage, foot-mounted, 280 kW, 380V, 1490 RPM, IP67
- e) HRC Coupling (motor-to-pump).
- f) Baseplate.
- g) Machine guards for the new pumpsets on all moving parts, especially gear couplings (pump-to-motor).

Pipework And Fittings

- a) Suction piping refurbishment, to maintain 350NB, complete with requisite fabrication, including flanges, crotch plates, gaskets, fasteners
- b) Non-return valve, 300 NB, PN25, tilted disc type with an operating stroke of not more than 40°
- c) Pump Control Valve, 300NB, at least PN25 (Bermad, CLA-VAL or equivalent) , SABS 1123 flanged, complete with controls
- d) Flowmeter, magnetic flow type, DN300, PN 25, Promag 51, or equivalent, for instantaneous and totalised flow readouts in l/s and kl (LCD), 4-20mA, programmable datalogger, SABS 1123 flanged, stainless steel electrodes, 240 VAC, complete with pipe reducers
- e) Air valve, DN25, PN25, Ventomat or equivalent installed on discharge main
- f) 400 NB, 45° Long elbow, PN 16, SANS 719 Steel
- g) 300 NB, 45° Long elbow, PN 25, SANS 719 Steel
- h) Suction side, 400 NB, PN 16 concentric reducer, SANS 719 Steel
- i) Delivery side, 300 NB, PN 25 concentric reducer, SANS 719 Steel
- j) Pump drainage piping (from pumps to the drainage sumps)
- k) Gate Valve 50NB, PN 10
- l) Swing Non-return valve 50NB, PN10
- m) Building repairs on pump plinths and floor
- n) Floor repairs and painting in pump station

Pump Protection

- a) Temperature sensor, PT100 with 4-20mA signal transmission, for the DE and NDE bearings of each pump (Nipples to be factory fitted on the pumps, no drilling on site)
- b) Vibration sensor, for the DE and NDE bearings of each pump (Nipples to be factory fitted on the pumps, no drilling on site will be acceptable)
- c) No flow switch
- d) Pressure Switch

Pump Performance Monitoring

- a) Pressure Transmitter, 4-20mA signal, WIKA or equivalent on the Suction and delivery of each Pumps complete with wiring to the MCC.
- b) Suction Mechanical Pressure Gauge, Wika (100mm dial and filled with glycerine), mounted on each pump suction side for the new pumps with a range from -5 kPa to 200 kPa, complete with ball isolating valve and piping
- c) Delivery Mechanical Pressure Gauge, Wika (100mm dial and filled with glycerine), mounted on each pump delivery piping, for the new pumps, with a range from 0 to 2500 kPa, complete with ball isolating valve and piping

Pedestals

- a) Suction and Delivery Pressure Gauge Pedestals (PS-1), Design, issuing of shop drawings, manufacture, deliver, install complete with corrosion protection pressure gauge support frames to suit Specified pressure gauge as detailed on this BOQ.

Cathodic Isolation

- a) Cathodic isolation for each pump

Corrosion Protection

- a) Painting of pipework, pumps and fittings in line with the set colour-coding convention

Signage

- a) Signage and labelling on all equipment, in line with existing convention, including but not limited to name tagging, pipe painting (painting in line with colour coding), fire fighting, evacuation, floor painting, PPE requirements

Note: The quantities of the items mentioned in the summary of scope of work is determined in the Bill of quantities separate C1.2 Bill of quantities.

C2.4 TECHNICAL SPECIFICATIONS-MECHANICAL WORKS**C2.4.1 CONTRACTOR'S ESTABLISHMENT ON SITE AND GENERAL CHARGES****C2.4.1.1 SCOPE**

The Tenderer shall allow for preliminary and general charges associated with the Contract as a whole and shall thus include the relevant charges associated with any/all sub-contractors and suppliers appointed under the Contract.

C2.4.1.2 NOTICES, SIGNS AND ADVERTISEMENTS

The Tenderer shall allow for the supply and erection of one (1No) contract notice board in terms of the issued drawing if any are supplied. The notice board shall be erected at a suitable location as confirmed by the Engineer.

C3.3.1.3 COMPLIANCE WITH OCCUPATIONAL HEALTH AND SAFETY ACT, ITS REGULATION AND THE EMPLOYER'S HEALTH AND SAFETY SPECIFICATION

The Tenderer shall refer to relevant sections included within this document for the Employer's Health and Safety Specification and shall make adequate allowance in the tendered fixed and time-related rates for compliance to the said Specification.

C2.4.1.3 COMPLIANCE WITH ENVIRONMENTAL MANAGEMENT PLAN

The Tenderer shall refer to relevant sections included within this document for the applicable Environmental Management Plan (EMP) and shall make adequate allowance in the time-related rates for compliance to the said Specification during the period of installation on Site.

C2.4.1.4 GENERAL

The limits of the project are within the Malamulele Water Treatment Works, including the raw water abstraction works at the banks of Luvuvhu River. Coordinates of the water treatment works and the abstraction point are as indicated in the table below.

Village name	Latitude	Longitude
Water Treatment Works	22°57'12,57"(S)	30°39'01,60 (E)
Abstraction Point	22°57'11,19"(S)	30°38'53,56"(E)

The site shall not only include the works area for the construction of the new services, but shall be extended in the broader sense to take account of all areas occupied by the Contractor, be it deliberate or unintentional, in the execution of the contract.

C2.4.2 PUMPS

C2.4.2.1 RAW WATER PUMPING

Malamulele Water Treatment Plant has two (2) raw water pumps 1 operating and 1 standby, which are located at the banks of Luvuvhu River. They pump water at a maximum of 93l/s. The Centrifugal pump set, KSB Etanorm 300-250-320 has a duty of 950m³/h (264 l/s) at a speed of 1450 rpm, against a head of 23 metres, and hydraulic efficiency of at least 80%, coupled with a 90 kW Motor (VSD application Motor) at 400V, 4-pole, IP 68, Complete with a cooling jacket and a DN 200 pedestal. Refurbishment work needs to be done on this pumps. Allow sum for pipework modification, including suction side and delivery side fittings, flanges, fasteners, adapters, to suit the new pump installations.

C2.4.2.2 LIFTING EQUIPMENT MOTOR

New electric motor, SEW-EURODRIVE DRN80M4/FF type, or approved equivalent, rated at 0.75 kW, 230/400 V, 50 Hz, IE3 efficiency class, with a speed of 1440 rpm and continuous duty cycle (S1). The motor shall be B5 mounted with IEC FF165 flange (200 mm diameter) and a 19x40 mm output shaft. Motors shall have an IP55 degree of protection, thermal class 155(F) (max winding temperature 155°C), and be coated in high-visibility orange suitable for industrial environments. **The engineer shall give prior approval before a purchase order is placed.**

C2.4.2.3 HIGH LIFT PUMPSTATION

The High lift pump station has three (3) pumps. The KSB Pump Assy OMEGA 200-670A(GC) centrifugal pumps have a duty of 456 m³/h (127.22l/s) at a speed of 1450 rpm, against a head of 138 metres, and hydraulic efficiency of at least 80%, with Carbon steel shaft; Bronze (BS 1400 PB1) impeller; Mechanical seals: low maintenance, low wear mechanical cartridge-type, pre-assembled unit, independent of direction of rotation, corrosion resistant, balanced, dynamically-loaded o-ring, Graphite Cast iron casing. **The engineer shall give prior approval before a purchase order is placed.**

C2.4.3 CHEMICAL DOSING

- The chemical dosing plant has an existing line Dry Lime Feeder, consisting of S/S 304, 0-40kg/hr or 0-120kg/hr, c/w S/S304 - 0,5cu Hopper and 100 Lt S/S304 mixing bowl. **The engineer shall give prior approval before purchase order is placed.** They will need to be tested and commissioned.
- The pipe, bends, tees and fittings all needs to be replaced.
- The chemical dosing plant has secondary metering pumps sets from storage tank to the mixing chamber. These two (2) pumps are flocculant (polyelectrolyte) dosing pumps, Grundfos DMX, two (2) being duty units and one being standby, each with a dosing

range of 2- 60l/hr for liquid of 1200 kg/m³ density at a head capability up to 10 bar. There is also carrier water pumps. These carrier water pump sets, have a duty of 1.7 l/s and a head of 15 metres. They will need to be tested and commissioned.

- Carrier water pump sets shall have a duty of 1.7 l/s and a head of 15 metres, complete with requisite pipe fittings, wiring to the MCC (See Electrical Bill of Quantity).

C2.4.4 FILTRATION

The filters have backwash pumps. Supply identical end suction centrifugal backwash pumps complete with motors and base plates, all as specified.

C2.4.5 CHEMICAL DOSING SYSTEM

Chlorine Injection

5 kg/h, wall-mounted, vacuum-operated, sonic controlled, chlorinators (injectors), Grundfos, Wallace and Tiernan or equivalent

Chlorine Cylinder Room

Electronic scale assembly, with a capacity of 3000 kg, complete with stand and trunnions, 4-20mA signal output capable, and a local LCD display.

C2.4.6 FILTRATION

There are currently 3 x filters at phases 1, phase 2 and phase 3 in the existing water treatment plant. Each filter box contains one (3 total) filter floor (effective area =150 m² per bed).

The minimum adequate water level will be maintained on the media ensuring that the media remains wet at all time.

Contractors will be expected to replace filter nozzles. The filter media in all filters to be replaced with a single grade of filter sand which works with the nozzle. Contractors shall supply and install UV-blocked polypropylene filter nozzles, fitted with air holes. Each nozzle to provide a flow that will meet the backwash flow requirement of 27 m/h at operating conditions.

A single media filter supported on a grit and gravel layer complying to the following criteria :

Layer Description	Grain Size
150mm gravel bed	: 2.00–2.7mmdia
100mm grit layer	: 2.4–4.8mmdia
750 mm silica sand	: Effective size (d10) 0.6 – 1.18 mm dia

The total depth of the filter media will be 1 000 mm and will be 150 mm lower than the backwash water outlet weir. Another weir on the outlet side of the filter will prevent filter media to drained completely or that negative pressures occur in the filter media.

The sand shall have an uniformity coefficient, UC <1,4. A limit is placed on the over size and under size fractions, not more than 3% of the mass should pass the 0,6 mm sieve and not more than 3% of the mass should be retained on a 1,35 mm sieve.

The sand must be clean i.e. have an acid solubility of less than 0,15% and must have a silica content of greater than 98%.

The media above must be placed in horizontal layers within 5% of the specified thickness. The final level of the media shall be as shown on the drawings once the initial filter washing has been completed.

C2.4.7 BLOWERS

The existing water treatment plant is equipped with one(1) air blower. The blowers shall be replaced, thus availing the existing blower arrangement to be used for servicing both existing and new filters. Pipework shall be connected from the existing filter plant to the refurbished filter plant.

The contractor shall include in his rates for the installation of all pipework from the blower room, including any/all excavation, should this be necessary.

Each blower shall be able to deliver 401 m³/h and a delivery pressure of 108.5kPa. Volumetric efficiency of at least 82.5% and total efficiency of at least 60% at operating conditions of total static pressure to the filters through the supply pipes and lateral filter underdrain system and the rate tendered must include the blower, motors, couplings, baseplates, safety devices, silencers, including all electrical equipment.

C2.4.8 PRESSURE GAUGES

Provide four(4) reliable pressure gauges to be supplied and installed at Raw water.

Provide two (2) Suction Mechanical Pressure Gauge, Wika (100mm dial and filled with glycerine), mounted on each pump suction side for the new pumps with a range from -5 kPa to 200 kPa, complete with ball isolating valve and piping and two(2) delivery Mechanical Pressure Gauge, Wika (100mm dial and filled with glycerine), mounted on each pump delivery piping, for the new pumps, with a range from 0 to 2500 kPa for High lift pump sets.

C2.4.9 FLOW METERS

Flow meter Electromagnetic type, on each raw water line (after the split), full bore (250NB, contractor to verify bore), to replace existing meters. The said meters shall be Promag W, Proline 400, or similar, PN40, for instantaneous and totalised flow readouts in l/s and kl (LCD), 4-20mA, programmable datalogger, SABS 1123 flanged on pipe full-bore, stainless-steel electrodes, 240 VAC, complete with sufficient length of signal cable. Operating range of 0 l/s to at least 400 l/s, and capable of recording reverse flow.

C2.4.10 VALVE CONSTRUCTION AND OPERATIONAL REQUIREMENTS

Bodies

Hubs for shaft-bearing housings shall form an integral part of the valve body. Valves bodies shall have adjustable mechanical stops to prevent over travel of the valve disc in the open or closed position. These stops may be incorporated in an actuator.

Discs

Discs shall be a single casting of approved hydrofoil section with a smooth continuous surface. The maximum combined stresses in the disc shall not exceed 20% of the minimum yield stress

of the material used when the specified unbalanced pressure is applied on any of the two (2) sides.

Retaining Rings

Stainless steel retaining rings shall be coated to reduce galvanic corrosion (Refer to Standard Specification DWS 9900 Section C3). Any recess for the retaining ring in the disc or body shall be coated and the retaining rings assembled whilst the coating is still wet.

Seats and Seals

Preference shall be given to resilient seal arrangements that are removable, replaceable and adjustable from the downstream side of the valve, without having to remove the valve from the pipeline.

Resilient seals shall have non-weathering, non-sticking, long life properties and shall be compatible with the quality of water to be conveyed.

The seat profile shall be smooth and continuous and shall provide adequate "lead in" for the resilient seal to open and to close on the stainless-steel seat only.

Seats and seals shall be of a design that would prevent them from becoming loose and obviate water seepage under the seals or seats during all conditions of operation and test.

Shafts

Shafts can either be continuous or a stub-shaft design configuration. Stub shafts shall extend into the disc hub for a distance of at least 1.5 shaft diameters and shall not protrude from the hubs i.e. exposing the shaft.

Shafts shall be attached to discs by means of keys, dowel pins, taper pins or any combination of the three and the connection shall be designed to transmit shaft torque equivalent to at least 75% of the torsional strength of the shaft. Dowel and taper pins shall be mechanically secured.

Bearings

Self-lubricating sleeve type bearings shall be fitted in the hubs in the valve body.

Each valve shall be fitted with at least one adjustable thrust bearing set to hold the disc securely concentric with the body or seat.

C2.4.11 NON-RETURN VALVES

Non-return valves at high lift pump stations shall be of a tilted disc type

ID	Item	Specification
1	Type	Tilted Disc
2	Body	SG Iron or Cast Steel
3	Disc Material	Cast Steel BS 1504-161
4	Disc Seat Material	Stainless Steel, Grade 308
5	Body Seat Material	Stainless Steel, Grade 304L
6	Stroke of Operation	Not more than 40 degrees
7	Dashpot	Not required
8	Valve Position Indicator	Yes
9	Pressure rating	PN10
10	Flanges	To SANS 1123
11	End cover O-ring	Nitrile Rubber 70 NBR
12	Corrosion Protection	Fusion Bonded Epoxy, to 150 microns

Table 2 Non-return Valve Specifications – Raw Water Pump Station

Non-return valves at high lift pump stations shall be of a tilted disc type

ID	Item	Specification
1	Type	Tilted Disc
2	Body	SG Iron or Cast Steel
3	Disc Material	Cast Steel BS 1504-161
4	Disc Seat Material	Stainless Steel, Grade 308
5	Body Seat Material	Stainless Steel, Grade 304L
6	Stroke of Operation	Not more than 40 degrees
7	Dashpot	Not required
8	Valve Position Indicator	Yes
9	Pressure rating	PN25
10	Flanges	To SANS 1123
11	End cover O-ring	Nitrile Rubber 70 NBR
12	Corrosion Protection	Fusion Bonded Epoxy, to 150 microns

Table 3 Non-return Valve Specifications, High Lift Pump Station

C3.3.6.2 PUMP CONTROL VALVES

Pump control valves shall meet specifications that are listed in the schedule below.

ID	Item	Specification
1	Type	Hydraulically operated, diaphragm-actuated, active check valve that opens fully or shuts off in response to electric signals
2	Body	Ductile Iron, Globe Valve, Angle Pattern Design
3	Fail safe mechanism	Yes
4	Double chamber	Yes
4	Operation	Hydraulic, electric and Spring operated, for start-up control, normal shutdown control, as well as power failure shutdown control
5	Control System	3-way solenoid pilot, check valves, limit switch, isolating cock valves
6	Seat	Replaceable, raised stainless steel ring seat
7	Flow Patch	Unobstructed
8	Actuator	Double-chamfered with an inherent separating partition
9	Valve shaft	Stainless Steel
10	Pressure Rating	PN25
11	Flange	To SANS 1123
	Internals	Stainless Steel and Brass
12	Elastomers	NBR (Acrylonitrile butadiene rubber)

Table 3 Pump Control Valves

C3.3.6 .3 BALL VALVES

Isolating ball valve, uPVC, 50NB, class 16.

C3.3.6 .4 MOTOR OPERATED VALVES

3-way motor-operated valve, PN 40 (for automatic changeover).

C3.3.6 .5 DESLUDGING VALVE

250NB desludging valves double flanged on sedimentation tanks.

Spindle extension on existing and new valves for mounting of actuators, complete with guides, brackets and fasteners.

C3.3.6.7 PENSTOCKS, CHANNEL GATES & SLUICE GATES

Stainless steel 750 x 750 manual penstock at flocculation channels for scum removal, PN 16 complete with guide structure, rising spindle and drive train, inclusive of requisite concrete works and sealing structure. The stem, door, frame and fasteners shall be made of 316 stainless steel.

C3.3.6.8 GATE VALVE

Gate Valve 50NB, PN 10.

C3.3.6.9 AIR VALVE

Air valve, DN25, PN25, Ventomat or equivalent installed on discharge main.

C3.3.6.10 OTHER NON-RETURN VALVE

Swing Non-return valve 50NB, PN10

PS4 CONSTRUCTION AND MANAGEMENT REQUIREMENTS

4.1 General

The Contractor is referred to **SANS 1921: 2004 parts 1, 2 and 3: Construction and Management Requirements for Works Contracts**. These specifications shall be applicable to the contract under consideration and the Contractor shall comply with all requirements relevant to the project.

Certain aspects however require further attention as described hereafter.

4.2 Drawings

4.3 Responsibilities for design and construction

4.3.1 The responsibility strategy followed in this contract shall be A.

4.3.2 The mechanical engineer responsible for the design in accordance with the specification is: Muteo Consulting CC

Planning, Programme and Method Statements

4.4.1 Preliminary programme

The Contractor shall include with his tender a preliminary programme on the prescribed form to be completed by all Tenderers. The programme shall be in the form of a simplified bar chart with sufficient details to show clearly how the works will be performed within the time for completion as stated in the Contract Data.

Tenderers may submit tenders for an alternative Time for Completion in addition to a tender based on the initial tendered Time for Completion. Each such alternative tender shall include a preliminary programme similar to the programme above for the execution of the works, and shall motivate his proposal clearly by stating all the financial implications of the alternative completion time.

The Contractor shall be deemed to have allowed fully in his tendered rates and prices as well as in his programme for all possible delays due to normal adverse weather conditions and special non-working days as specified in the Special Conditions of Contract, in the Project Specifications and in the Contract Data.

4.4.2 Programme in terms of Clause 12 of the General Conditions of Contract

It is essential that the construction programme, which shall conform in all respects to Clause 12 of the General Conditions of Contract, be furnished within the time stated in the Contract Data. The preliminary programme to be submitted with the tender shall be used as basis for this programme.

The following must be stated on the programme:

- (a) The quantity of work applicable to each bar item as well as the rate at which the work will be completed.
- (b) A budget of the value of completed work, month by month, for the full contract period.
- (c) The critical path.
- (d) Work to be undertaken by Local Contractor (if applicable)
- (e) Training Courses
- (f) Schedule of plant and resources to be utilized

The Contractor's attention is also drawn to clause 40.3 of the General Conditions of Contract 2004.

4.4.3 Time for Completion

The tenderer shall indicate under section C1.2.2: **Data provided by Contractor** the time within which the contract shall be completed.

4.4.4 Delay in Completion

The Contractor shall organise the Works in such a manner that no delays occur. Delays due to faulty organisation or lack or shortage of materials or labour or co-operation with other parties or to any other cause within the control of the Contractor will not be countenanced and full power is reserved by the Engineer to order the Contractor to expedite the work should the work, in the opinion of the Engineer, not progress in a satisfactory way.

4.5 Quality Assurance (QA) (Read with SANS 1921 – 1: 2004 clause 4.4)

The Contractor will be solely responsible for the production of work that complies with the Specifications to the satisfaction of the Engineer. To this end it will be the full responsibility of the Contractor to institute an appropriate Quality Assurance (QA) system on site. The Engineer will audit the Contractor's quality assurance (QA) system on a regular basis to verify that adequate independent checks and tests are being carried out and to ensure that the Contractor's own control is sufficient to identify any possible quality problems which could cause a delay or failure.

The Contractor shall ensure that efficient supervisory staff, the required transport, instruments, equipment and tools are available to control the quality of his own workmanship in accordance with his QA-system. His attention is drawn to the fact that it is not the duty of the Engineer or the Engineer's representative to act as foreman or surveyor.

4.6 Management and disposal of water *(Read with SANS 1921 - 1: 2004 clause 4.6)*

The Contractor shall pay special attention to the management and disposal of water and stormwater on the site. It is essential that all completed works or parts thereof are kept dry and properly drained. Claims for delay and for repair of damage caused to the works as a result of the Contractor's failure to properly manage rain and surface water, will not be considered.

4.7 Earthworks

4.8 Testing 4.8.1 Process control

The Contractor shall arrange for his own process control tests. The Contractor will be expected of to employ the services of the existing established laboratory on site. T Contractor must submit the results of tests carried out on materials and workmanship when submitting work for acceptance by the Engineer. The costs for these tests shall be deemed to be included in the relevant rates and no additional payment will be made for testing as required.

4.8.2 Acceptance control

The process control test results submitted by the Contractor for approval of materials and workmanship may be used by the Engineer for acceptance control. However, before accepting any work, the Engineer shall have his own acceptance control tests carried out by the laboratory. The cost of acceptance testing shall be to the account of the client.

4.9 Site Establishment *(Read with SANS 1921 - 1: 2004 clause 4.14)*

4.9.1 Contractor's camp site and depot

The Contractor is responsible to provide a suitable site for his camp and to provide accommodation for his personnel, labourers, clerk of works and contracts manager. If the Employer can make any specific site available to the Contractor, such site will be pointed out to the Contractor.

The Contractor shall provide security watchmen for the contract as he deems fit at no extra cost for the Employer. The Contractor must ensure that all his employees as well as the employees of his subcontractors are able to identify themselves as members of the construction team.

The chosen site shall be subject to the approval of the Engineer and Employer. Possible locations for a campsite shall be pointed out at the Site Inspection. The Contractor shall conform to all local authority, environmental and industrial regulations.

4.9.2 Power Supply

The Contractor shall make his own arrangements concerning the supply of electrical power at the contractor's campsite. No direct payment shall be made for the provision of electrical services. Electrical power cannot be guaranteed by the service provider. During power failures and shortages, the Contractor must make his own arrangements for the provision of electricity.

The rates tendered for the relevant items in the Preliminary and General Section of the schedule shall include all costs for the establishment and maintenance of a power supply to the works.

4.9.3 Water Supply and Sewer

The Contractor shall erect and maintain on the site proper ablution facilities. The Contractor shall service and maintain the facilities in a clean and hygienic state for the duration of the contract period and on completion of the works from the site.

The Contractor shall make his own arrangements concerning the supply of water and sewer disposal at the contractor's campsite. No direct payment shall be made for the provision of water or sewer disposal.

The Contractor must supply all necessary materials for the water connection at a position pointed out by the Engineer. The availability of water cannot be guaranteed by the Municipality and in the event of water no longer being freely available, the Contractor must make his own arrangements to acquire it.

The rates tendered for the relevant items in the Preliminary and General Section of the schedule shall include all costs for the establishment and maintenance of water supply to the works and the Contractor shall make his own arrangements for the possible conveyance and storage of water if necessary. The Contractor will be held responsible for any wastage of water due to negligence.

4.9.4 Accommodation of Employees**4.9.5 Water for construction****4.9.6 Facilities for the Engineer****4.9.7 Telephone Facilities**

Telephone and facsimile facilities are needed on the site.

4.9.8 Survey beacons *(Read with SANS 1921 - 1 : 2004 clause 4.15)*

The Contractor shall take special precautions to protect all permanent survey beacons or pegs such as bench-marks, stand boundary pegs and trigonometrical beacons, regardless whether such beacons or pegs were placed before or during the execution of the Contract. If any such beacons or pegs have been disturbed by the Contractor or his employees, the Contractor shall have them replaced by a registered land surveyor at his own cost.

4.10 Existing Services *(Read with SANS 1921 - 1: 2004 clause 4.17)*

The Contractor shall make himself acquainted with the position of all existing services before any excavation or other work likely to affect the existing services is commenced. The Contractor will be held responsible for any damage to known existing services caused by or arising out of his operations and any damage shall be made good at his own expense. Damage to unknown services shall be repaired as soon as possible and liability shall be determined on site when such damage should occur.

Services belonging to the following service owners will be encountered:

SERVICE OWNER	TYPE OF SERVICE
Eskom	Electrical/Power lines
Telkom	Telephone lines
Vhembe District Municipality	Sewer, water and electrical infrastructure

4.11 Health and Safety *(Read with SANS 1921 - 1: 2004 clause 4.18)***4.11.1 General statement**

It is a requirement of this contract that the Contractor shall provide a safe and healthy working environment and to direct all his activities in such a manner that his employees and any other persons, who may be directly affected by his activities, are not exposed to hazards to their health and safety. To this end the Contractor shall assume full

responsibility to conform to all the provisions of the Occupational Health and Safety Act (OHSA) No 85 and Amendment Act No 181 of 1993, and the OHSA 1993 Construction Regulations 2003 issued on 18 July 2003 by the Department of Labour.

For the purpose of this contract the Contractor is required to confirm his status as mandatory and employer in his own right for the execution of the contract by entering into an agreement with the Employer in terms of the Occupational Health and Safety Act in the form as included in section C1.4.

4.11.2 Health and Safety Specifications and Plans

(a) Employer's Health and Safety Specification

A Health and Safety Specification is included in Section C3.3, Part PE of the tender documents as part of the Particular Specifications.

(b) Tenderer's Health and Safety Plan

The Tenderer shall submit with the tender his own documented Health and Safety Plan proposed to be implemented for the execution of the work under the contract. The Health and Safety Plan must at least cover the following:

- (i) a proper risk assessment of the works, risk items, work methods and procedures in terms of Regulations 7 to 28;
- (ii) pro-active identification of potential hazards and unsafe working conditions;
- (iii) provision of a safe working environment and equipment;
- (iv) statements of methods to ensure the health and safety of subcontractors, employees and visitors to the site, including safety training in hazards and risk areas (*Regulation 5*);
- (v) monitoring health and safety on the site of works on a regular basis, and keeping of records and registers as provided for in the Construction Regulations;
- (vi) details of the Construction Supervisor, the Construction Safety Officers and other competent persons he intends to appoint for the construction works in terms of Regulation 6 and other applicable regulations; and
- (vii) details of methods to ensure that his Health and Safety Plan is carried out effectively in accordance with the Construction Regulations 2003.

The Contractor's Health and Safety Plan will be subject to approval by the Employer, or amendment if necessary, before commencement of construction work. The Contractor will not be allowed to commence work, or his work will be suspended if he had already commenced work, before he has obtained the Employer's written approval of his Health and Safety Plan.

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

4.11.3 Cost of compliance with the OHSA Construction Regulations

The rates and prices tendered by the Contractor shall be deemed to include all costs for conforming to the requirements of the Act, the Construction Regulations and the Employer's Health and Safety Specification as applicable to this contract.

Should the Contractor fail to comply with the provisions of the Construction Regulations, he will be liable for penalties as provided in the Construction Regulations and in the Employer's Health and Safety Specification.

4.12 Management of the environment (Read with SANS 1921 - 1 : 2004 clause 4.19)

Respect for the environment is an important aspect of this contract and the Contractor shall pay special attention to the following:

4.12.1 Natural Vegetation

The Contractor shall confine his operation to the limits of the pipeline reserve (4m wide) for the purpose of constructing the works and where applicable detours, shall be sited in consultation with the Engineer and the local communities.

Only those trees and shrubs directly affected by the works and such others as the Engineer may direct in writing shall be cut down and stumped. The natural vegetation, grassing and other plants shall not be disturbed other than in areas where it is essential for the execution of the work or where directed by the Engineer.

4.12.2 Fires

The Contractor shall comply with the statutory and local fire regulations. He shall also take all necessary precautions to prevent any fires. In the event of fire the Contractor shall take active steps to limit and extinguish the fire and shall accept full responsibility for damages and claims resulting from such fires which may have been caused by him or his employees.

4.12.3 Environmental Management Plan

In addition to the above all requirements according to the Environmental Management Plan will be adhered to.

4.13 Contract Name board

One official contract name board, as per C4.2 *Site Information: Construction Notice Board*, is required for this contract.

4.14 Railway Facilities

N/A

PS 5 SECURITY CLEARANCE OF PERSONNEL

Tenderers should note that the Vhembe District Municipality may require that Security Clearance investigations be conducted on any number of the Tenderer's personnel.

If so required, by the Vhembe District Municipality, the Tenderer must remove personnel as indicated immediately and ensure that they have no access to the works or

documentation or any other information pertaining the site.

The Employer shall not be liable for any cost concerning the removal of personnel or the effect thereof on the execution of the work.

PS 6 SUPPLY OF MATERIALS

All material to be used in the Works is to be supplied by the Contractor.

The Contractor shall ensure that the work is not delayed due to the lack of materials on Site, by placing orders for material required under this Contract as soon as possible. No extension of time will be allowed for any delay due to the supply of materials.

Although the quantities have been carefully calculated, it must be considered as approximate only and the Contractor, before ordering any materials, should check the quantities required. The bill of quantities is provisional.

PS 7 EXECUTION OF THE WORKS

7.1 Inspection by the Engineer

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

7.2 Certificate of Completion

When all the work under the Contract have been completed to the entire satisfaction of the Engineer, he will issue a certificate of completion to the Contractor informing the Contractor of the date the date at which the works are deemed to be completed and accepted by the Employer.

The sureties provided by the Contractor for the fulfilment and completion of the Contract in terms of the Form of Agreement will be released upon the issue of the Certificate of Completion.

PS 8 EXPANDED PUBLIC WORKS PROGRAMME (EPWP) LABOUR INTENSIVE SPECIFICATION *(Read with SANS 1914 -5 2002 and Guidelines for the implementation of Labour-Intensive Infrastructure Projects under the Expanded Public Works Programme (EPWP) third edition 2015)*

8.1 Labour intensive competencies of supervisory and management staff

Contractors having a CIDB Contractor grading designation of 5CE and higher only shall engage supervisory and management staff in labour intensive works who have either completed, or for the period 1 April 2004 to 30 June 2006, are registered for training towards, the skills programme outlined in Table 1.

Table 1: Skills programme for supervisory and management staff

Personnel	NQF level	Unit standard titles	Skills programme description
Foreman/ supervisor	4	Implement labour Intensive Construction Systems and Techniques <i>or the equivalent QCTO qualification</i>	This unit standard must be completed, and
		Use Labour Intensive Construction Methods to Construct and Maintain Roads and Stormwater Drainage <i>or the equivalent QCTO qualification</i>	} any one of these 3 unit standards
		Use Labour Intensive Construction Methods to Construct and Maintain Water and Sanitation Services <i>or the equivalent QCTO qualification</i>	
		Use Labour Intensive Construction Methods to Construct, Repair and Maintain Structures <i>or the equivalent QCTO qualification</i>	
Site Agent / Manager (i.e. the Contractor's most senior representative that is resident on the site)	5	Manage Labour Intensive Construction Processes <i>or the equivalent QCTO qualification</i>	Skills Programme against this single unit standard <i>or part qualification</i>

8.2 Employment of unskilled and semi-skilled workers in labour-intensive works**8.2.1 Requirements for the sourcing and engagement of labour.**

8.2.1.1 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.

8.2.1.2 The rate of pay set for the EPWP is R per task or per day.

8.2.1.3 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.

8.2.1.4 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 5.2.1.3.

8.2.1.5 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

8.2.1.6 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 25; and
- c) 2% on persons with disabilities.

8.2.2 Specific provisions pertaining to SANS 1914-5

8.2.2.1 Definitions

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

8.2.2.2 Contract participation goals

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.

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

8.2.2.3 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.

8.2.2.4 Variations to SANS 1914-5

The definition for net amount shall be amended as follows:

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

The schedule referred to in 5.2.2.3 shall in addition reflect the status of targeted labour as women, youth and persons with disabilities and the number of days of formal training provided to targeted labour.

8.2.2.5 Training of targeted labour

- a) 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.
- b) The cost of the formal training of targeted labour, will be funded by the provincial office of the Department of Labour. This training should take place as close to the

project site as practically possible. The Contractor, must access this training by informing the relevant provincial office of the Department of Labour in writing, within 14 days of being awarded the contract, of the likely number of persons that will undergo training and when such training is required. The employer must be furnished with a copy of this request.

- c) A copy of this training request made by the Contractor to the DOL provincial office must also be faxed to the EPWP Training Director in the Department of Public Works– Cinderella Makunike, Fax Number 012 328 6820 or email cinderella.makunike@dpw.gov.za Tel: 083 677 4026.
- d) The Contractor shall be responsible for scheduling the training of workers and shall take all reasonable steps to ensure that each beneficiary is provided with a minimum of six (6) days of formal training if he/she is employed for 3 months or less and a minimum of ten (10) days if he she is employed for 4 months or more.
- e) The Contractor shall do nothing to dissuade targeted labour from participating in training programmes.
- f) 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 d above.
- g) Proof of compliance with the requirements of b to f must be proven.

8.3 Typical construction work to be executed applying labour intensive principles

PART B: AMENDMENTS TO THE STANDARD SPECIFICATIONS

SABS 1200 A: CIVIL ENGINEERING CONSTRUCTION: GENERAL

PSA GENERAL (SABS 1200 A)

PSA 1 **MATERIALS (Clause 3)**

PSA 1.1 Standardisation mark (Clause 3.1)

Add the following to the Clause:

All material delivered to the site shall bear the Official Standardisation Mark.

PSA 2 **PLANT (Clause 4)**

PSA 2.1 Restrictions on employee accommodation (Sub-clause 4.2)

No housing is available for the Contractor's employees. The Contractor shall make his own arrangements to house his employees.

The Employer shall place an area at the disposal of the Contractor to enable him to erect his site offices, workshops and stores. Any facilities shall comply with the requirements of the local authority. The Contractor shall provide his own fencing and site security.

PSA 3 **CONSTRUCTION (Clause 5)**

PSA 3.1 Dealing with water (Sub-clause 5.5)

In addition to the items as set out in Subclause 5.5, the Contractor shall also provide pumping equipment, pipes and other equipment as may be necessary.

PSA 4 **MEASUREMENT AND PAYMENT (Clause 8)**

PSA 4.1 Fixed charge and Value Related Items (Sub-clause 8.2.1)

Replace the sub-clause with the following:

“Payment shall be a lump sum to provide for the Contractor's expenses in connection with:

- (a) setting up and maintaining his organisation, camps and plant on the site;
- (b) effecting the insurance's and indemnities required in terms of the General Conditions of Contract
- (c) meeting all other general obligations and liabilities which are not specifically measured for payment in these contract documents.

The lump sum total of items (a), (b) and (c) as measured and Fixed Charge Items and time Related Items shall not exceed 15% of the nett total Tender Amount. If the Tenderer should tender a higher amount for this item it shall be reduced to the amount allowed above and all other tendered prices increased in the proportion required to retain the same Nett Total Tender Amount.

The tendered lump sum shall not be subject to any variation if the actual value of work done under the Contract exceeds, or falls short of, the Tender Amount, or as a result of an extension of time for completion in terms of Clause 42 of the General Conditions of Contract.

Any payment made under this item shall not be taken into account when determining whether the value of a certificate complies with the "minimum amount of monthly certificate" laid down in the Appendix.

Before any payment is made under this item the Contractor shall satisfy the Engineer that he has provided on site an establishment and plant of good quality and in value exceeding that of the first instalment. The Contractor may be asked to furnish documented proof that he owns the offices and plant on site, the value of which should exceed the amount claimed in the first certificate. In the event that the Contractor cannot satisfy the Engineer as to the value or ownership, the Engineer shall have the right to withhold part of any payments to be made under this item, until the Works have been completed.

Payment of the lump sum shall be made in three separate instalments as follows:

- (a) The first instalment, 50% of the lump sum, will be paid in the first payment certificate after the Contractor has met all his obligations under this sub-clause and has made a substantial start on construction in accordance with the approved programme.
- (b) The second instalment, 35% of the lump sum, will be paid when the value of the work done reaches one half of the Nett Total Tender Amount.
- (c) The third and final instalment, 15% of the lump sum, will be paid when the works have been completed and the Contractor has fulfilled all requirements of this sub-clause. No payment for the scheduled Fixed Charge Items for this contract will not be made until the requirements regarding and the erection of name boards have been met."

PSA 4.2 Time-Related Items (Sub-clause 8.2.2)

Replace this sub-clause with the following:

Subject to the provisions of 8.2.3 and 8.2.4, payment of item 8.4 (time-related item) will take place in equal monthly amounts, calculated on the tendered amount for the item, divided by the contract period in months, with the understanding that the total of the monthly payments which was paid for this specific item does not exceed the proportion that the progress of the works to date bears in relation to the works as a whole.

Should the Engineer grant an extension of time, the Contractor is entitled to an increase in the amount tendered for time related items, and this increase must be kept in the same proportion to the original tender amount as the extension of time is to the original time of the completion of the works.

Payment for such increased amounts will be considered as full compensation for all time related, provisional and general costs which arise as a result of the extension of time.

PSA 4.3 Exposing of existing services (add the following Sub-clause 8.9)

Add the following new pay item:

Item:

Excavation by hand in all materials to expose existing services
Unit: m³

The tendered sum must include full compensation for all hand excavation as per the dimension approved by the Engineer for the locating, exposing and moving of existing services. Excavation outside of approved dimensions will not be paid. The rate must also include for backfill and compaction to 90% of mod AASHTO density and, if applicable, the removal of excess material not used for backfill, the securing of excavations, for handling surface and subsurface water, for protection of existing services and for any other activity necessary to complete the work. Free haul of 1,0 km will be applicable on the transport of excess material.

No distinction will be made between classes of material or types of services.

Note: The Contractor must provide sufficient supervision over labourers when services are exposed.

PSA 4.4 Occupational Health and Safety (add the following Sub-clause 8.10)

Add the following new pay items:

Item:

Provision for the cost related to the Occupational Health and Safety Act, 85 of 1993, and the relevant Regulations:

- a) Complete "Notification of Construction" form and submit
Unit: Sum
- b) Prepare a Health and Safety Plan for compliance with all the requirements of the OHS Act and the Construction Regulations 2003 and submit to the engineer Preparation of a Health & Safety Plan
Unit: Sum
- c) Compilation of a Risk Assessment prior to Construction
Unit: Sum
- d) Health & Safety induction Training of employees
Unit: Sum
- e) Compilation and keeping up to date the Health & Safety plan and file which shall include all documentation required in terms of the act, over the entire construction period
Unit: Sum

The tendered sum shall include full compensation for providing the above services as required from the Occupational Health & Safety Act. The rate shall include all related costs incurred by the Act, remuneration of personnel, trainers, etc. and equipment required for the execution of the required services as depicted by the Act. The tendered amount for items a, b, c, d and e shall only be paid on the successful completion of the task as approved by the client. The tendered amount for item e shall be paid on a monthly basis.

PSA 4.5 Facilities for Engineer (Fixed Charge) (Sub-clause 8.3.2.1)

PSA 4.5.1 Furnished office (Sub-clause 8.3.2.1 a)

Add the following to the pay item:

No office will be required for the Engineer.

PSA 4.6 Facilities for Engineer (Time Related) (Sub-clause 8.4.2.1)

PSA 4.6.1 Furnished office (Sub-clause 8.4.2.1 a)

Add the following to the pay item:

No office will be required for the Engineer.

PSA 4.6.2 Survey assistant and materials (Sub-clause 8.4.2.1 d)

Add the following to the pay item:

The Contractor shall make available for the duration of the contract period, when required by the Engineer, one skilled and one unskilled survey labourers.

SABS 1200 D : CIVIL ENGINEERING CONSTRUCTION : EARTHWORKS

PSD 1 SPECIFICATION FOR BORROW PITS

5.2.2.2.2 PSD 1.1 SCOPE

This section shall include all work in obtaining materials for work under this contract, negotiation with owners of the ground on which borrow pits are situated, clearing the site, stripping excess or unsuitable overburden, excavating selected material for use on the works, and finishing off the borrow area to the satisfaction of both the owners and the Engineer, all in accordance with these Specifications or as directed.

PSD 1.2 GENERAL

The Contractor shall be solely responsible for the locating and supply of all materials required from borrow pits for the due and proper construction of the works embodied in this contract.

Before commencing operations at any borrow pit the Contractor shall consult the property owner concerned and the Engineer regarding his proposals for operating the quarry or borrow pit and obtaining access thereto.

The Contractor shall take all measures for the protection and control of livestock, etc., which is made necessary by his operations, such as providing of gates in the existing fences and ensuring that all gates are closed during the whole of the time that they are not actually in use by his traffic.

Where access to the Contractor's quarries is not obtainable by existing roads he shall after consultation with the property owner concerned construct such access roads and provide such gates as he requires and as the authorities concerned may agree to, but the cost of construction of such access roads and the provision of gates shall be deemed to be covered by the prices tendered for the construction of those parts of the works in which the materials from the quarries concerned are being used. The provision of gates and subsequent removal of the gates when no longer required as well as restoration of the fence to its former standard will be at the Contractor's expense.

Whenever required by the owner of the land on which the borrow pit is situated or when it appears necessary in the interest of public health, or the prevention of soil erosion, adequate provision for draining the borrow pit must be made.

PSD 1.3 USE OF IMPORTED MATERIAL

The onus shall rest on the Contractor to ensure that the materials used in each stage of the work comply with the requirements for materials as specified for that stage before proceeding with the processing of the next stage and the Contractor is required to ensure that his organisation is at all times properly and adequately equipped to fulfil the above requirements.

All materials which do not conform to the requirements of these Specifications, shall be considered as defective and all such material, whether in place or not, shall be removed from the site of the works by the Contractor at his own expense.

No payment will be made for the shifting of the Contractor's equipment from one borrow pit position to the next.

PSD 1.4 **TAKING AND TESTING OF SAMPLES**

The Contractor must supply the Engineer with comprehensive test results regarding the proposed borrow material 14 days before any borrowing starts. The results must contain enough information to enable the Engineer to assess the quality and quantity of material available from the borrow site. The total cost of these tests must be borne by the Contractor. The exploitation of the pit must be planned in such a way that material of varying quality may be planned in such a way that material of varying quality may be selected and loaded directly or otherwise stockpiled temporarily without contamination.

If, after trial, it is found that any sources of supply, which have previously been approved, do not furnish a uniform product, or if the product from any source proved unsatisfactory in any way, the Contractor shall furnish materials from other approved sources.

The Engineer may from time to time instruct the Contractor to submit samples from approved sources of supply in order to ensure that the quality of materials remains satisfactory.

The cost of taking and testing of samples shall be borne by the Contractor.

PSD 1.5 **MEASUREMENT AND PAYMENT**

The rate for importing material from borrow pits selected by the Contractor or other commercial sources (item 8.3.4(a)2) shall cover the cost of acquiring suitable material, handling and transportation regardless of distance, and placing. No separate payment will be made for location of borrow pits, the taking of samples, the testing of samples, the construction and maintenance of access roads, the clearing of the borrow pit site, the removal and replacement of overburden, the shaping and drainage of borrow pits, the scarifying of access roads, and paying of any royalties.

PSD 1.6 **FREEHAUL**

Replace clause 5.2.5.2 with:

All haul will be regarded as freehaul.

PSD 1.7 **CLASSIFICATION OF EXCAVATIONS**

Notwithstanding anything to the contrary as may be contained elsewhere in the specifications, excavations shall be classified according to the specified method of excavation as follows :

(i) Excavations which are :

- not specified in as being required to be executed utilising labour intensive construction methods : and
- specified as being required to be executed utilising labour intensive construction methods but which notwithstanding, are executed by the Contractor using mechanical plant and equipment which is prohibited in terms of the project specifications, either with the prior authorisation of the Engineer or in breach of the provisions of the specifications :

shall be classified in accordance with the provisions of the SABS 1200 standard specification.

- (ii) Excavations which are specified as being required to be executed utilising labour intensive construction methods and which are so executed, shall be classified in accordance with TABLE 1.
- (iii) Where only softer classes of excavation are required in terms of part 1 to be executed utilising labour intensive methods, the classification for the purposes of determining the cut-off point for labour intensive excavation shall be made in terms of subsubclause (ii) above, and the excavation beyond the cut-off point shall be in terms of subsubclause (i) above. (i.e. a material classified as "intermediate" in terms of subsubclause (ii) may, when not excavated by labour intensive methods, be classified as "soft" in terms of subsubclause (i).
- (iv) Where materials which are specified to be excavated utilising labour intensive construction methods are not in fact excavated by such methods, whether in compliance of an instruction from the Engineer, or in accordance with a concession granted by the Engineer or through default of the Contractor, classification of the material shall be in terms of subsubclause (i) above.

TABLE 1

	NUMBER OF BLOWS REQUIRED FOR A DCP PENETRATION OF 100mm	
	GRANULAR SOIL	COHESIVE SOIL
SOFT - Class 1	≤ 2	≤ 1
SOFT - Class 2	$> 2, \leq 6$	$> 1, \leq 5$
SOFT - Class 3	$> 7, \leq 5$	$> 5, \leq 8$
INTERMEDIATE	$> 15, \leq 50$	$> 8,$
HARD	> 50	-

“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.”

The Generic Labour-intensive specification below is the same as SANS 1921-5, Construction and management requirement for works contracts- Part 5: Earthworks activities which are to be performed by hand and should be included in the scope of works without amendment or modification as set out below.

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

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.

Measurement and payment

Separate items will be listed in the schedule of quantities for works which are required to be executed utilising labour intensive construction methods and for works to which such requirement does not apply:

Items which apply in respect of Works which in terms of part 1 are required to be executed utilising labour intensive construction methods, are identified in the schedule of quantities by way of the upper case letter "L" suffixed to the item number. Item numbers not suffixed with the letter "L" shall, unless the context implies otherwise, be deemed to apply in respect of Works not required to be executed by labour intensive methods.

Where any item in the SABS 1200 standard specifications or in part 2 refers to the measurement and payment of excavations in terms of increments in the depth of the excavation, the depth increment for excavations required in terms of part 1 to be executed by labour intensive methods shall be taken as 1,0 metre.

The measurement and payment clauses as set out in the SABS 1200 standard specification and in part 2 shall, unless specifically stated to the contrary, apply generally whether or not the Works to which they relate are required to be executed utilising labour intensive construction methods; provided always that where the Works is required to be executed by labour intensive construction methods, each particular clause shall be interpreted and constructed mutatis mutandis in accordance with the provisions of this clause 2.

**PARTICULAR SPECIFICATIONS AND VARIATIONS AND
ADDITIONS TO THE STANDARD SPECIFICATIONS**

**PROJECT DESCRIPTION: REFURBISHMENT OF MALAMULELE WATER TREATMENT
WORKS PHASE 1**

C3.4 PARTICULAR SPECIFICATIONS

In addition to the Standardized and Project Specifications the following Particular Specifications shall apply to this contract and are bound in hereafter.

SECTION PC TRIMMING OF SITE

SECTION PD MAINTENANCE

SECTION PE CONTINGENCIES

SECTION PF MASONRY WORK

SECTION POHS OHSA 1993 SAFETY SPECIFICATION

PC TRIMMING OF SITE

PC1 SCOPE

This work shall consist of the finishing of the entire site affected by the Contractor's operations before the issue of the Completion Certificate.

PC2 REQUIREMENTS

After completion of the work covered by this Contract, the entire area affected by the Contractor's operations shall be finished off and cleared up and all loose rock shall be removed, if required, and disposed of as directed by the Engineer.

Under no circumstances shall the Contractor use machines for trimming.

All loose stones, roots or other waste matter exposed on fill or excavation slopes, which are liable to become loosened shall be removed and all debris and muck from clearing operations shall be disposed of and the area affected by the Contractor's operations and all camp sites left in a neat and presentable manner.

All false work, temporary supports and structures, casting yards or platforms and equipment shall be removed from the site and from all ground occupied by the Contractor in connection with the work. All parts of the work and adjacent ground shall be left in a neat and presentable condition, all to the satisfaction of the Engineer.

PC3 MEASUREMENT AND PAYMENT

Measurement and payment for complying with the above requirements will not be made separately, and would be regarded as being provided for in full by relevant payment items under 1200 A - General.

PD MAINTENANCE

PD1 MAINTENANCE DURING REFURBISHMENT

From the time of taking over the site by the Contractor, as set out in the Special Conditions of Contract until the acceptance of the work and the issue of the Completion Certificate, the Contractor shall be responsible for the maintenance of the work and shall rebuild, repair, restore and make good at his own expense all injuries or damages to any portion thereof whether occasioned by the action of the elements or any other cause.

PD2 MAINTENANCE OF COMPLETED WORK

Periods of Maintenance

The periods of maintenance for each completed section of work shall extend for twelve months from the time of acceptance of the work and the issue of the relevant Completion Certificate for that section of the work as the case may be as set out in Clause 53 of the General Conditions of Contract.

PD2.1 Work during Period of Maintenance

The Contractor shall be responsible for the repair at his own expense, of all defects in any of the works constructed by him, or affected by him during construction, all in terms of Clause 53 of the General Conditions of Contract.

PD3 MEASUREMENT AND PAYMENT

Measurement and payment for maintenance as described above shall be deemed to be included in the prices tendered and paid for the various items for which payment is made in terms of this Contract and such prices shall be full compensation for the supply of all supervision, labour, materials, equipment, plant and work necessary for the maintenance thereof.

The retention monies as set out in the General Conditions of Contract, Clause 49 (3) shall be released only upon Final Settlement of the Contract as set out in Clause 52 of the General Conditions of Contract

PE CONTINGENCIES

PE1 CONTINGENCIES

An amount to be spent in part or in whole at the complete discretion of the Engineer. This amount shall not form part of the 15% as is defined in Clause 50 of the General Conditions of Contract.

PG GENERIC LABOUR-INTENSIVE SPECIFICATION

The Generic Labour-intensive specification below is the same as SANS 1921-5, Construction and management requirement for works contracts- Part 5: Earthworks activities which are to be performed by hand and should be included in the scope of works without amendment or modification as set out below.

PG1 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

PG2 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.

PG3 HAND EXCAVATEABLE MATERIAL

Hand excavatable 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;

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 is an instrument used to measure the insitu 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 30-40 mm; 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 10 mm; 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 thumbnail; 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 thumbnail with difficulty; slight indentation produced by blow of a geological pick point.

PG4 TRENCH EXCAVATION

All hand excavatable material in trenches having a depth of less than 1,5 metres shall be excavated by hand.

PG5 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 stampers

- a) to 90% Proctor density;
- b) such that in excess of 5 blows of a dynamic cone penetrometer (DCP) is required to penetrate 100 mm 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.

PG6 EXCAVATION

All hand excavatable material including topsoil classified as hand excavatable 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.

PG7 CLEARING AND GRUBBING

Grass and small bushes shall be cleared by hand.

PG8 SHAPING

All shaping shall be undertaken by hand.

PG9 LOADING

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

PG10 HAUL

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

PG11 OFFLOADING

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

PG12 SPREADING

All material shall be spread by hand.

PG13 COMPACTION

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

PG14 GRASSING

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

PG15 STONE PITCHING AND RUBBLE CONCRETE MASONRY

All stone required for stone pitching and rubble concrete masonry, whether grouted or dry, must be collected, loaded, off loaded and placed by hand.

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

Grout shall be mixed and placed by hand.

PG16 MANUFACTURED ELEMENTS

Elements manufactured or designed by the Contractor, such as manhole rings and cover slabs, precast concrete planks and pipes, masonry units and edge beams shall not individually, have a mass of more than 320kg. In addition the items shall be large enough so that four workers can conveniently and simultaneously acquire a proper hand hold on them.

SECTION POHS: OHS 1993 HEALTH AND SAFETY SPECIFICATION

POHS.1 SCOPE

This specification covers the health and safety requirements to be met by the Contractor to ensure a continued safe and healthy environment for all workers, employees and subcontractors under his control and for all other persons entering the site of works.

This specification shall be read with the Occupational Health and Safety Act (Act No 85 and amendment Act No 181) 1993, and the corresponding Construction Regulations 2003, and all other safety codes and specifications referred to in the said Construction Regulations.

In terms of the OHS 1993 Agreement in Section C1.2.4 of the Contract document, the status of the Contractor as mandatory to the Employer (client) is that of an employer in his own right, responsible to comply with all provisions of OHS 1993 and the Construction Regulations 2003.

This safety specification and the Contractor's own Safety Plan as well as the Construction Regulations 2003, shall be displayed on site or made available for inspection by all workers, employees, inspectors and any other persons entering the site of works.

The following are possible risks associated with this project:

- Lifting and lowering of materials and equipment from the ground onto the pipe pedestals (sewer)
- Deep excavations in soils requiring shoring or reducing of slopes
- Blasting of hard rock or demolition of concrete
- Movement of construction vehicles on site, taking into consideration steep slopes, other traffic and existing services
- Exposure to possible injuries due to mishandling or failure of power and hand tools
- Falling debris, tools and materials from bridge
- Non-conformance to specifications with regards to fasteners and materials
- Risks related to general safety and security on site

Additional risks may arise from specific methods of construction selected by the Contractor which are not necessary covered in the above.

POHS.2 DEFINITIONS

For the purpose of this contract the following shall apply:

- (a) **Employer** where used in the contract documents and in this specification, means the Employer as defined in the General Conditions of Contract and it shall have the exact same meaning as "**client**" as defined in the Construction Regulations 2003. "**Employer**" and "**client**" is therefore interchangeable and shall be read in the context of the relevant document.

- (b) “**Contractor**” wherever used in the contract documents and in this specification, shall have the same meaning as “**Contractor**” as defined in the General Conditions of Contract.

In this specification the terms “**principal contractor**” and “**contractor**” are replaced with “**Contractor**” and “**subcontractor**” respectively.

For the purpose of this contract the **Contractor** will, in terms of OHSA 1993, be the mandatory, without derogating from his status as an employer in his own right.

- (c) “**Engineer**” where used in this specification, means the Engineer as defined in the General Conditions of Contract. In terms of the Construction Regulations the Engineer may act as agent on behalf of the Employer (the client as defined in the Construction Regulations).

POHS.3 TENDERS

The Contractor shall submit the following with his tender:

- (a) a draft Health and Safety Plan as stipulated in Regulation 5 of the Construction Regulations. The Safety Plan must be based on the Construction Regulations 2003 and will be subject to approval by the Employer;
- (b) a declaration to the effect that he has the competence and necessary resources to carry out the work safely in compliance with the Construction Regulations 2003;
- (c) a declaration to the effect that he made provision in his tender for the cost of the health and safety measures envisaged in the Construction Regulations.
- (d) Failure to submit the foregoing with his tender, will lead to the conclusion that the Contractor will not be able to carry out the work under the contract safely in accordance with the Construction Regulations.

POHS.4 NOTIFICATION OF COMMENCEMENT OF CONSTRUCTION WORK

After award of the contract, but before commencement of construction work, the Contractor shall, in terms of Regulation 3, notify the Provincial Director of the Department of Labour in writing if the following work is involved:

- (a) the demolition of structures and dismantling of fixed plant of height of 3,0m or more;
- (b) the use of explosives;
- (c) construction work that will exceed 30 days or 300 person-days;
- (e) excavation work deeper than 1,0m; or
- (f) working at a height greater than 3,0m above ground or landings.

The notification must be done in the form of the pro forma included under Section 9 (Forms to be completed by Successful Tenderer) of the tender document.

A copy of the notification form must be kept on site, available for inspection by inspectors, Employer, Engineer, employees and persons on site.

POHS.5 RISK ASSESSMENT and SAFETY PLAN

5.1 Risk assessment

Before commencement of any construction work during the construction period, the Contractor shall have a risk assessment performed and recorded in writing by a competent person. (Refer Regulation 7 of the Construction Regulations 2003).

The risk assessment shall identify and evaluate the risks and hazards that may be expected during the execution of the work under the contract, and it shall include a documented plan of safe work procedures to mitigate, reduce or control the risks and hazards identified.

The risk assessment shall be available on site for inspection by inspectors, Employer, Engineer, subcontractors, employees, trade unions and health and safety committee members, and must be monitored and reviewed periodically by the Contractor.

6.1 Safety Plan

The Safety Plan will be compiled in order to amongst others address the finding made during the Risk Assessment phase. The Safety plan will be compiled and submitted to the Engineer and Client for Approval. Construction work can only commence upon written approval of the Safety Plan by the Client.

POHS.6 APPOINTMENT OF EMPLOYEES AND SUBCONTRACTORS

6.1 Health and Safety plan

The Contractor shall appoint his employees and any subcontractors to be employed on the contract, in writing, and he shall provide them with a copy of his documented Health and Safety Plan, or relevant sections thereof. The Contractor shall ensure that all subcontractors and employees are committed to the implementation of his Safety Plan.

6.2 Health and safety induction training

The Contractor shall ensure that all employees under his control, including subcontractors and their employees, undergo a health and safety induction training course by a competent person before commencement of construction work. No visitor or other person shall be allowed or permitted to enter the site of the works unless such person has undergone health and safety training pertaining to hazards prevalent on site.

The Contractor shall ensure that every employee on site shall at all times be in possession of proof of the health and safety induction training issued by a competent person prior to commencement of construction work.

POHS.7 APPOINTMENT OF SAFETY PERSONNEL

7.1 Construction Supervisor

The Contractor shall appoint a full-time **Construction Supervisor** with the duty of supervising the performance of the construction work.

He may also have to appoint one or more competent employees to assist the construction supervisor where justified by the scope and complexity of the works.

7.2 Construction safety officer

Taking into consideration the size of the project and the hazards or dangers that can be expected, the Contractor shall appoint in writing a full-time or part-time **Construction Safety Officer** if so decided by the Inspector of the Department of Labour. The Safety Officer shall have the necessary competence and resources to perform his duties diligently.

Provision shall be made by the Contractor in his rates, to cover the cost of this dedicated construction safety officer appointed after award of the contract.

7.3 Health and safety representatives

In terms of **Section 17 and 18 of the Act (OHSA 1993)** the Contractor, being the employer in terms of the Act for the execution of the contract, shall appoint a **health and safety representative** whenever he has more than 20 employees in his employment on the site of the works. The health and safety representative must be selected from employees who are employed in a full-time capacity at a specific workplace.

The number of health and safety representatives for a workplace shall be at least one for every 100 employees.

The function of health and safety representative(s) will be to review the effectiveness of health and safety measures, to identify potential hazards and major incidents, to examine causes of incidents (in collaboration with his employer, the Contractor), to investigate complaints by employees relating to health and safety at work, to make representations to the employer (Contractor) or inspector on general matters affecting the health and safety of employees, to inspect the workplace, plant, machinery etc. on a regular base, to participate in consultations with inspectors and to attend meetings of the health and safety committee.

7.4 Health and safety committee

In terms of **Sections 17 and 18 of the Act (OHSA 1993)** the Contractor (as employer), shall establish one or more **health and safety committee(s)** where there are two (2) or more health and safety representatives at a workplace. The persons selected by the Contractor to serve on the committee shall be designated in writing.

The function of the health and safety committee shall be to hold meetings at regular intervals, but at least once every three months, to review the health and safety measures on the contract, to discuss incidents related to health and safety with the Contractor and the inspector, and to make recommendations regarding health and safety to the Contractor and to keep record of recommendations and reports made by the committee.

7.5 Competent persons

In accordance with the Construction Regulations the Contractor has to appoint in writing **competent persons** responsible for supervising construction work on each of the following work situations that may be expected on the site of the works.

- (a) Risk assessment and induction training as described in Regulation 7 of the Construction Regulations;
- (b) Fall protection as described in Regulation 8;
- (c) Formwork and support work as described in Regulation 10;
- (f) Excavation work as described in Regulation 11;
- (g) Demolition work as described in Regulation 12;
- (h) Scaffolding work as described in Regulation 14;
- (i) Suspended platform operations as described in Regulation 15;
- (j) Material hoists as described in Regulation 17;
- (k) Batch plant operations as described in Regulation 18;
- (l) Explosive powered tools as described in Regulation 19;
- (m) Cranes as described in Regulation 20;
- (n) Construction vehicle and mobile plant inspections on a daily basis by a competent person as described in Regulation 21(1);
- (o) Control of all temporary electrical installation on the construction site as described in Regulation 22;
- (p) Stacking and storage on construction sites as described in Regulation 26; and
- (q) Inspections of fire equipment as described in Regulation 27.

A competent person may be appointed for more than one part of the construction work with the understanding that the person must be suitably qualified and able to supervise at the same time the construction work on all the work situations for which he has been appointed.

The appointment of competent persons to supervise parts of the construction work does not relieve the Contractor from any of his responsibilities to comply with **all** requirements of the Construction Regulations.

POHS.8 RECORDS AND REGISTERS

In accordance with the Construction Regulations the Contractor is bound to keep records and registers related to health and safety on site for periodic inspection by inspectors, the Engineer, the Employer, trade union officials and subcontractors and employees. The following records and registers must be kept on site and shall be available for inspection at all times.

- (a) A copy of the OHSA 1993 Construction Regulations 2003;
- (b) A copy of this Health and Safety Specification;
- (c) A copy of the Contractor's Health and Safety Plan (Regulation 4);
- (d) A copy of the Notification of Construction Work (Regulation 3);
- (e) A health and safety file in terms of Regulation 5(7) with inputs by the Construction Safety Officer (Regulation 6(7));
- (f) A copy of the risk assessment described in Regulation 7;
- (g) A full protection plan and the corresponding records of evaluation and training of employees working from elevated positions as described in Regulation 8;
- (h) Drawings pertaining to the design of structures (Regulation 9(3)) and formwork and support work structures (Regulation 10(d)) must be kept on site;
- (i) Pronouncement of the safety of excavations must be recorded in a register to be kept on site (Regulation 11(3)(h));
- (j) A copy of the certificate of the system design for suspended platforms (Regulation 15(3));
- (k) A notice must be affixed around the base towers of material hoists to indicate the maximum mass load, which may be carried at any one time by material hoists (Regulation 7(5));
- (l) Maintenance records of material hoists and inspection results must be kept in a record book to be kept on site (Regulation 17(8));
- (m) A record of any repairs to or maintenance of a batch plant must be kept on site (Regulations 18(9));
- (n) A warning notice must be displayed in a conspicuous manner when and wherever an explosive powered tool is used (Regulation 19(2));
- (o) A register for recording of findings by the competent person appointed to inspect construction vehicles and mobile plant (Regulation 21(1)(j)).

POHS.9 CONTRACTORS RESPONSIBILITIES

For this contract the Contractor will be the mandatory of the Employer (Client), as defined in the Act (OHSA 1993), which means that the Contractor has the status of employer in his own right in respect of the contract. The Contractor is therefore responsible for all the duties and obligations of an employer as set out in the Act (OHSA 1993) and the Construction Regulations 2003.

Before commencement of work under the contract, the Contractor shall enter into an agreement with the Employer (Client) to confirm his status as mandatory (employer) for the contract under consideration.

The Contractor's duties and responsibilities are clearly set out in the Construction Regulations 2003, and are not repeated in detail but some important aspects are highlighted hereafter, without relieving the Contractor of any of his duties and responsibilities in terms of the Construction Regulations.

(a) Contractor's position in relation to the Employer (Client) (Regulation 4)

In accordance with Section 4 of the Regulations, the Contractor shall liaise closely with the Employer or the Engineer on behalf of the Employer, to ensure that all requirements of the Act and the Regulations are met and complied with.

(b) The Principal Contractor and Contractor (Regulation 5)

The Contractor is in terms of the definition in Regulation 2(b) the equivalent of Principle Contractor as defined in the Construction Regulations, and he shall comply with all the provisions of Regulation 5.

Any subcontractors employed by the Contractor must be appointed in writing, setting out the terms of the appointment in respect of health and safety. An independent subcontractor shall however provide and demonstrate to the Contractor a suitable, acceptable and sufficiently documented health and safety plan before commencement of the subcontract. In the absence of such a health and safety plan the subcontractor shall undertake in writing that he will comply with the Contractor's safety plan, the health and safety specifications of the Employer and the Construction Regulations 2003.

(c) Supervision of construction work (Regulation 6)

The Contractor shall appoint the safety and other personnel and employees as required in terms of Regulation 6 and as set out in paragraph 7 above. Appointment of those personnel and employees does not relieve the Contractor from any of the obligations under Regulation 6.

(d) Risk assessment (Regulation 7)

The Contractor shall have the risk assessment made as set out in paragraph 7 above before commencement of the work and it must be available on site for inspection at all times. The Contractor shall consult with the health and safety committee or health and safety representative(s) etc. on a regular basis to ensure that all employees, including subcontractors under his control, are informed and trained by a competent person regarding health hazards and related work procedures.

No subcontractor, employee or visitor shall be allowed to enter the site of works without prior health and safety induction training, all as specified in Regulation 7.

(e) Fall protection (Regulation 8)

Fall protection, if applicable to this contract shall comply in all respects with Regulation 8 of the Construction Regulations.

(f) Structures (Regulation 9)

The Contractor will be liable for all claims arising from collapse or failure of structures if he failed to comply with all the specifications, project specifications and drawings related to the structures, unless it can be proved that such collapse or failure can be attributed to faulty design or insufficient design standards on which the specifications and the drawings are based.

In addition the Contractor shall comply with all aspects of Regulation 9 of the Construction Regulations.

(g) Formwork and support work (Regulation 10)

The Contractor will be responsible for the adequate design of all formwork and support structures by a competent person.

All drawings pertaining to formwork shall be kept on site and all equipment and materials used in formwork, shall be carefully examined and checked for suitability by a competent person.

The provisions of Regulation 10 of the Construction Regulations shall be followed in every detail.

(h) Excavation work (Regulation 11)

It is essential that the Contractor shall follow the instructions and precautions in the Standard Specifications and Project Specifications as well as the provisions of the Construction Regulations to the letter as unsafe excavations can be a major hazard on any construction site. The Contractor shall therefore ensure that all excavation work is carried out under the supervision of a competent person, that inspections are carried out by a Professional Engineer or Technologist, and that all work is done in such a manner that no hazards are created by unsafe excavations and working conditions.

Supervision by a competent person will not relieve the Contractor from any of his duties and responsibilities under Regulation 11 of the Construction Regulations.

(i) Demolition work (Regulation 12)

Whenever demolition work is included in a contract, the Contractor shall comply with all the requirements of Regulation 12 of the Construction Regulations. The fact that a competent person has to be appointed by the Contractor does not relieve the Contractor from any of his responsibilities in respect of safety of demolition work.

(j) Tunneling (Regulation 13)

The Contractor shall comply with Regulation 13 wherever tunneling of any kind is involved.

(k) Scaffolding (Regulation 14)

The Contractor shall ensure that all the provisions of Regulation 14 of the Construction Regulations are complied with. [Note: Reference in the Regulations to "Section 44 of the Act" should read "Section 43 of the Act"].

(l) Suspended platforms (Regulation 15)

Wherever suspended platforms will be necessary on any contract, the Contractor shall ensure that copies of the system design issued by a Professional Engineer are submitted to the Engineer for inspection and approval. The Contractor shall appoint competent persons as supervisors and competent scaffold erectors, operators and inspectors and ensure that all work related to suspended platforms are done in accordance with Regulation 15 of the Construction Regulations.

(m) Boatswain's chains (Regulation 16)

Where boatswain's chains are required on the construction site, the Contractor shall comply with Regulation 16.

(n) Material Hoists (Regulation 17)

Wherever applicable, the Contractor shall comply with the provisions of Regulation 17 to the letter.

(o) Batch plants (Regulation 18)

Wherever applicable, the Contractor shall ensure that all lifting machines, lifting tackle, conveyors, etc. used in the operation of a batch plant shall comply with, and that all operators, supervisors and employees are strictly held to the provisions of Regulation 18. The Contractor shall ensure that the General Safety Regulations (Government Notice R1031 of 30 May 1986), the Driven Machinery Regulations (Government Notice R295 of 26/2/1988) and the Electrical Installation Regulations (Government Notice R2271 of 11/10/1995) are adhered to by all involved.

In terms of the Regulations, records of repairs and maintenance shall be kept on site.

(p) Explosive powered tools (Regulation 19)

The Contractor shall ensure that, wherever explosive-powered tools are required to be used, all safety provisions of Regulation 19 are complied with.

It is especially important that warning notices are displayed and that the issue and return of cartridges and spent cartridges be recorded in a register to be kept on site.

(q) Cranes (Regulation 20)

Wherever the use of tower cranes becomes necessary, the provisions of Regulation 20 shall be complied with.

(r) Construction vehicles And mobile plant (Regulation 21)

The Contractor shall ensure that all construction vehicles and plant are in good working condition and safe for use, and that they are used in accordance with their design and intended use. The vehicles and plant shall only be operated by workers

or operators who have received appropriate training, all in accordance with all the requirements of Regulation 21.

All vehicles and plant must be inspected on a daily basis, prior to use, by a competent person and the findings must be recorded in a register to be kept on site.

(s) Electrical installation and machinery on construction sites (Regulation 22)

The Contractor shall comply with the Electrical Installation Regulations (Government Notice R2920 of 23 October 1992) and the Electrical Machinery Regulations (Government Notice R1953 of 12 August 1993). Before commencement of construction, the Contractor shall take adequate steps to ascertain the presence of, and guard against dangers and hazards due to electrical cables and apparatus under, over or on the site.

All temporary electrical installations on the site shall be under the control of a competent person, without relieving the Contractor of his responsibility for the health and safety of all workers and persons on site in terms of Regulation 22.

(t) Use of temporary storage of flammable liquids on construction sites (Regulation 23)

The Contractor shall comply with the provisions of the General Safety Regulations (Government Notice R1031 of 30 May 1986) and all the provisions of Regulation 23 of the Construction Regulations to ensure a safe and hazard-free environment to all workers and other persons on site.

(u) Water environments (Regulation 24)

Where construction work is done over or in close proximity to water, the provisions of Regulation 24 shall apply.

(v) Housekeeping on Construction sites (Regulation 25)

Housekeeping on all construction sites shall be in accordance with the provisions of the environment Regulations for workplaces (Government Notice R2281 of 16 October 1987) and all the provisions of Regulation 25 of the Construction Regulations.

(w) Stacking and storage on construction sites (Regulation 26)

The provisions for the stacking of articles contained in the General Safety Regulations (Government Notice R1031 of 30 May 1986) as well as all the provisions Regulation 26 of the Construction Regulations shall apply.

(x) Fire precautions on construction sites (Regulation 27)

The provisions of the Environmental Regulations for Workplaces (Government Notice R2281 of 16 October 1987) shall apply.

In addition the necessary precautions shall be taken to prevent the incidence of fires, to provide adequate and sufficient fire protection equipment, sirens, escape routes etc. all in accordance with Regulation 27 of the Construction Regulations.

(y) Construction welfare facilities (Regulation 28)

The Contractor shall comply with the construction site provisions as in the Facilities Regulations (Government Notice R1593 of 12 August 1988) and the provisions of Regulation 28 of the Construction Regulations.

(z) Non-compliance with the Construction Regulations 2003

The foregoing is a summary of parts of the Construction Regulations applicable to all construction projects.

The Contractor, as employer for the execution of the contract, shall ensure that all provisions of the Construction Regulations applicable to the contract under consideration are complied with to the letter.

Should the Contractor fail to comply with the provisions of the Regulations 3 to 28 as listed in Regulation 30, he will be guilty of an offence and will be liable, upon conviction, to the fines or imprisonment as set out in Regulation 30.

The Contractor is advised in his own interest to make a careful study of the Act and the Construction Regulations as ignorance of the Act and the Regulations will not be accepted in any proceedings related to non-conformance to the Act and the Regulations.

POHS.10 MEASUREMENT AND PAYMENT

10.1 Principles

It is a condition of this contract that Contractors, who submit tenders for this contract, shall make provision in their tenders for the cost of all health and safety measures during the construction process. All associated activities and expenditure are deemed to be included in the Contractor's tendered rates and prices.

(a) **Safety personnel**

The Construction Supervisor, the Construction Safety Officer, Health and Safety Representatives, Health and Safety Committee and Competent Persons referred to in clauses 7.1 to 7.5 shall be members of the Contractor's personnel, and no additional payment will be made for the appointment of such safety personnel.

(b) **Records and Registers**

The keeping of health and safety-related records and registers as described in 8 is regarded as a normal duty of the Contractor for which no additional payment will be considered, and which is deemed to be included in the Contractor's tendered rates and prices.

**PROJECT DESCRIPTION: REFURBISHMENT OF MALAMULELE WATER TREATMENT
WORKS PHASE 1**

C3.5: HEALTH AND SAFETY SPECIFICATION

PART C4: SITE INFORMATION

C4.1: LOCALITY PLAN

Malamulele Water Treatment Works (WTW) falls within Collins Chabane Local Municipality, under Vhembe District Municipality in Limpopo Province. The said WTW, as depicted in locality map in Figure 1 below is located at coordinates 22.953444°S, 30.650202°E, and can be accessed via the Thohoyandou to Punda Maria Road (R524) and a network of local roads.

C4.2: BID DRAWINGS

The bid does not have new drawings.

As built drawings will be updated during construction.

VHEMBE DISTRICT MUNICIPALITY

**PROJECT DESCRIPTION: REFURBISHMENT OF MALAMULELE WATER TREATMENT
WORKS PHASE 1**

C4.1: LOCALITY PLAN

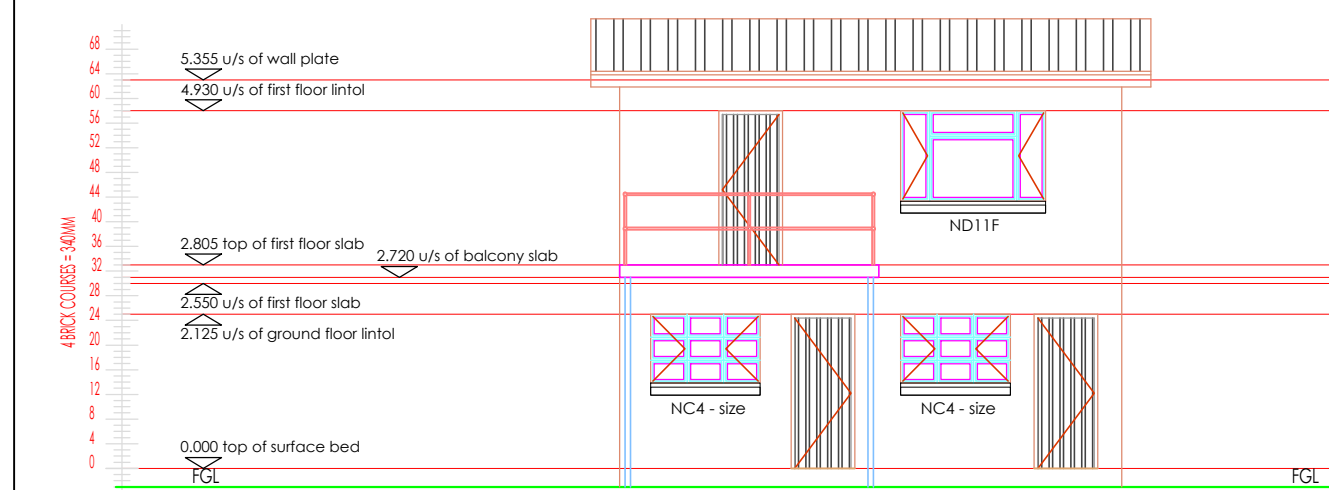


Figure 2: Malamulele WTW Locality Plan

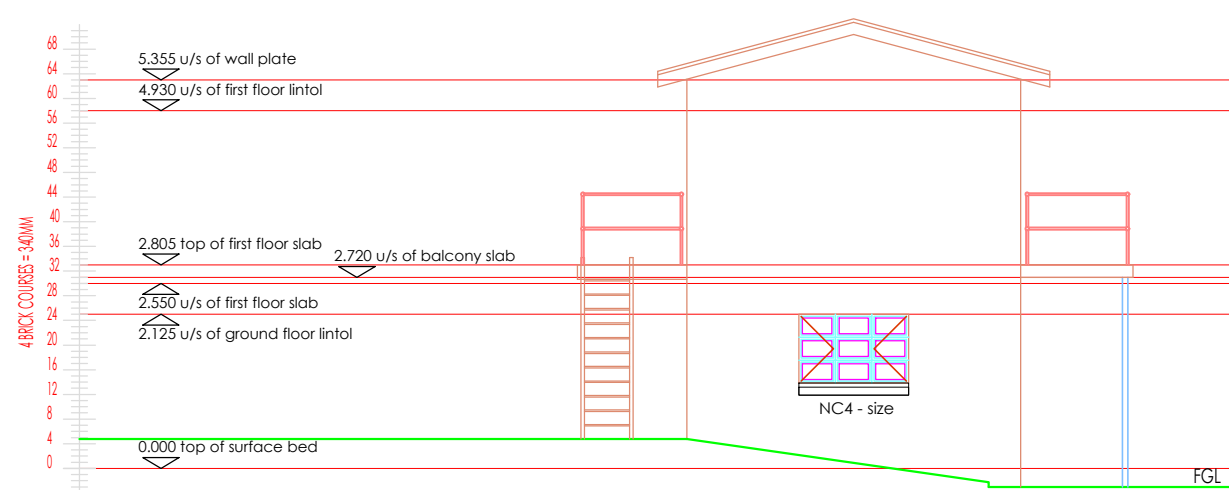
VHEMBE DISTRICT MUNICIPALITY

**PROJECT DESCRIPTION: REFURBISHMENT OF MALAMULELE WATER TREATMENT
WORKS PHASE 1**

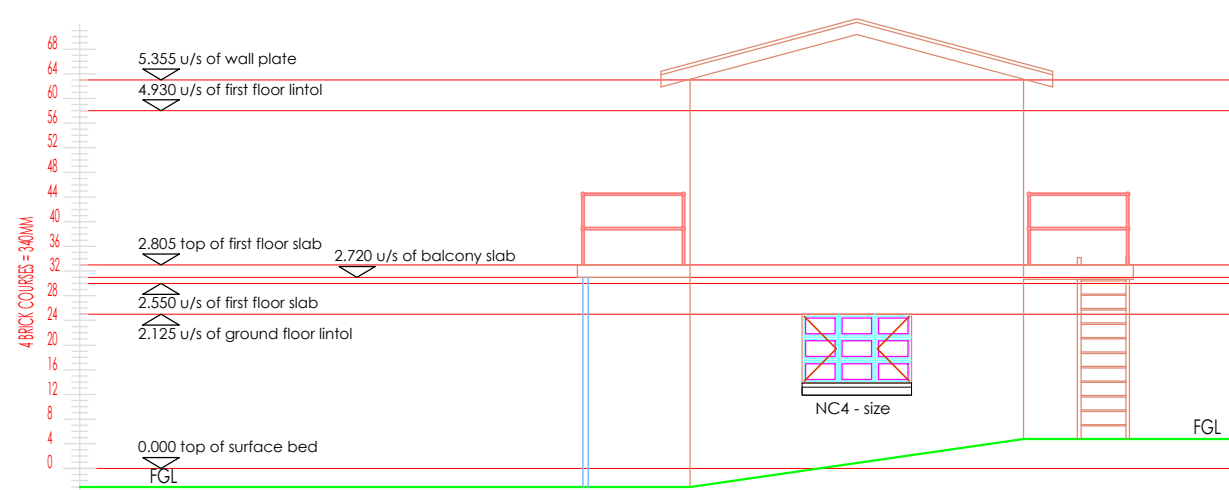
C4.2 BID DRAWING



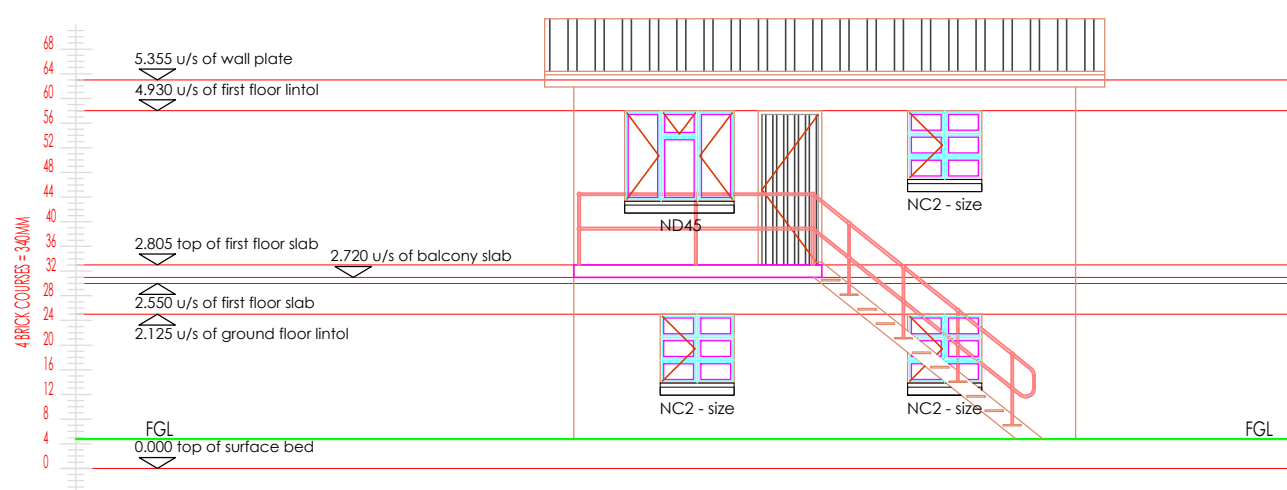
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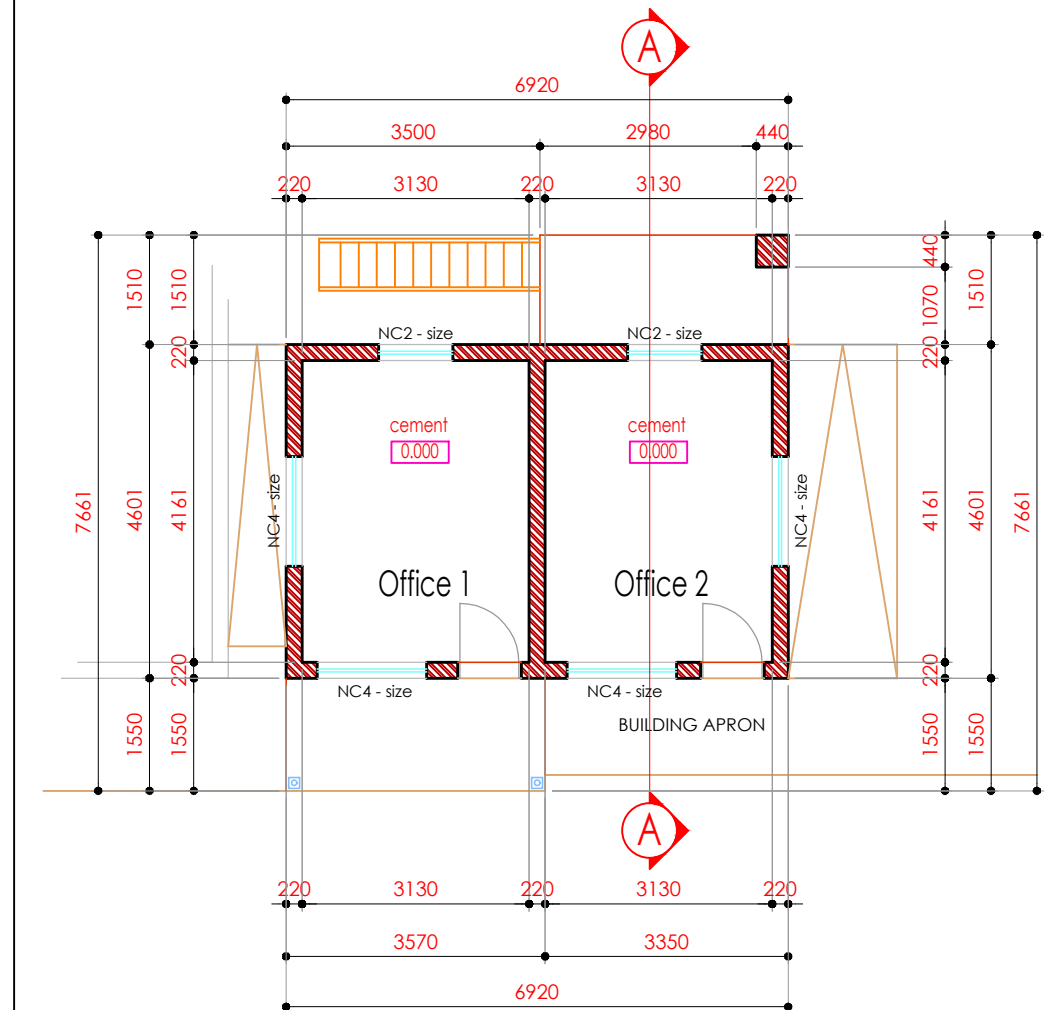
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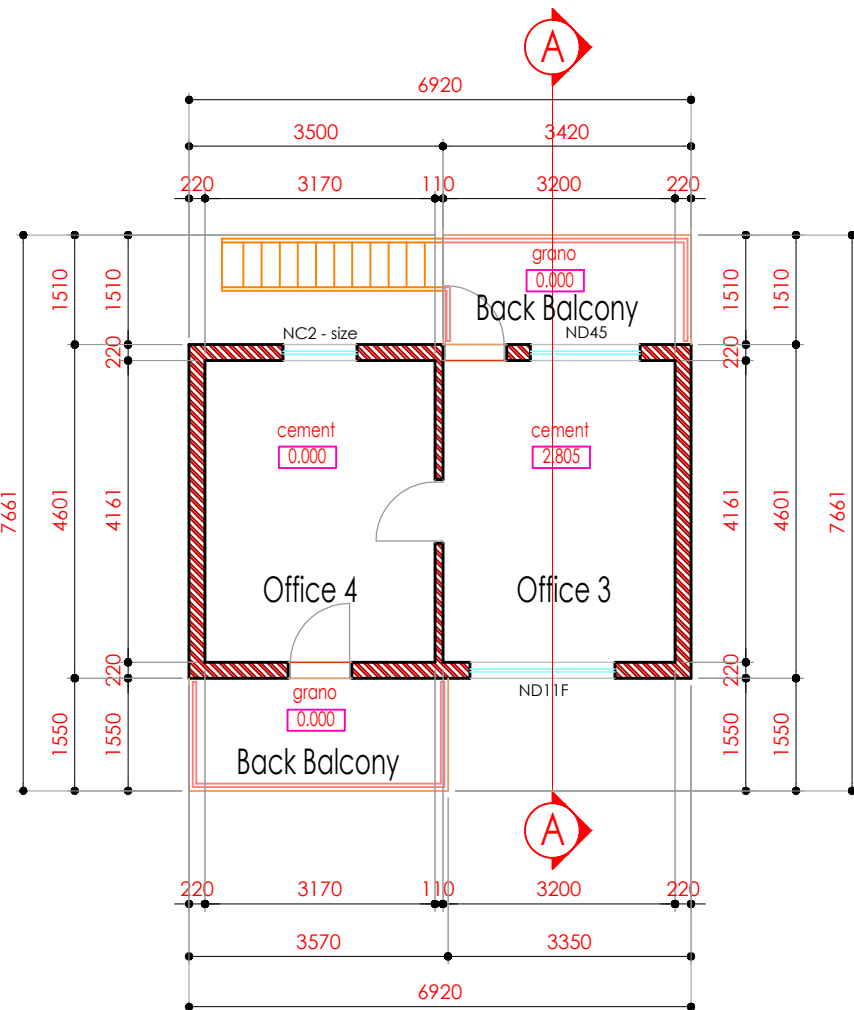
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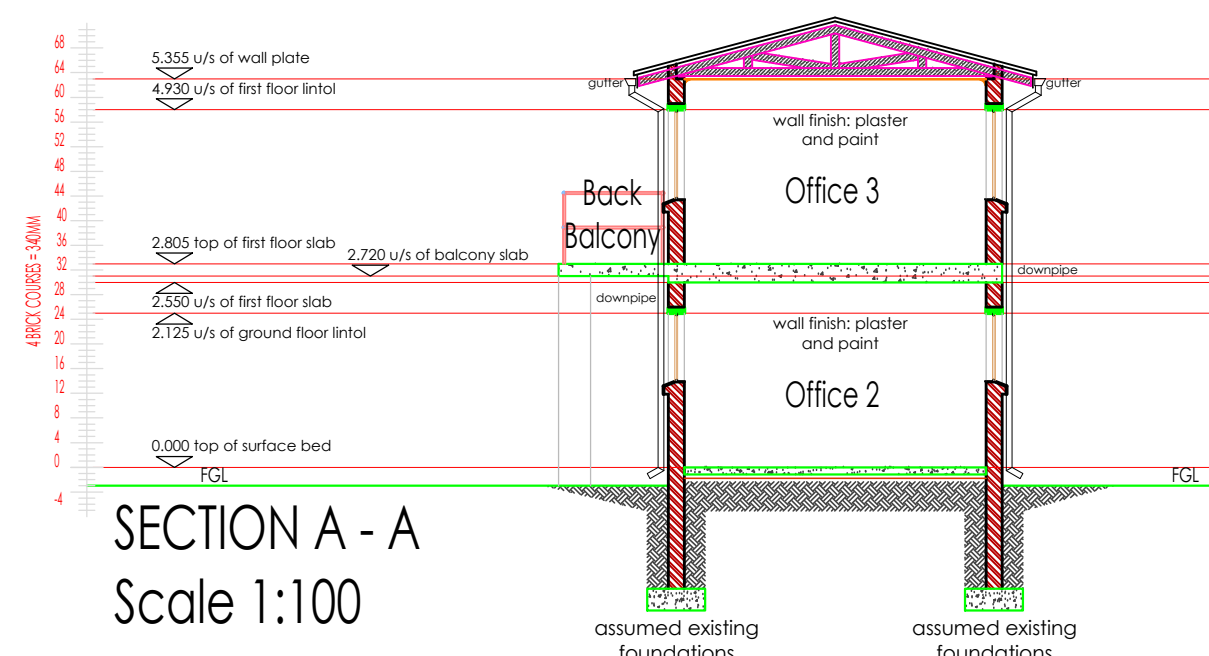
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GROUND FLOOR PLAN
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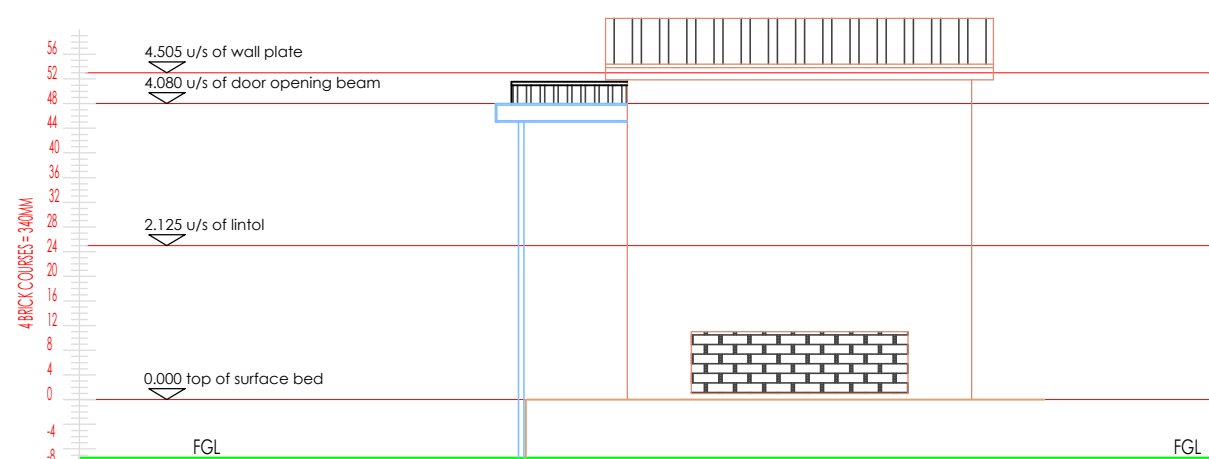
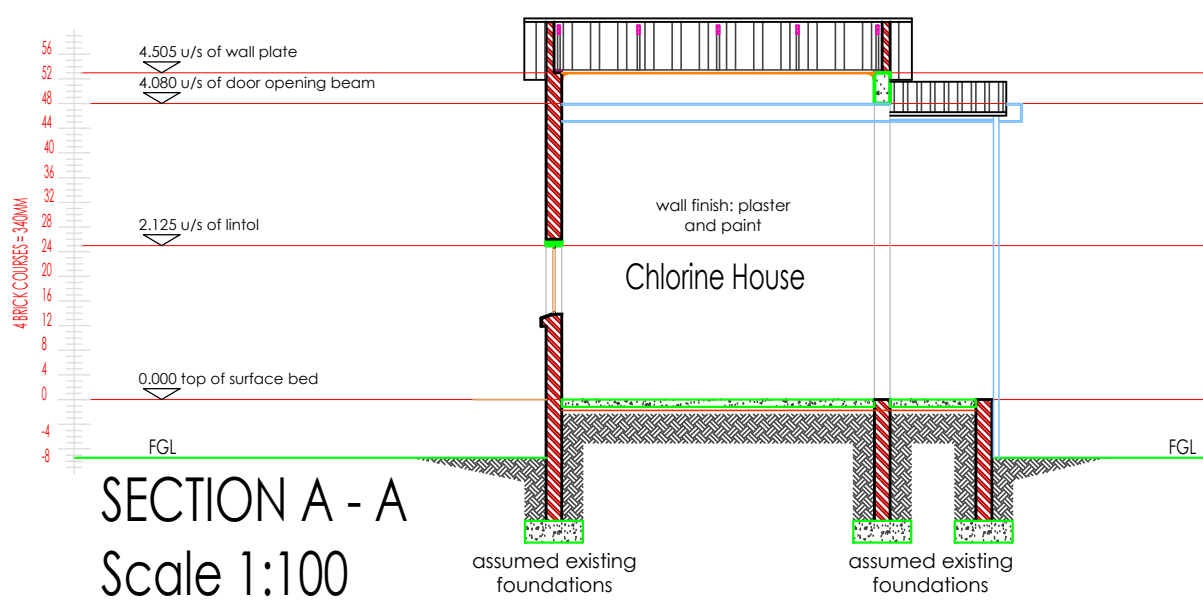
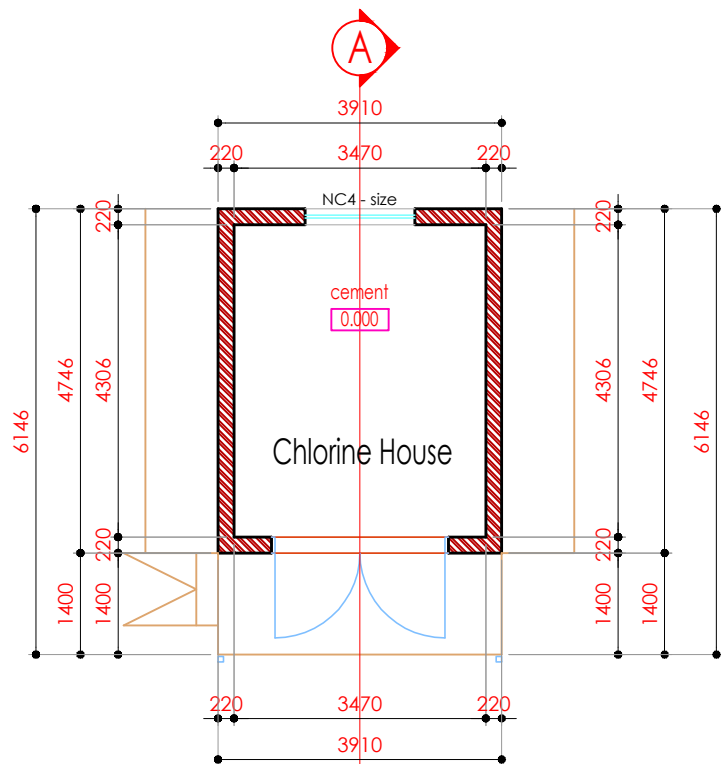
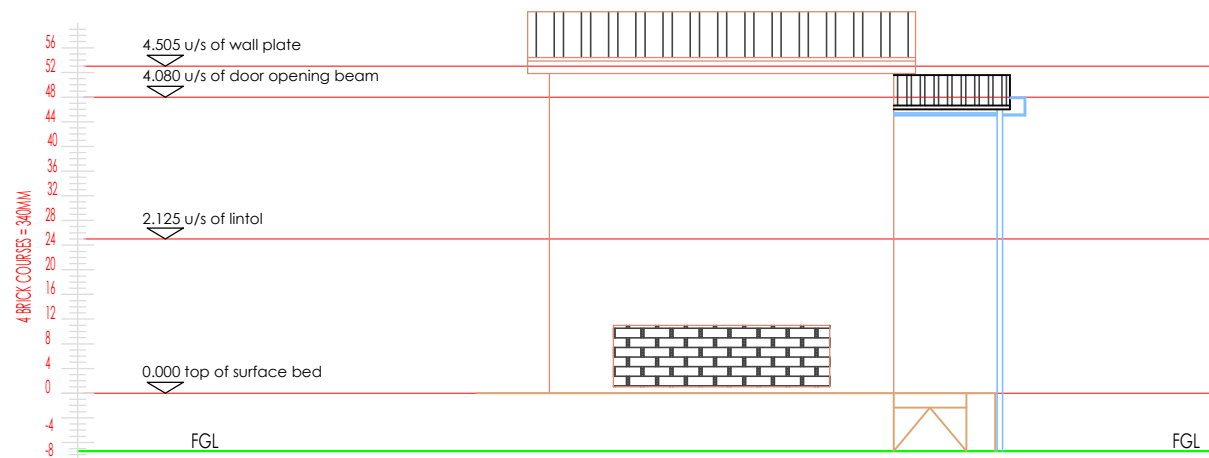
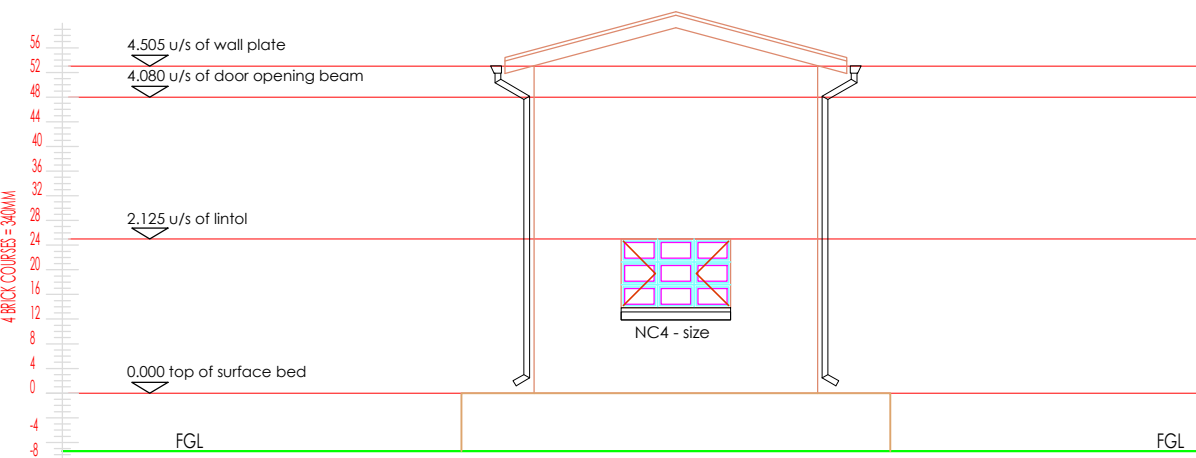
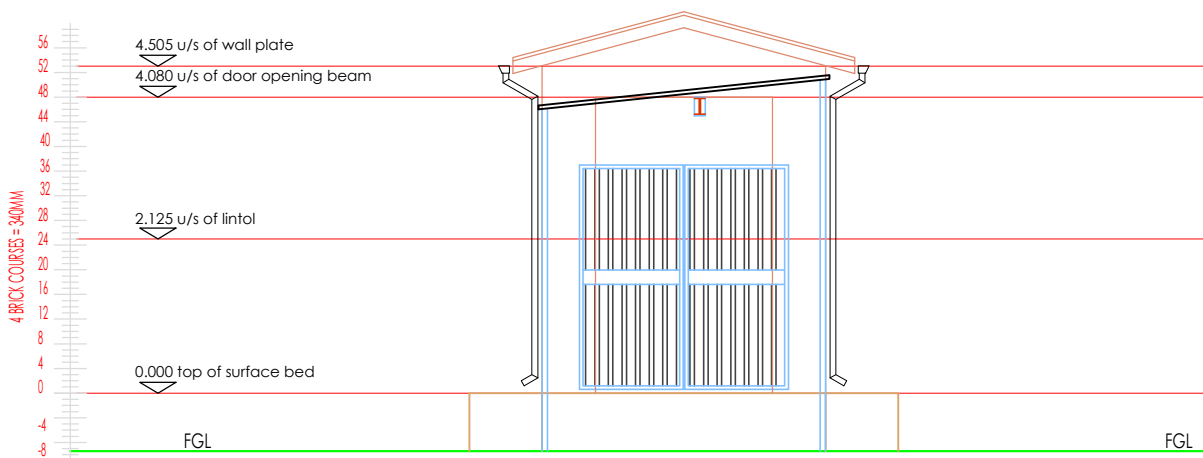
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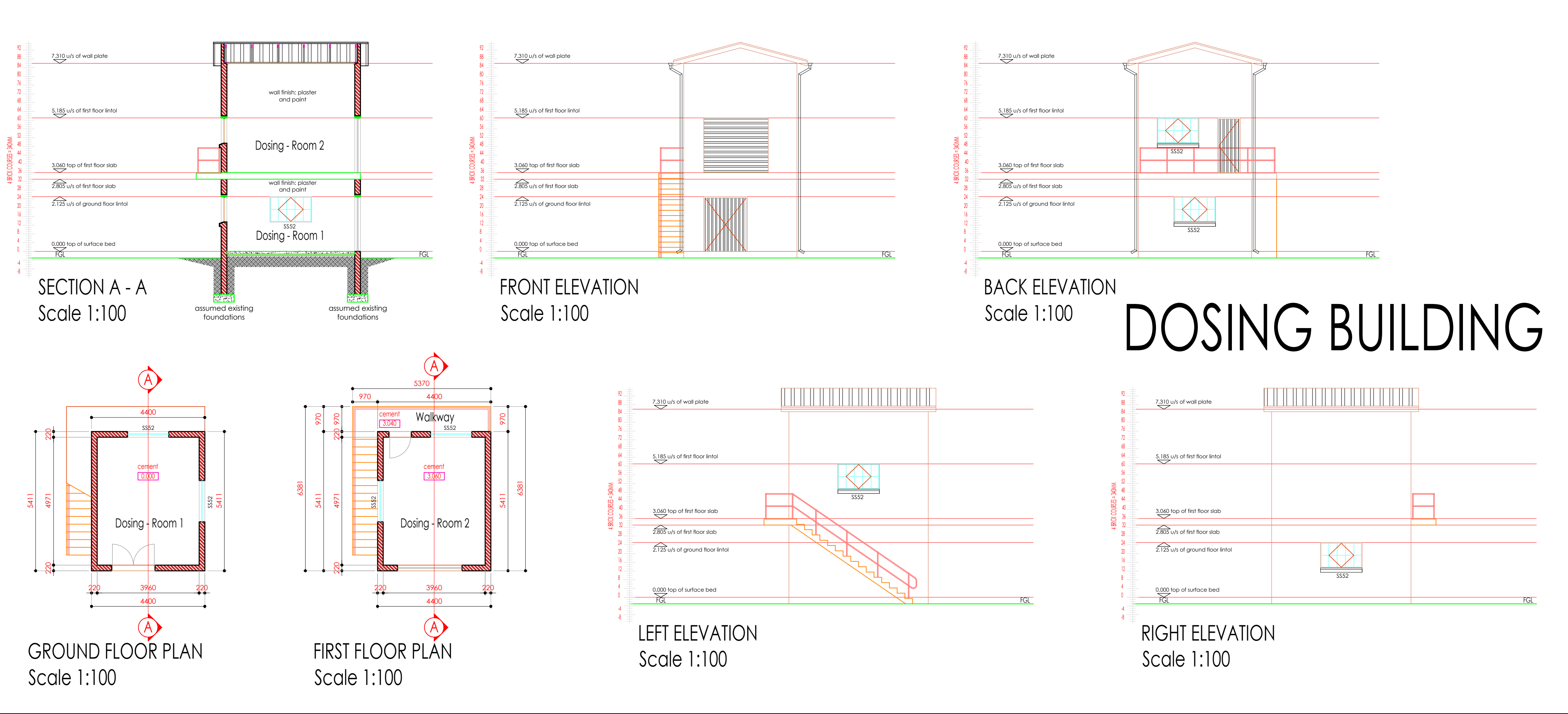
OFFICE BUILDING

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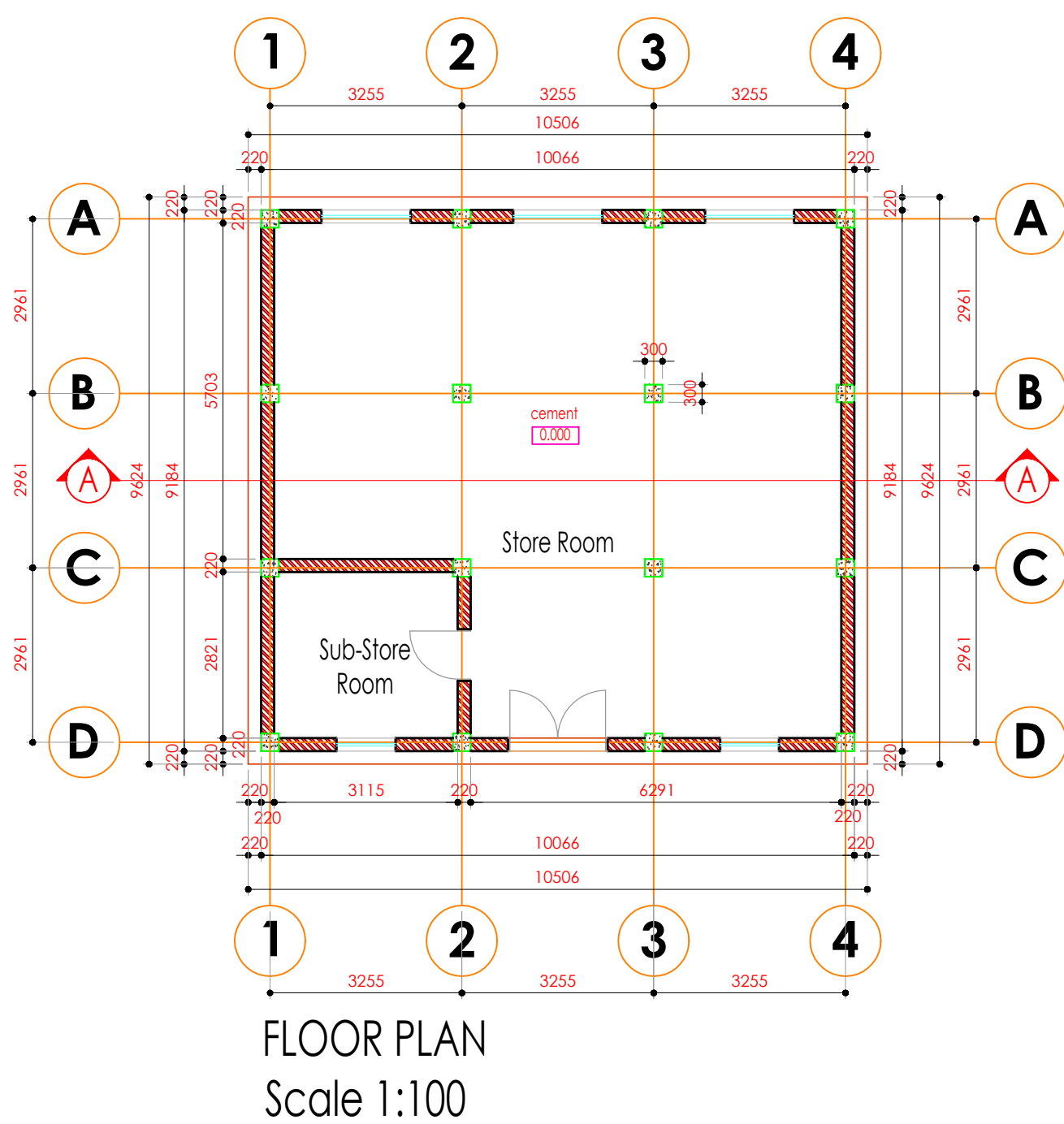
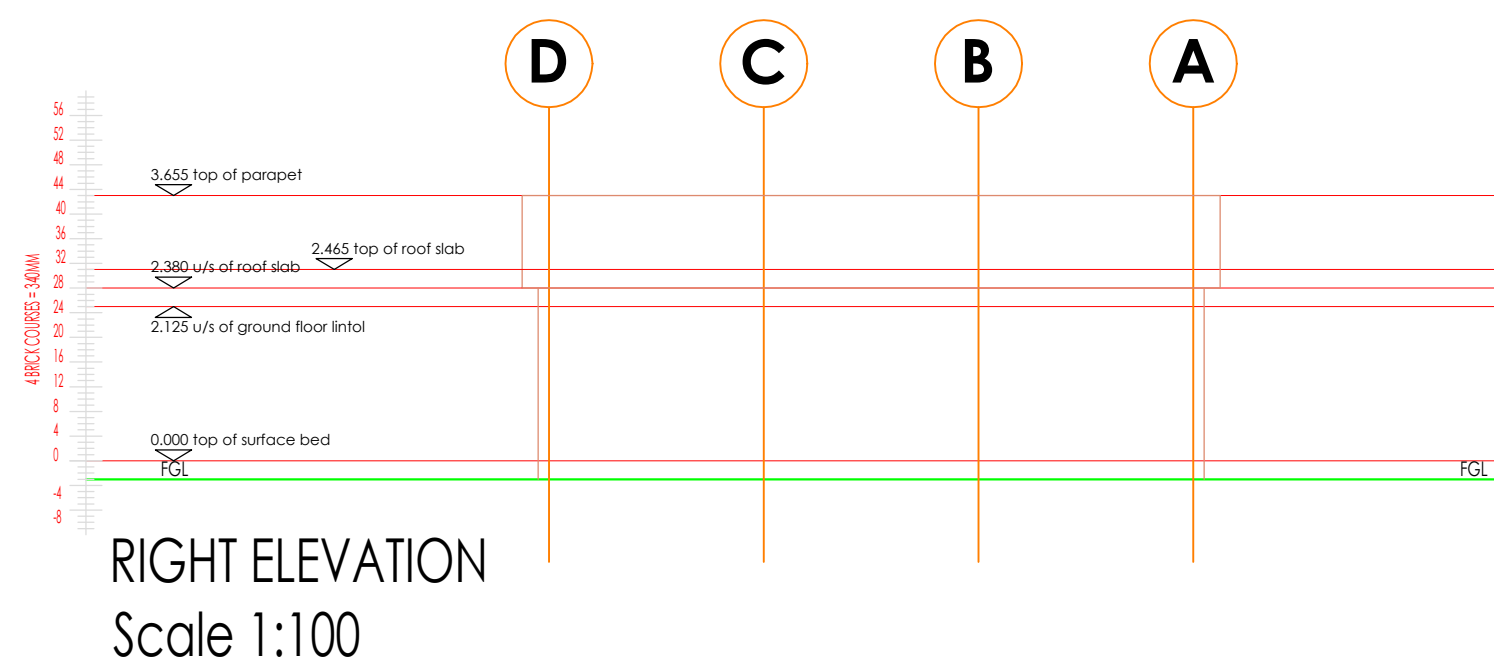
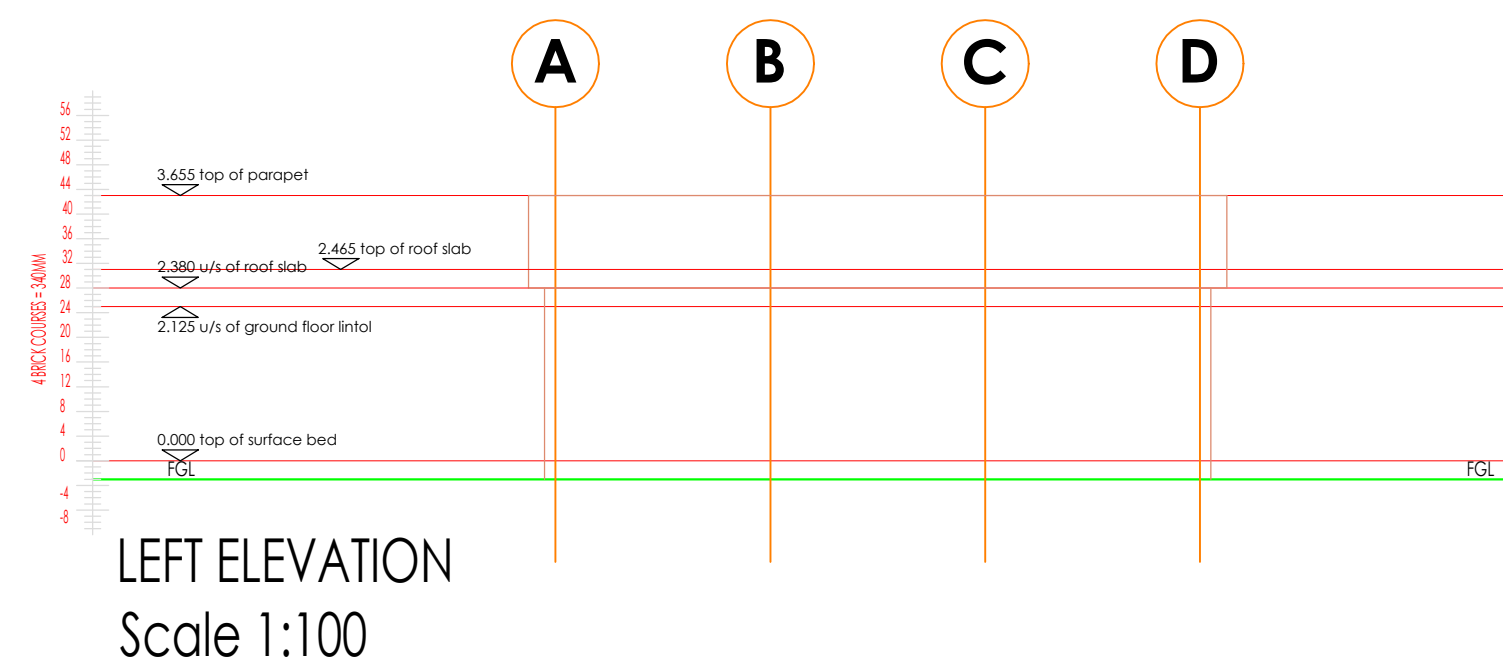
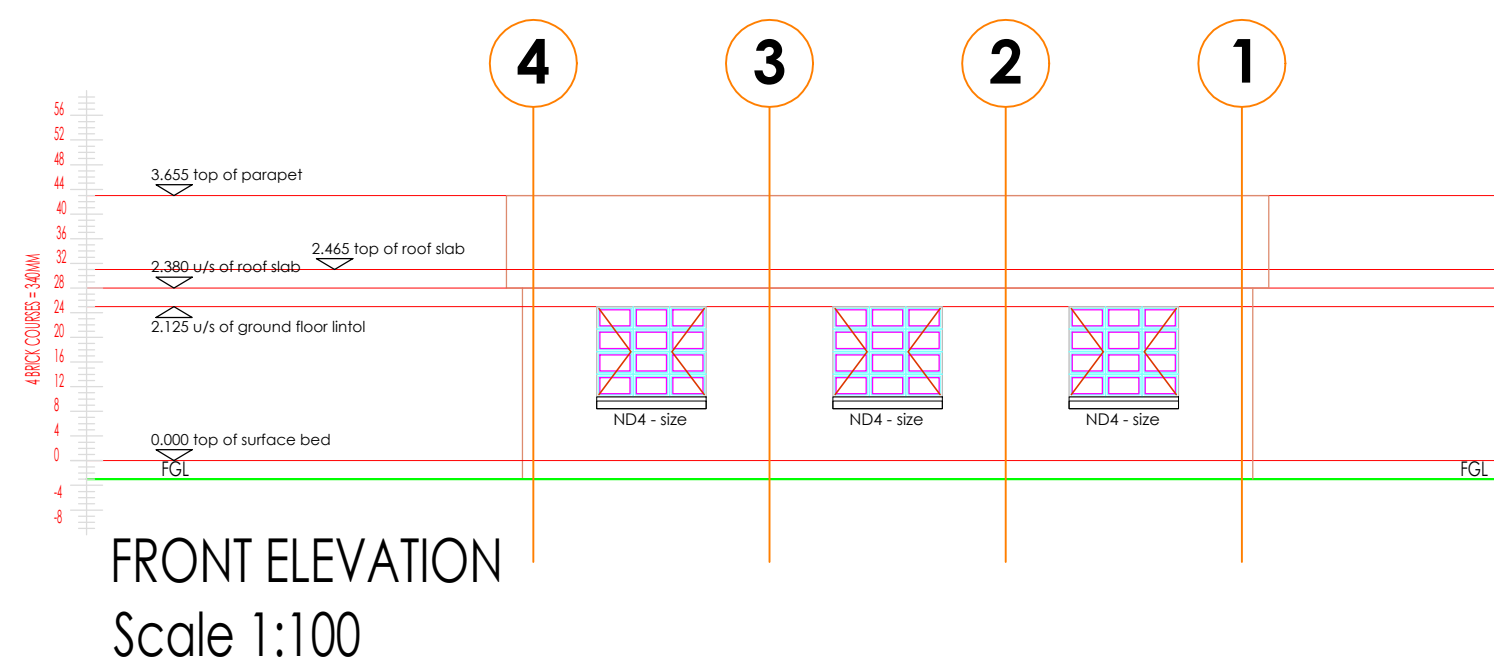
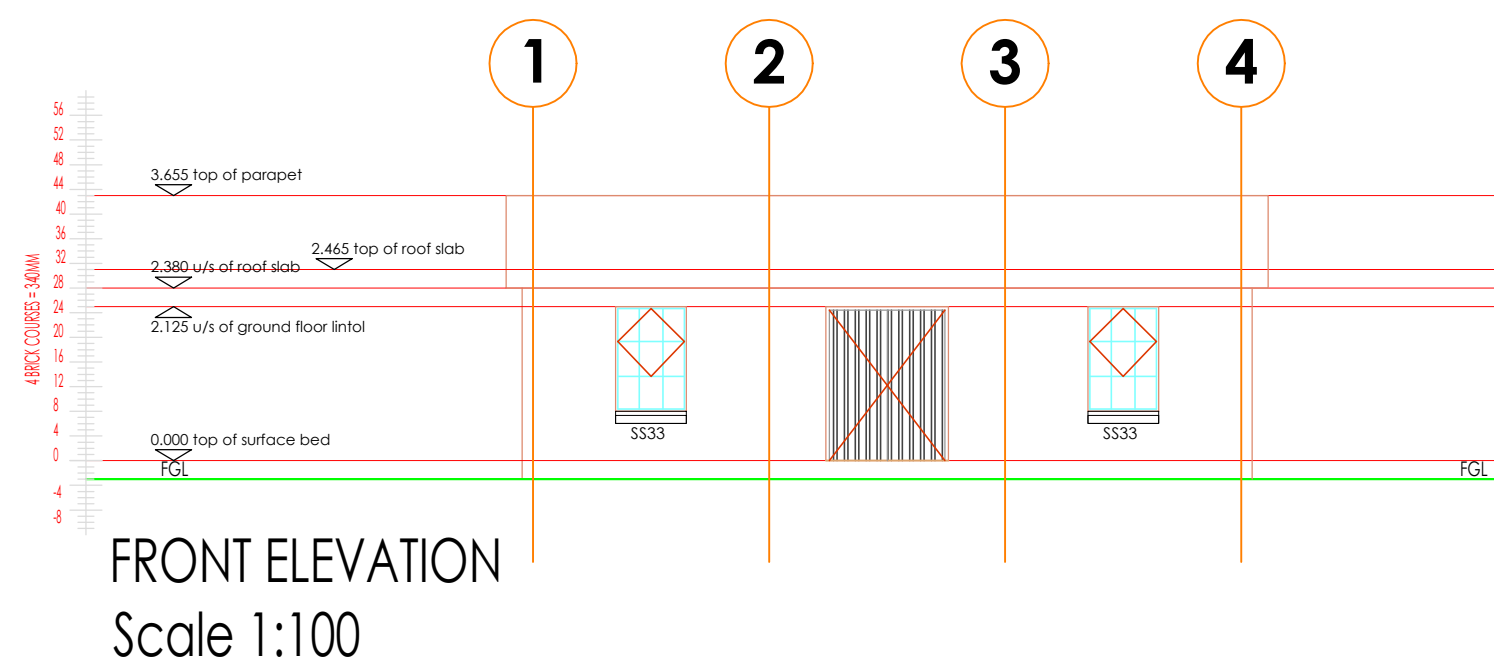
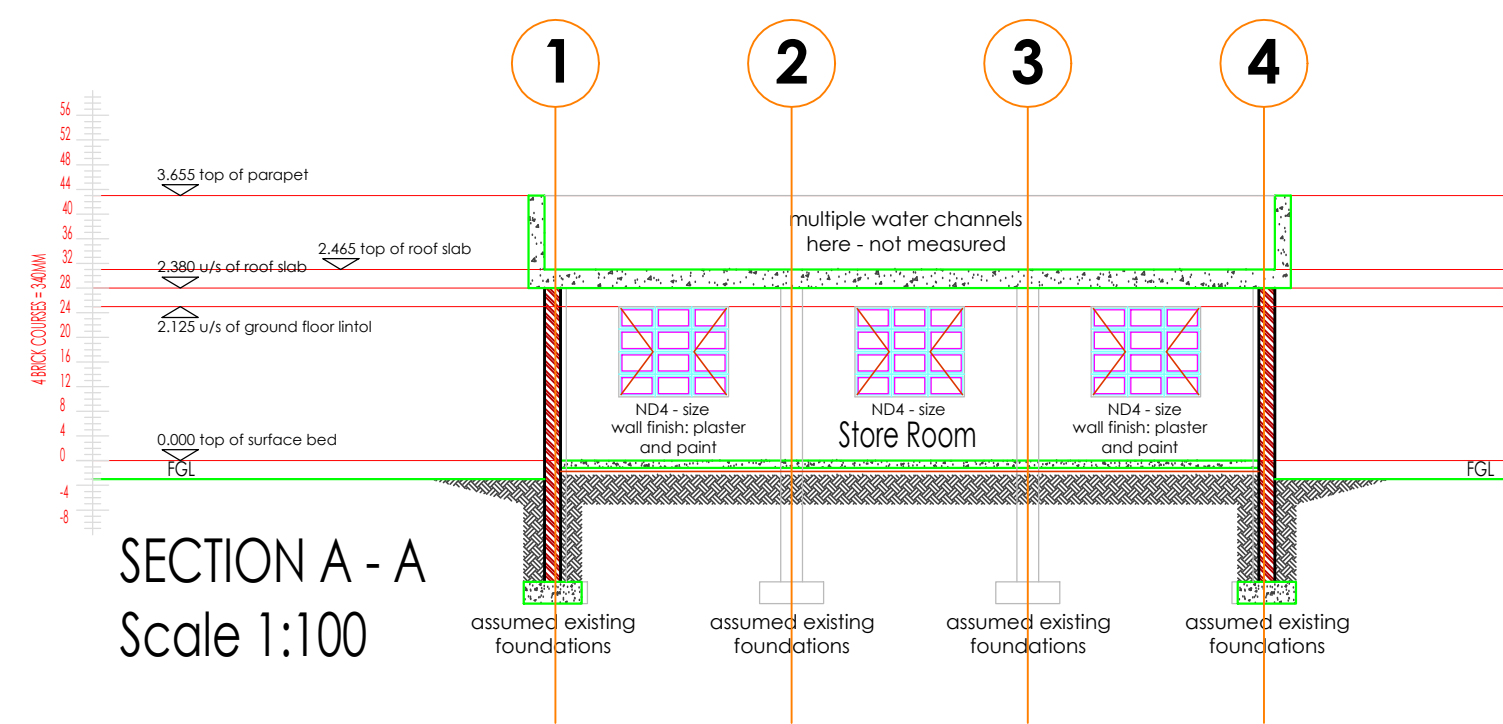


CHLORINE HOUSE

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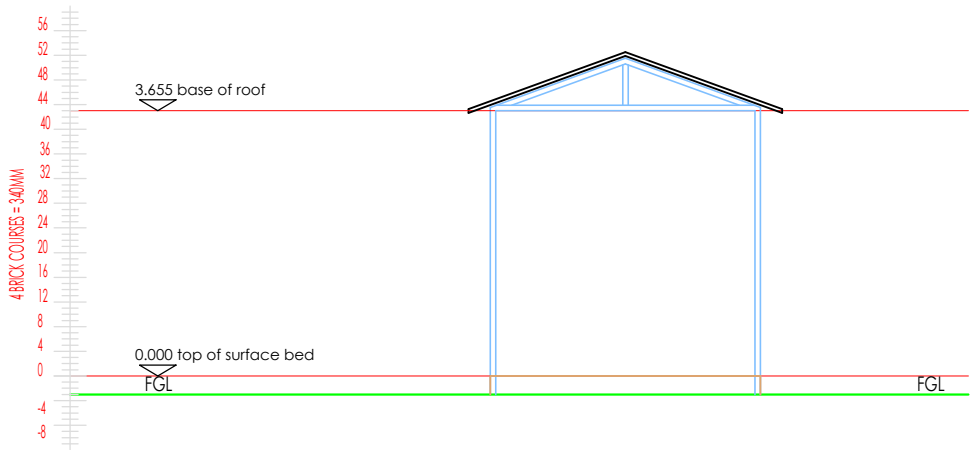


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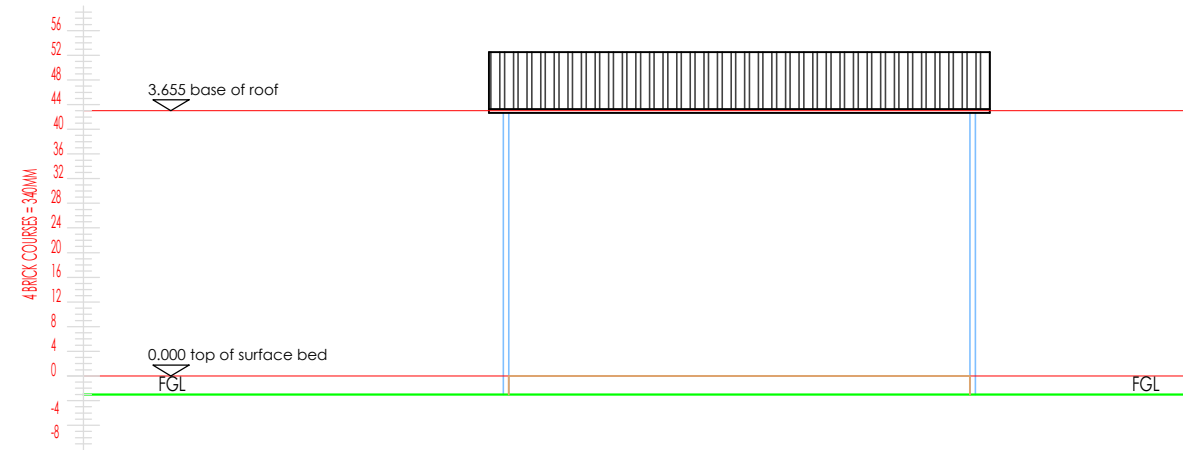


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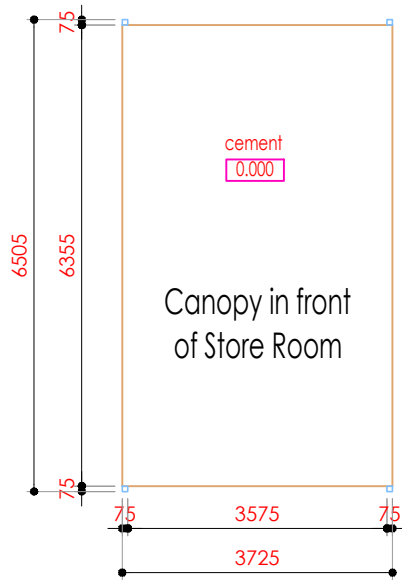
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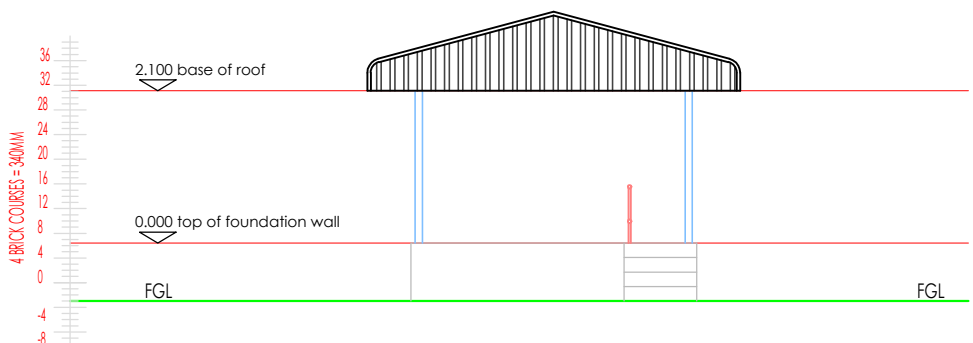


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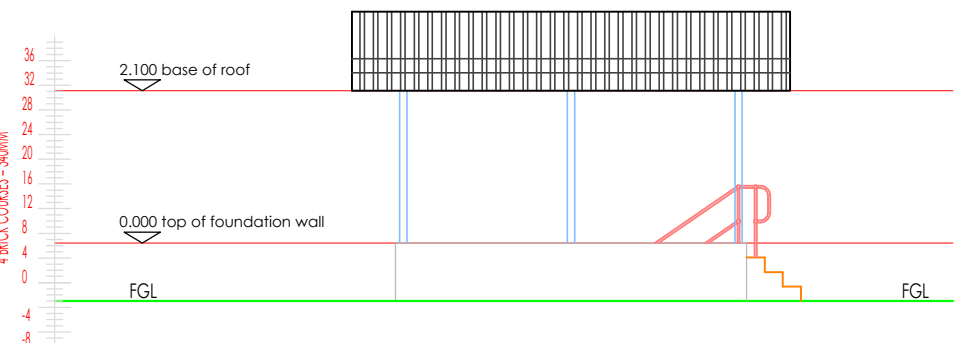


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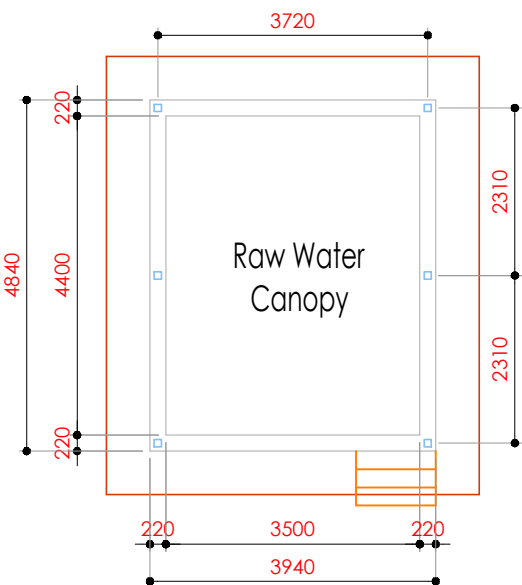
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LEFT ELEVATION
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FLOOR PLAN
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RAW WATER CANOPY

A	2025.05.28	EM	AS-BUILT
Rev	Date	by	
Revision Schedule			

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			AS-BUILT
Description COPY RIGHT RESERVED			

Client



Consultant

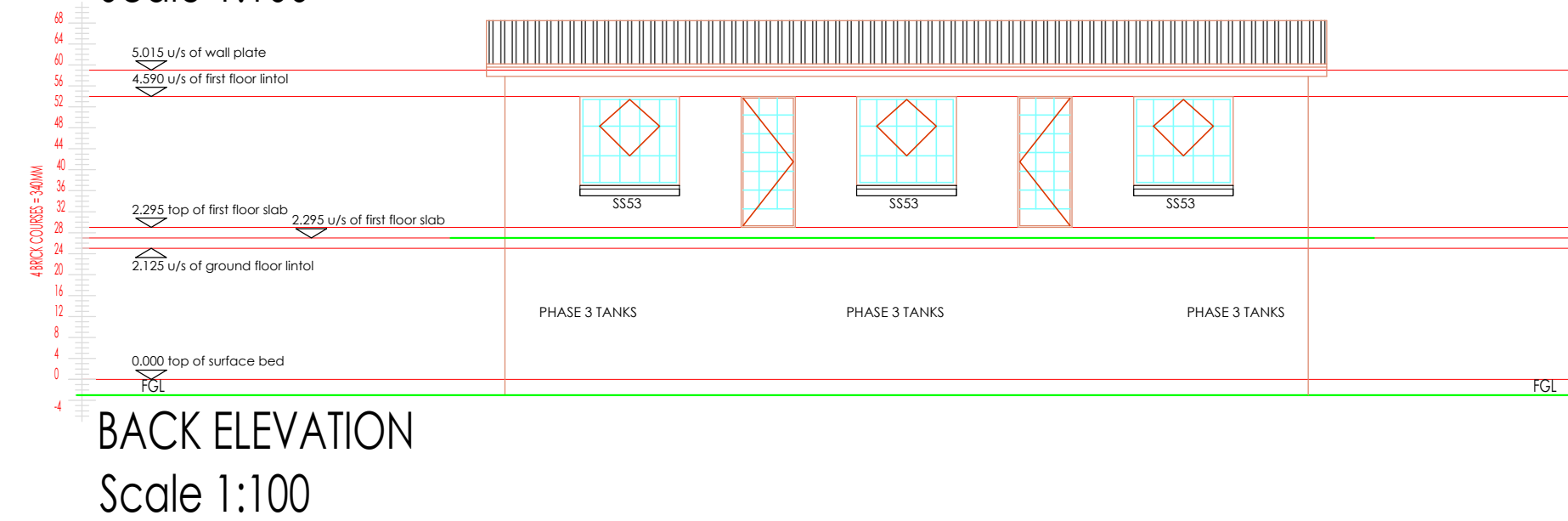
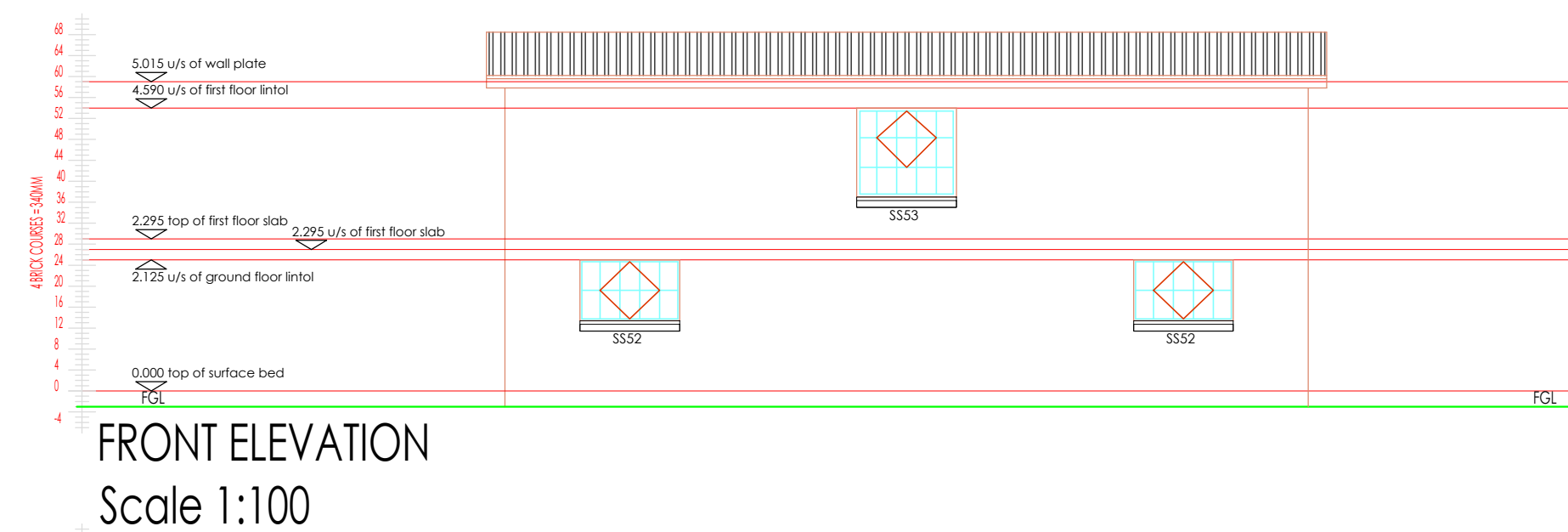
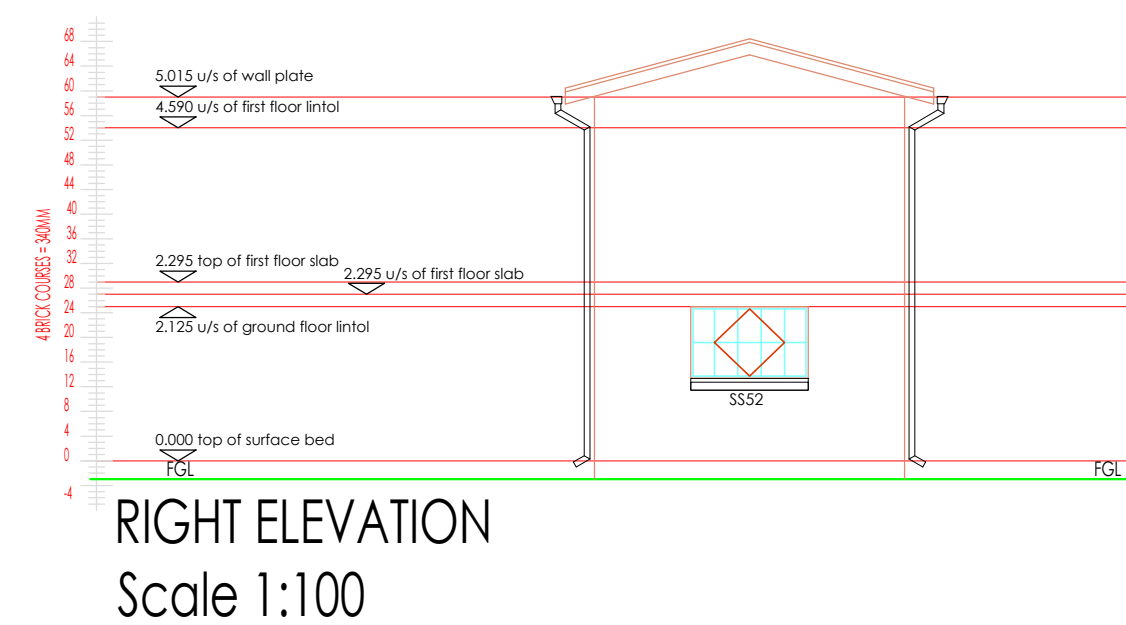
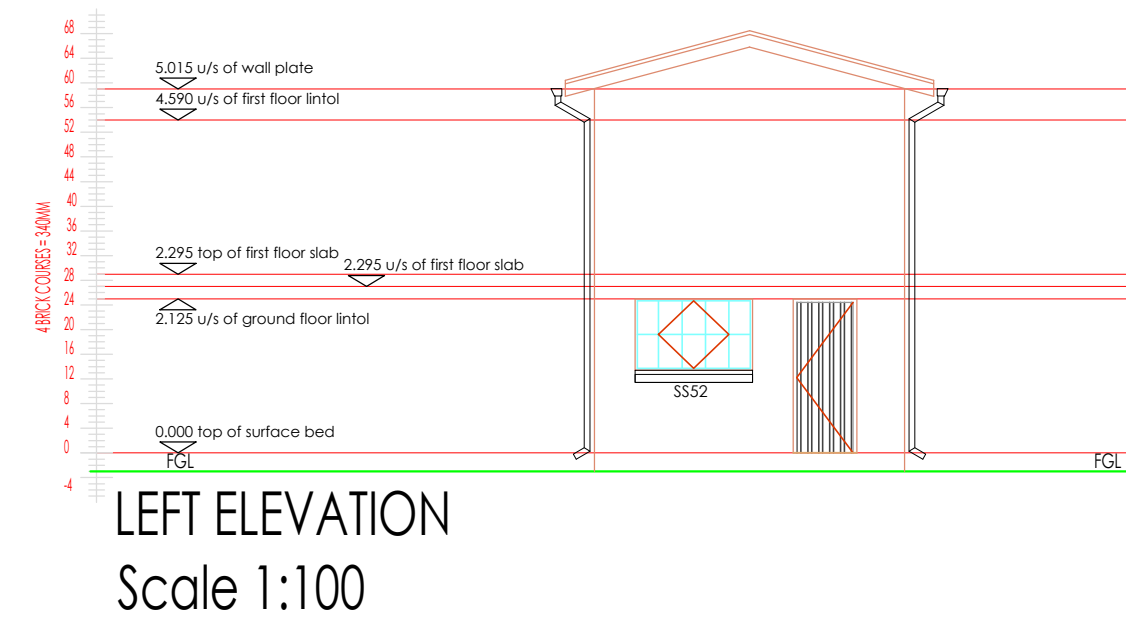
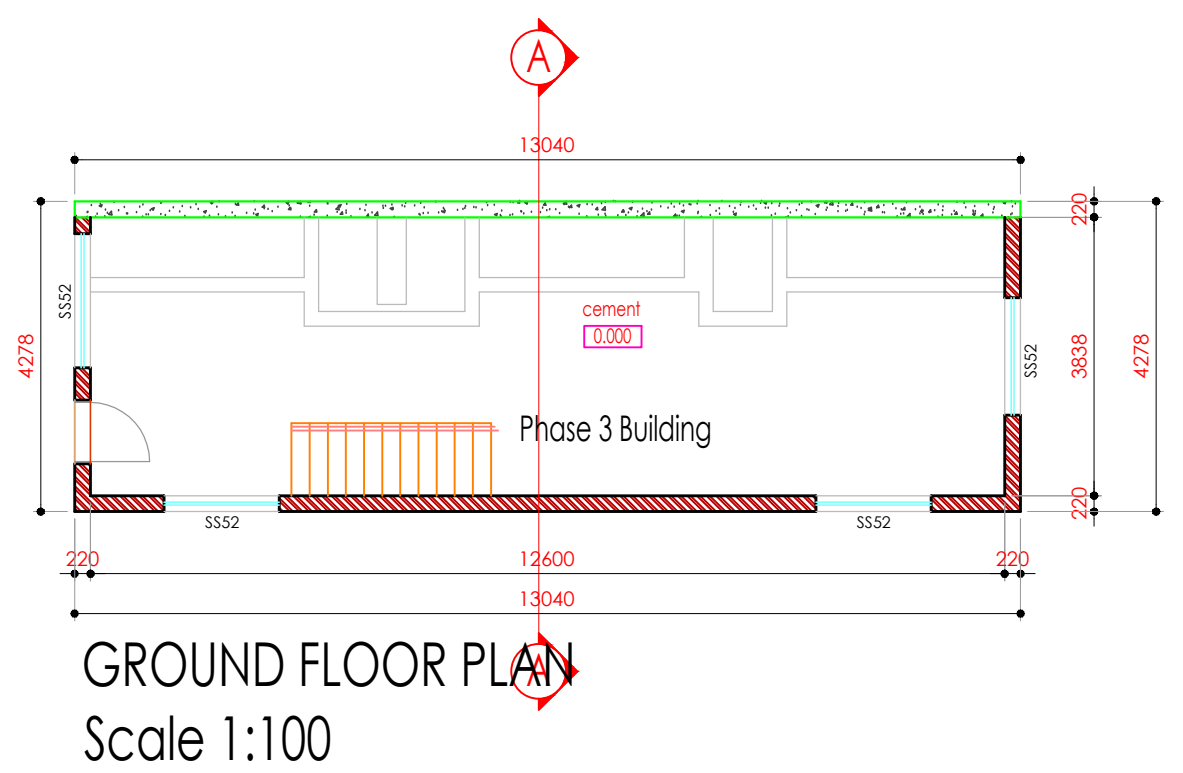
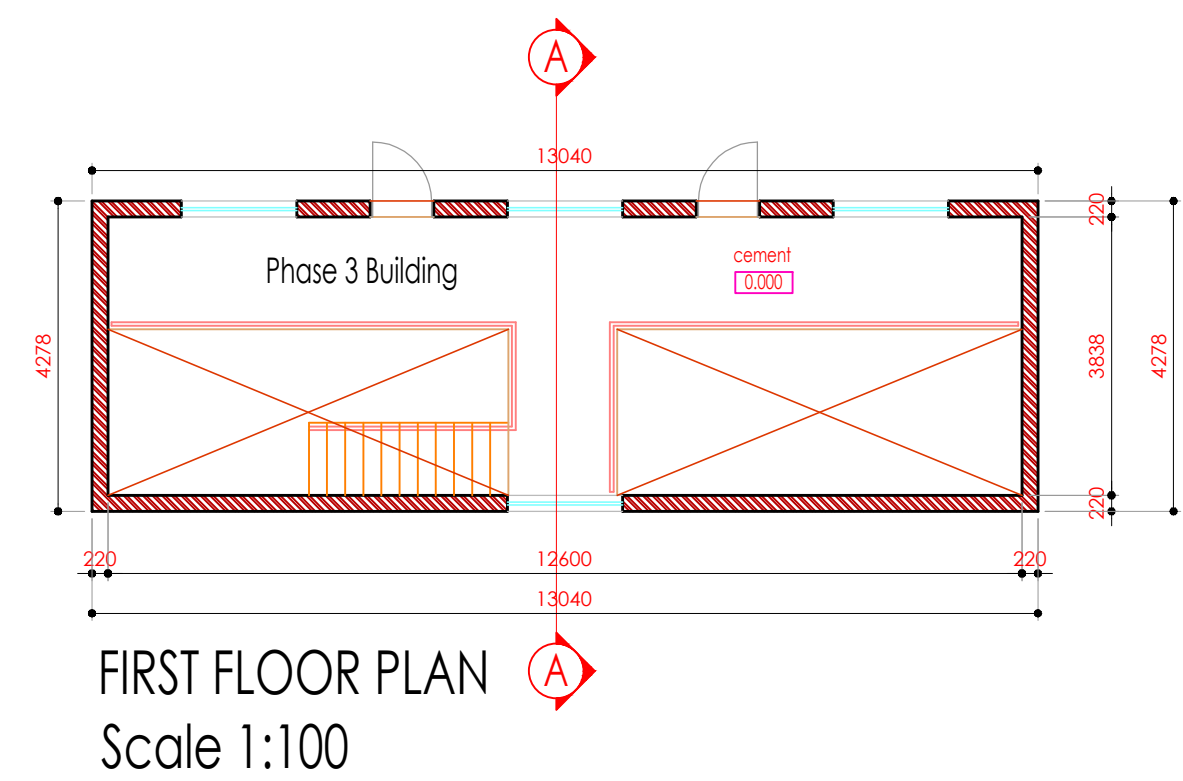
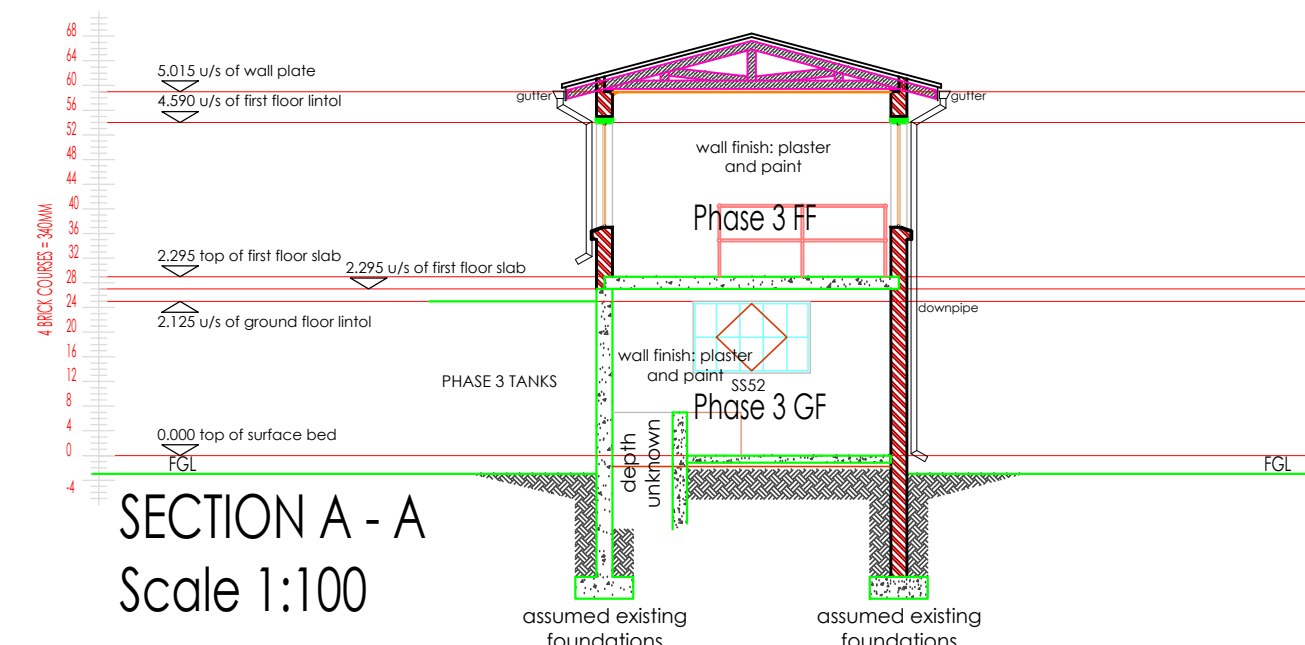


APPROVED BY	E.MHANDU
DESIGNED BY	E.MHANDU
DRAWN BY	E.MHANDU
DATE	2025.05.28
ECSA	202001408
SIGNATURE	

Project			
MALAMULELE WATER TREATMENT WORKS			
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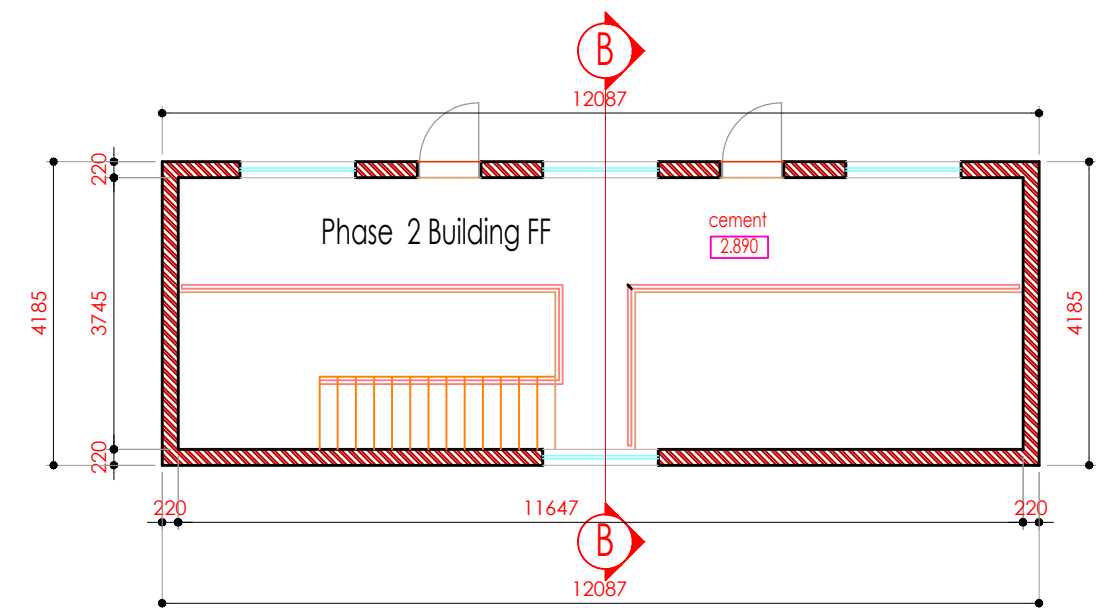
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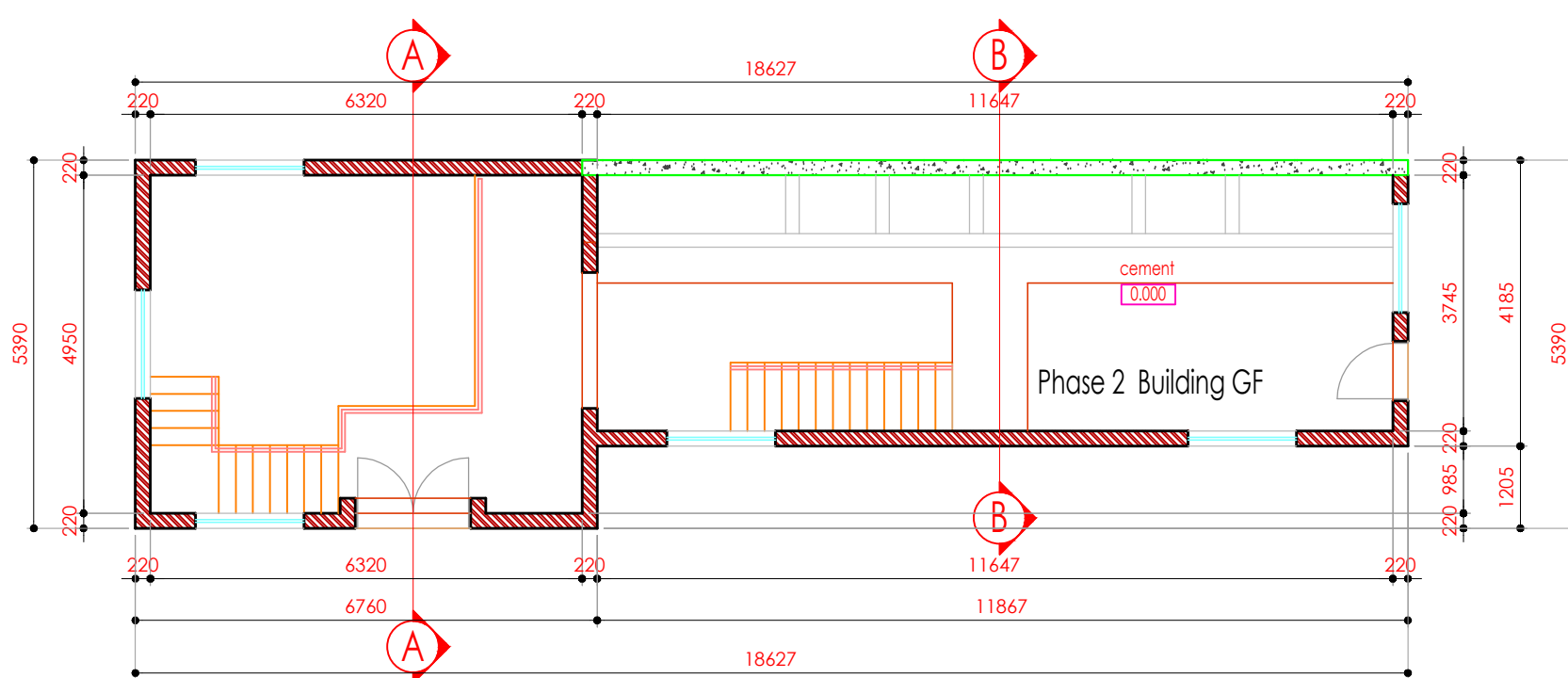


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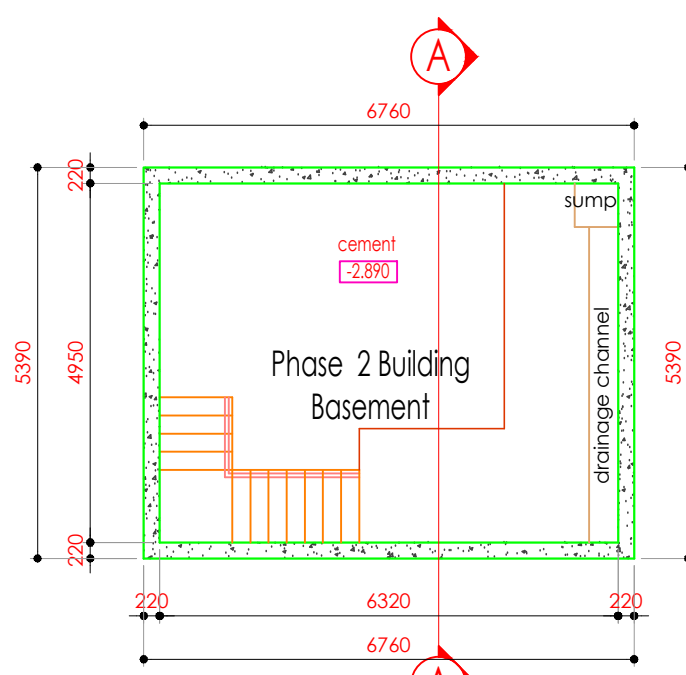
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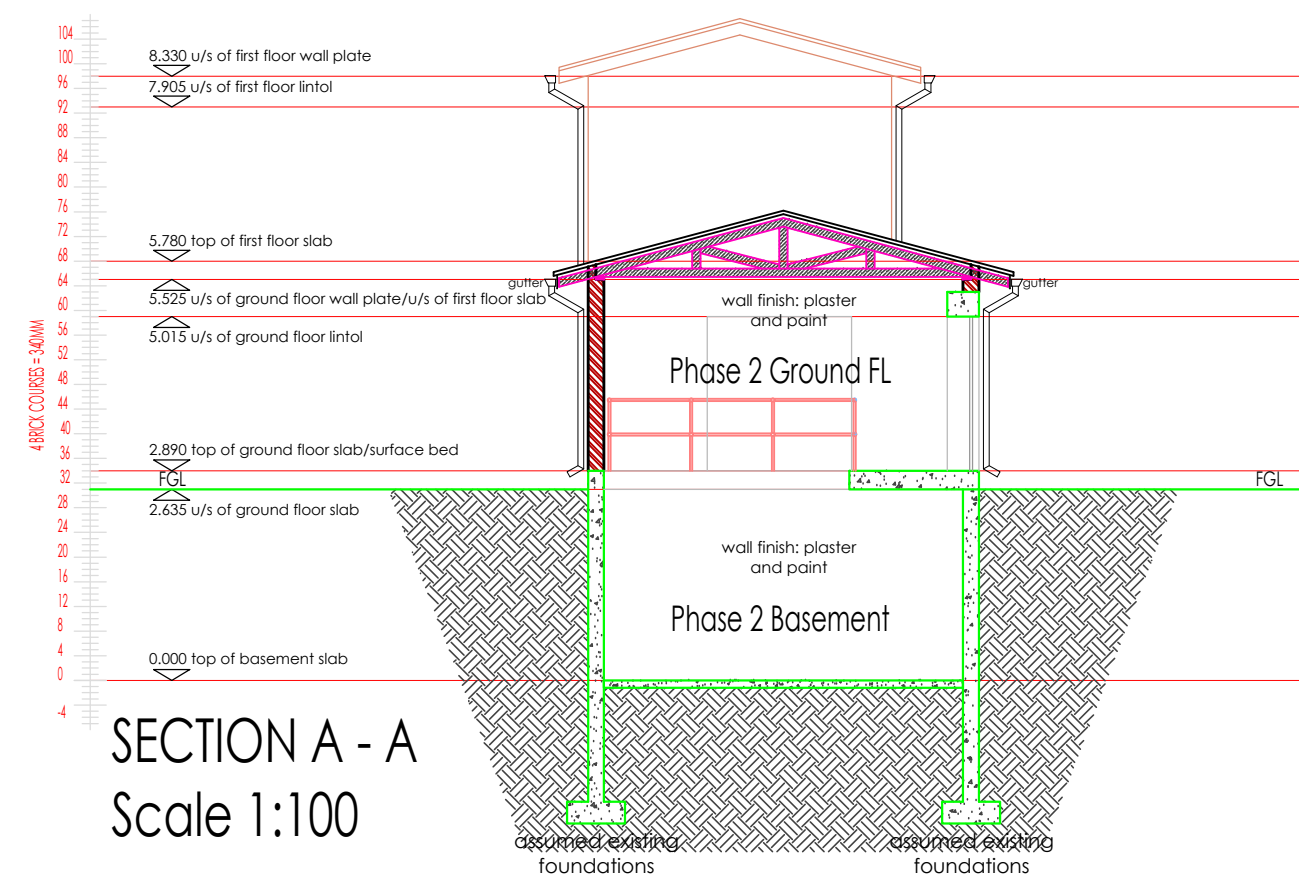
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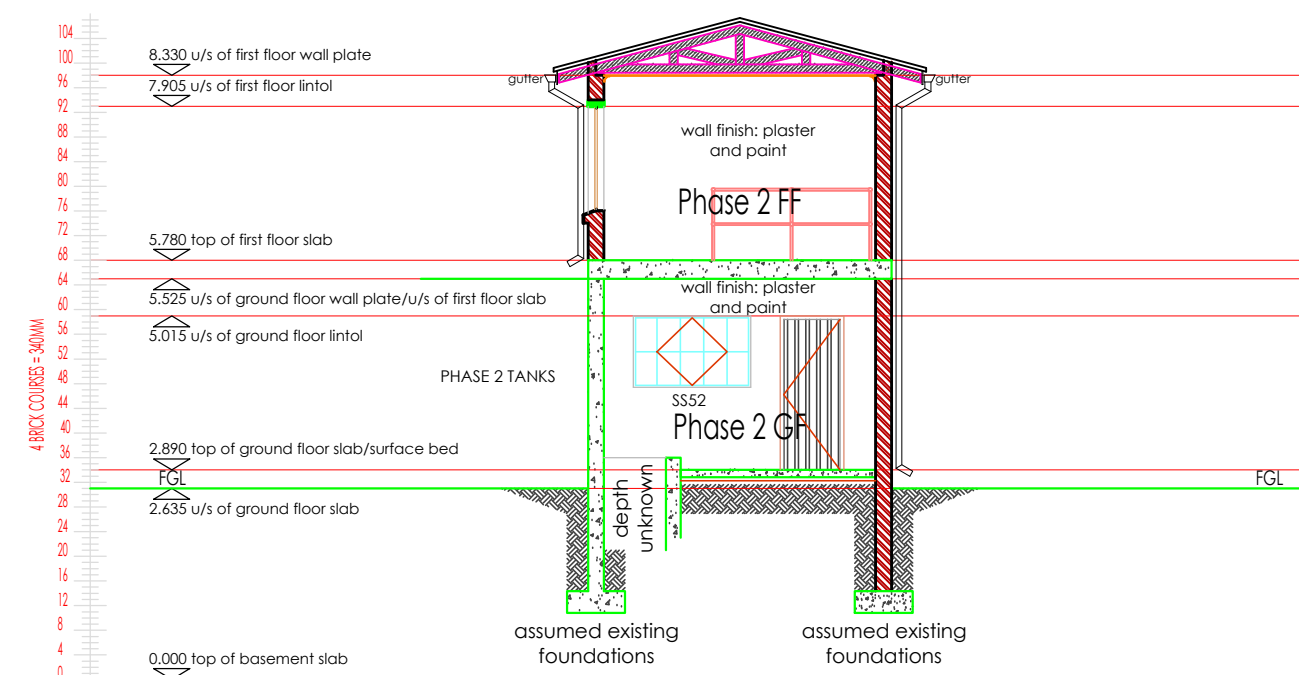
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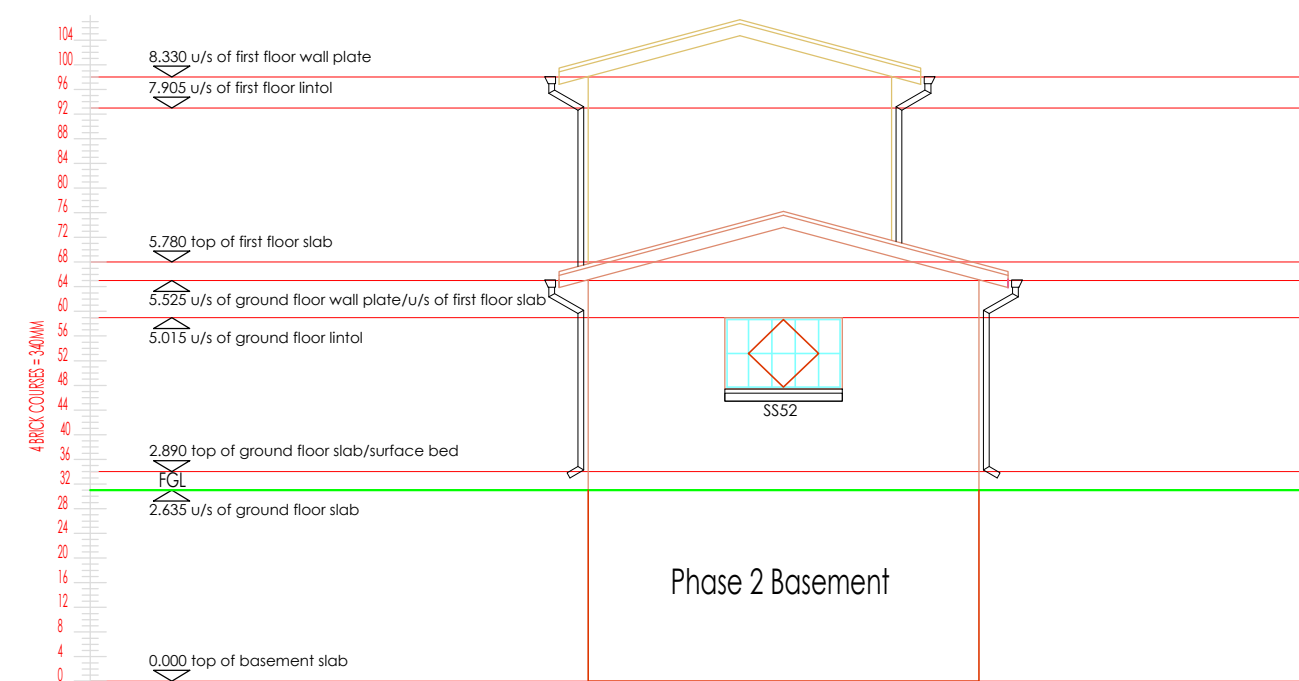
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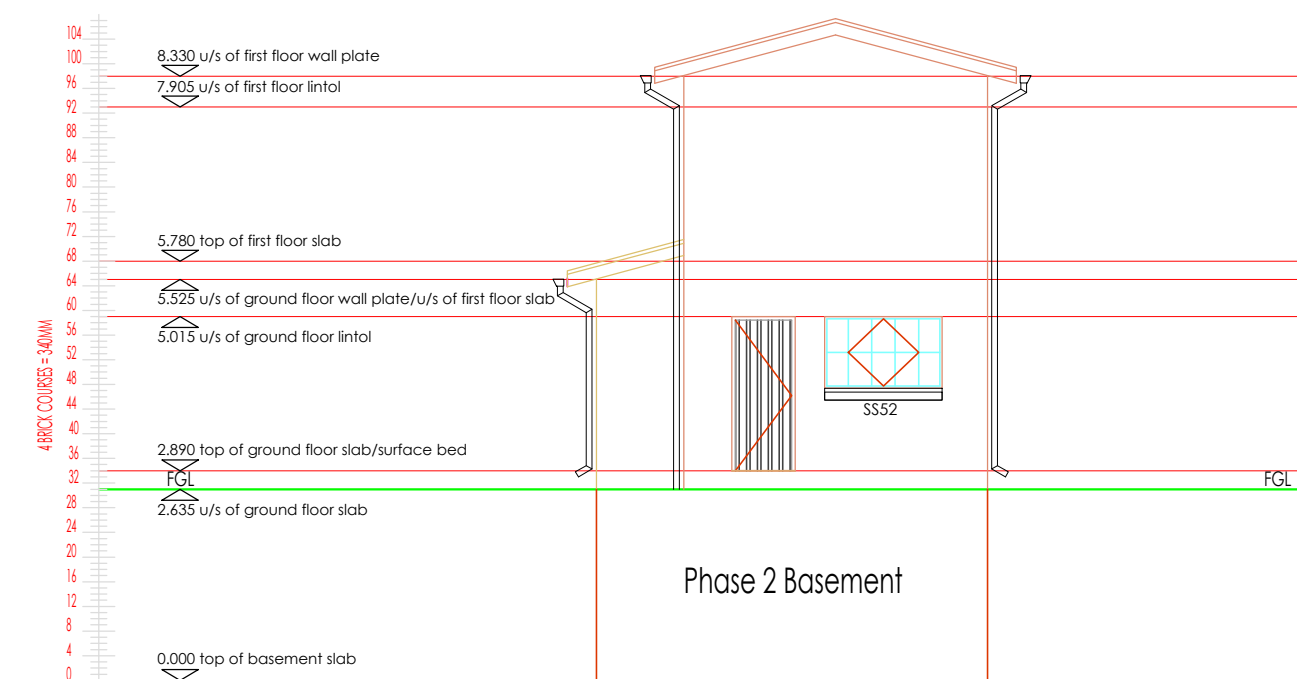
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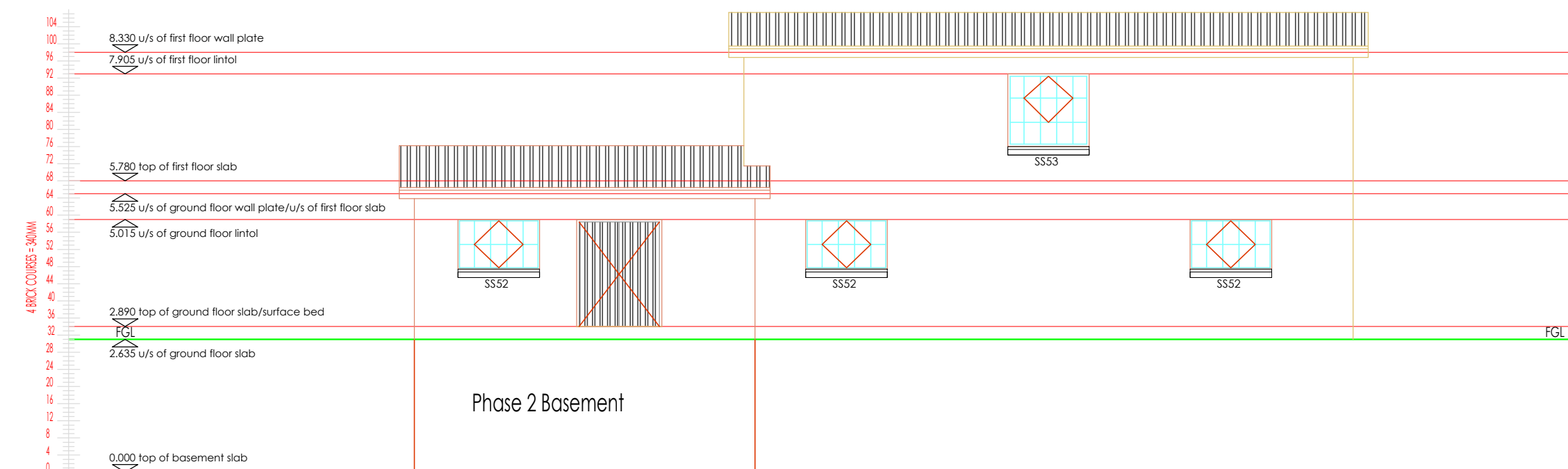
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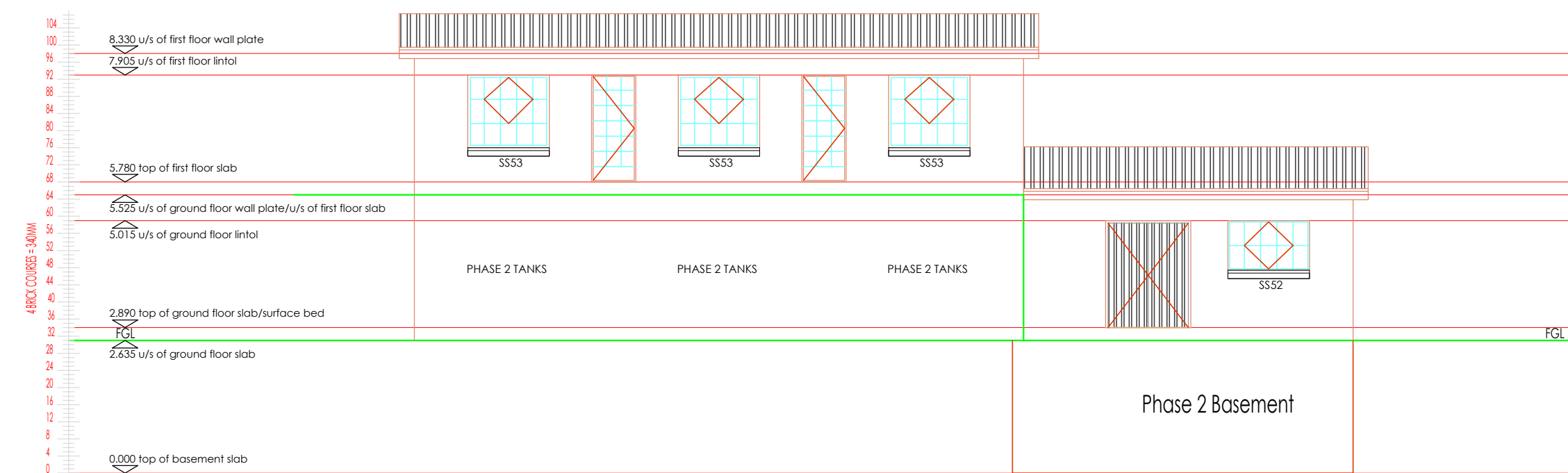
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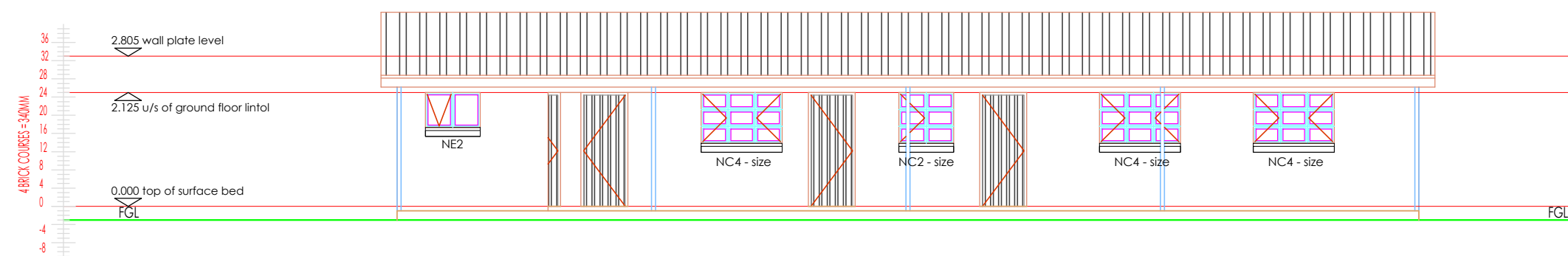


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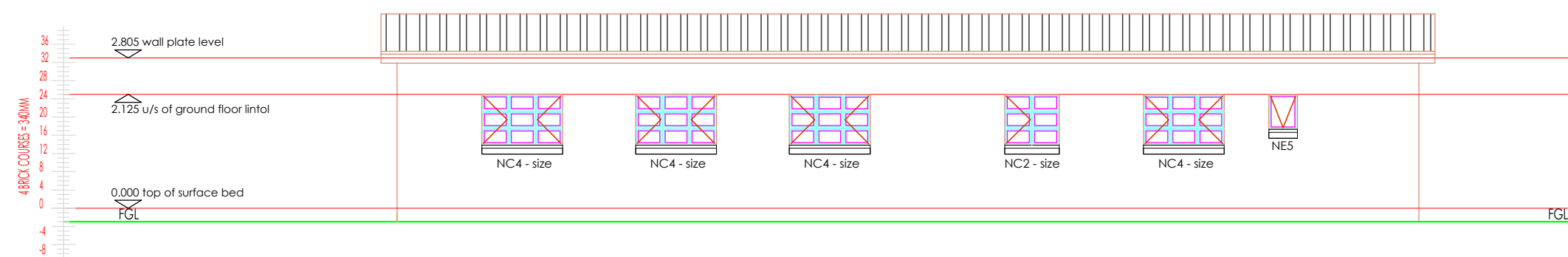


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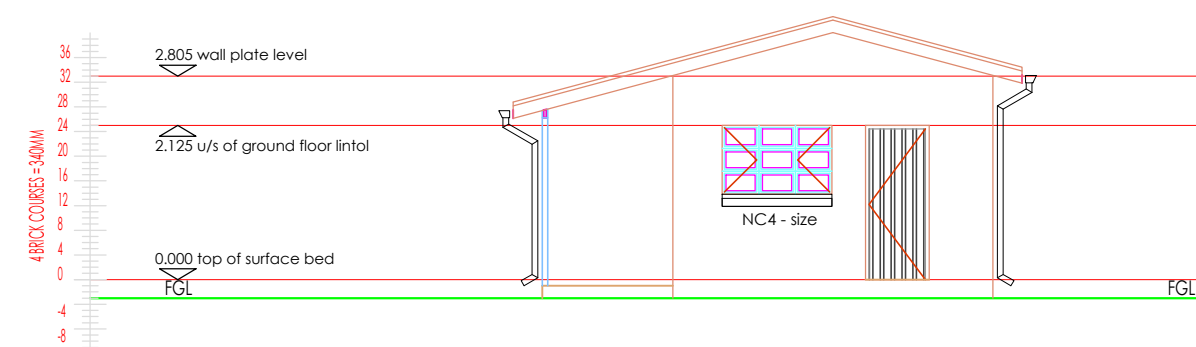
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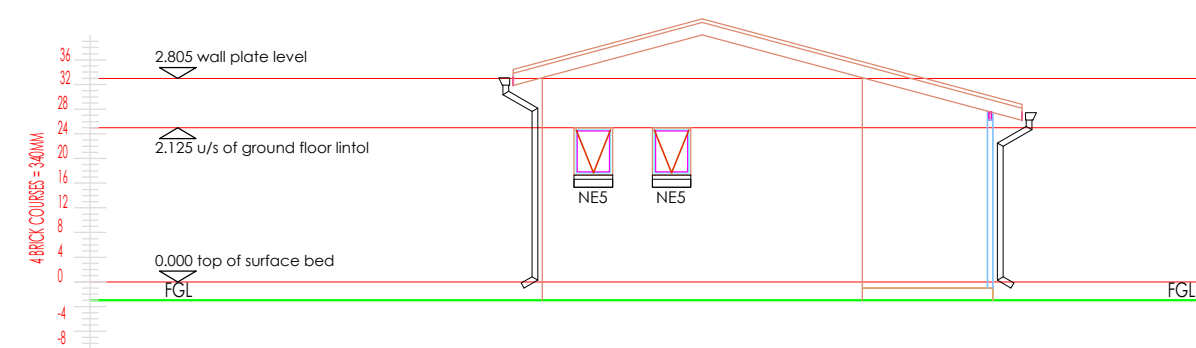
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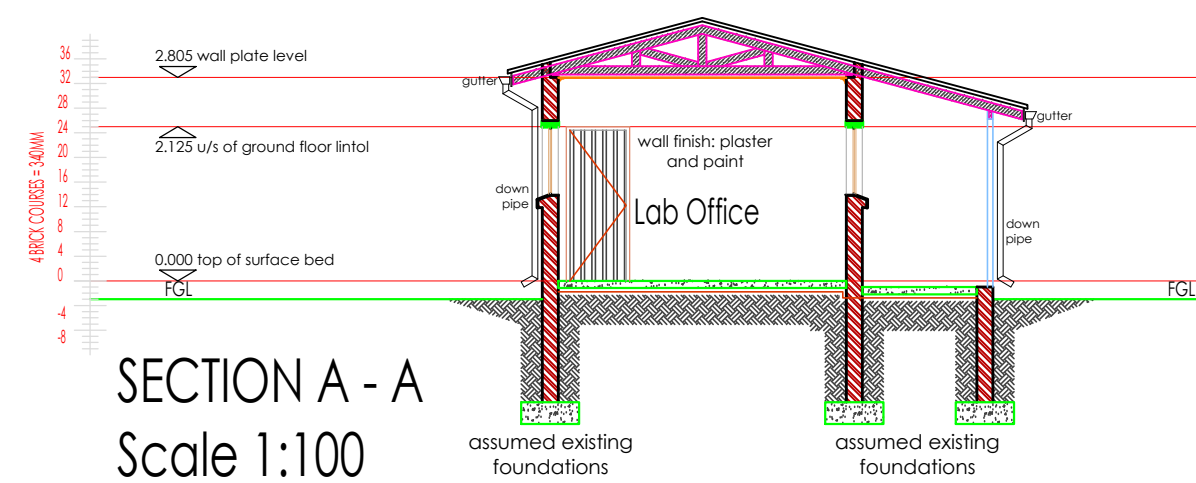
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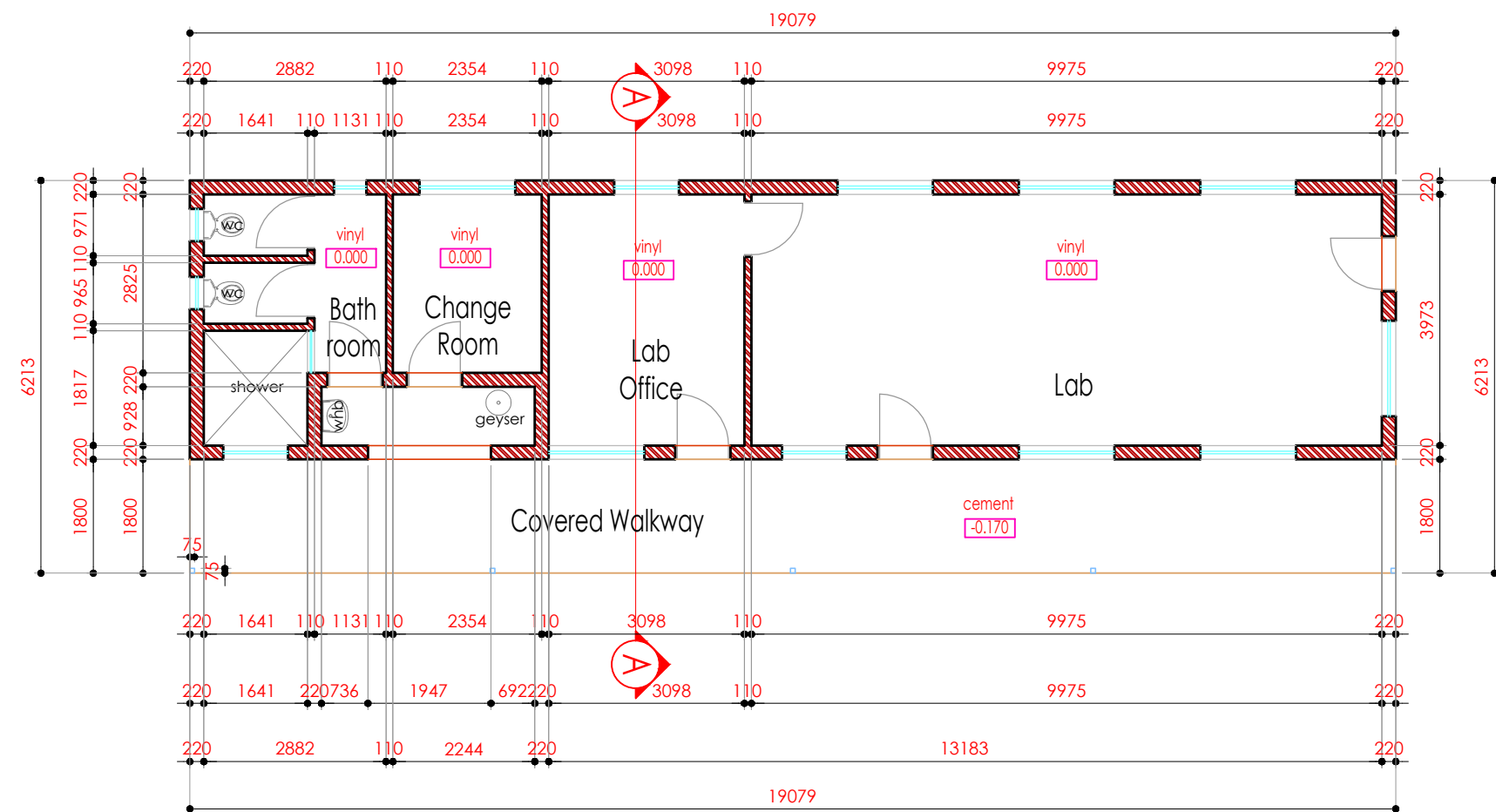
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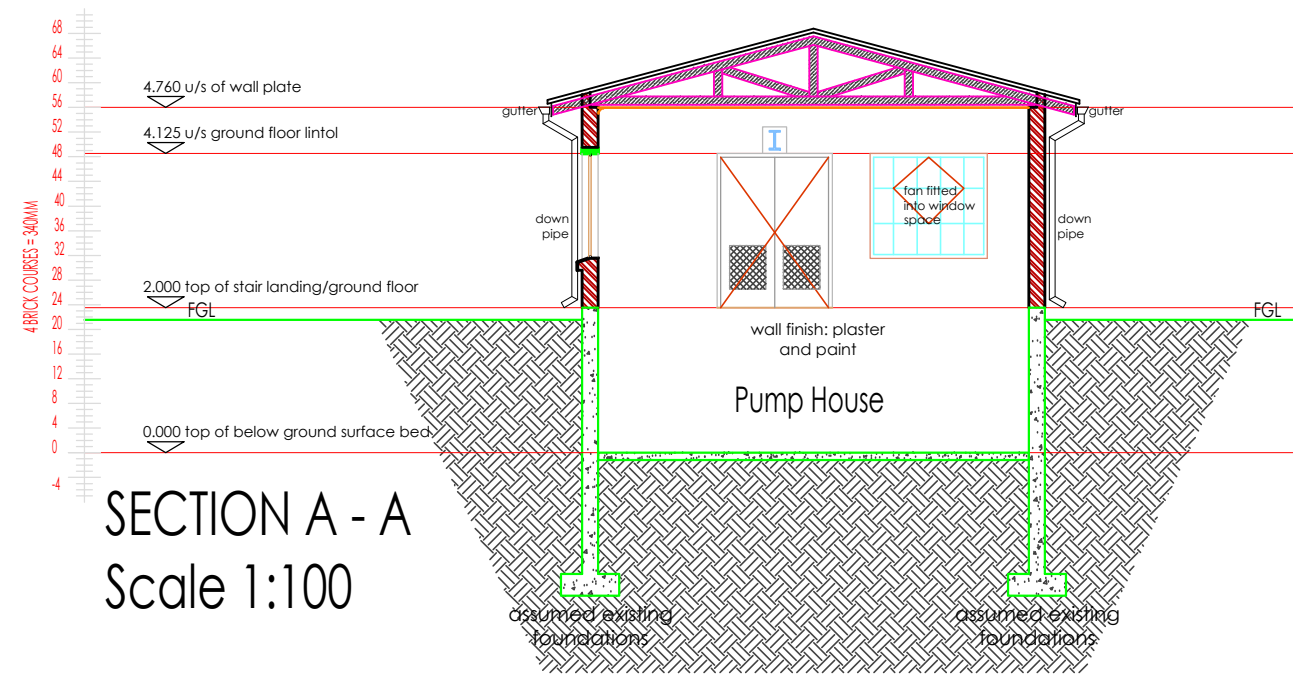
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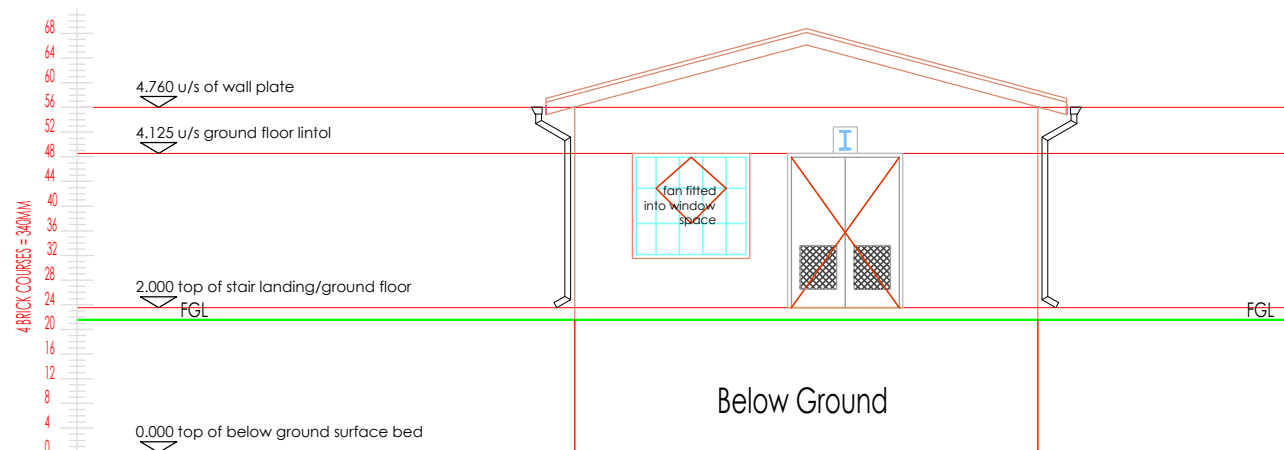
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LAB BUILDING

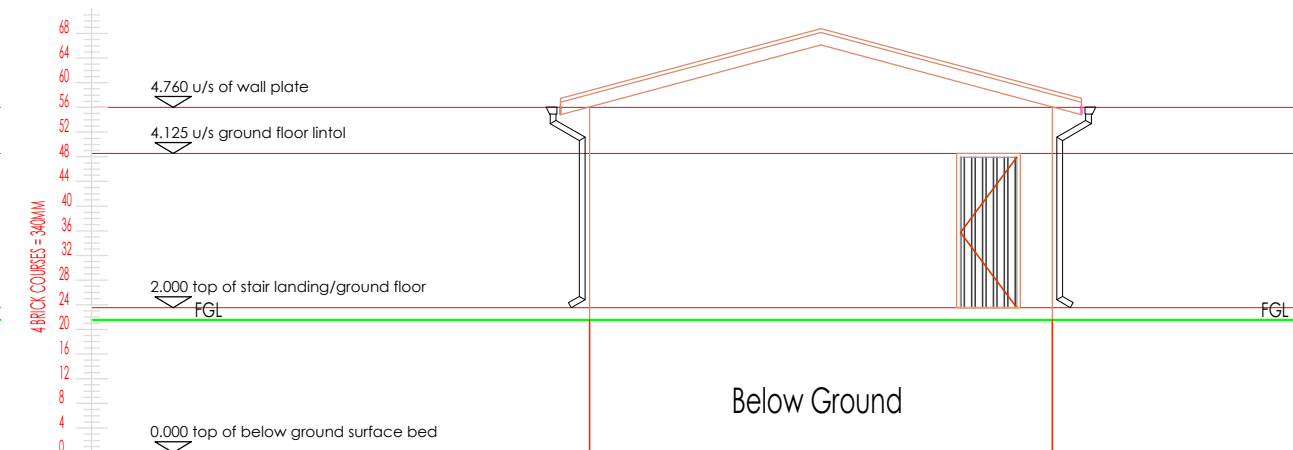
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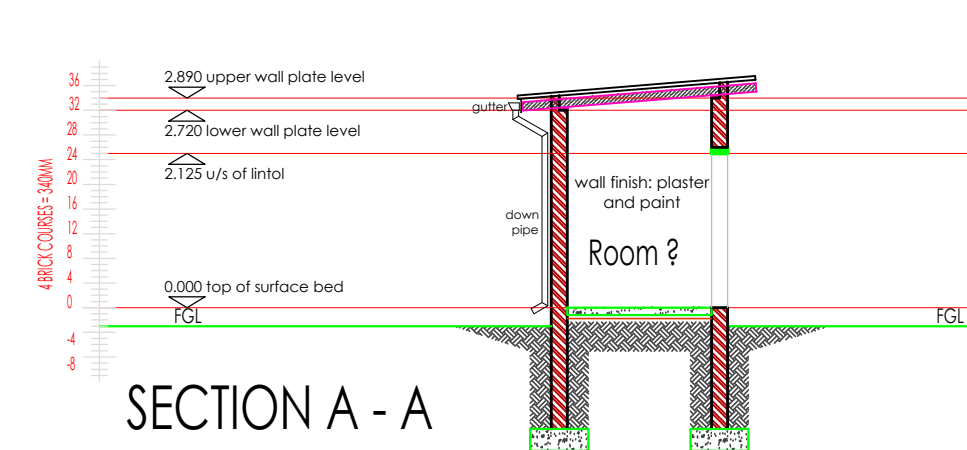
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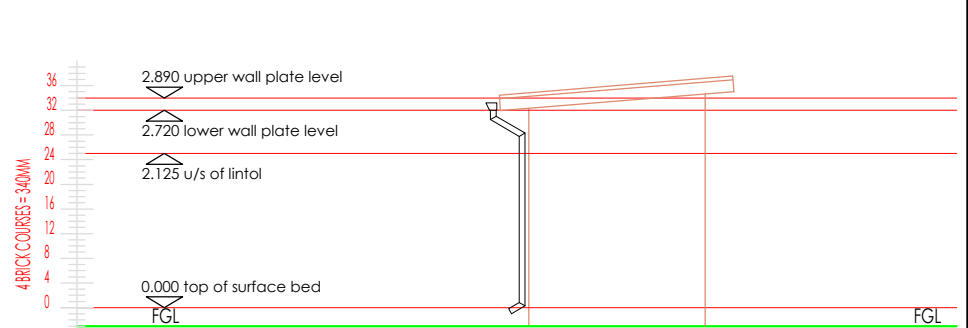
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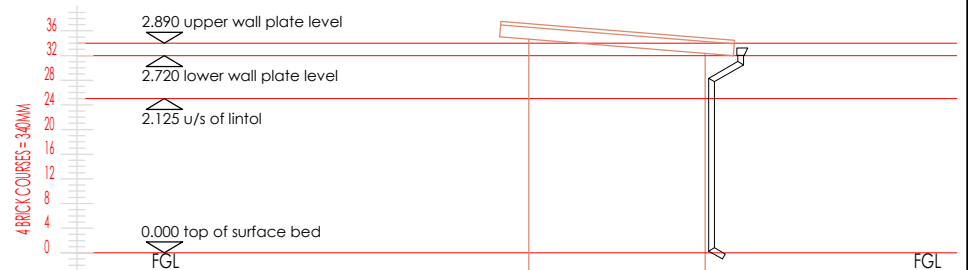
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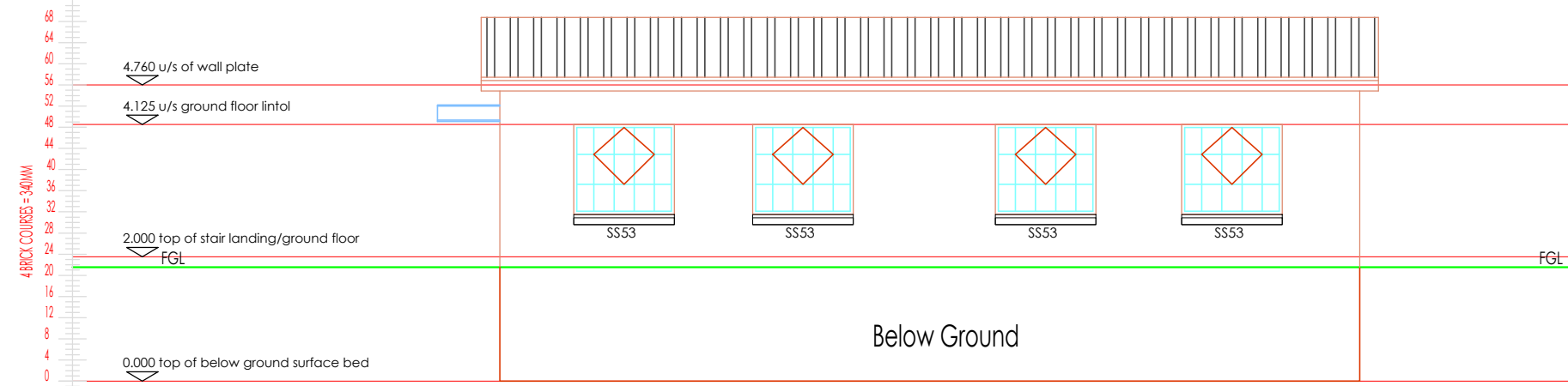
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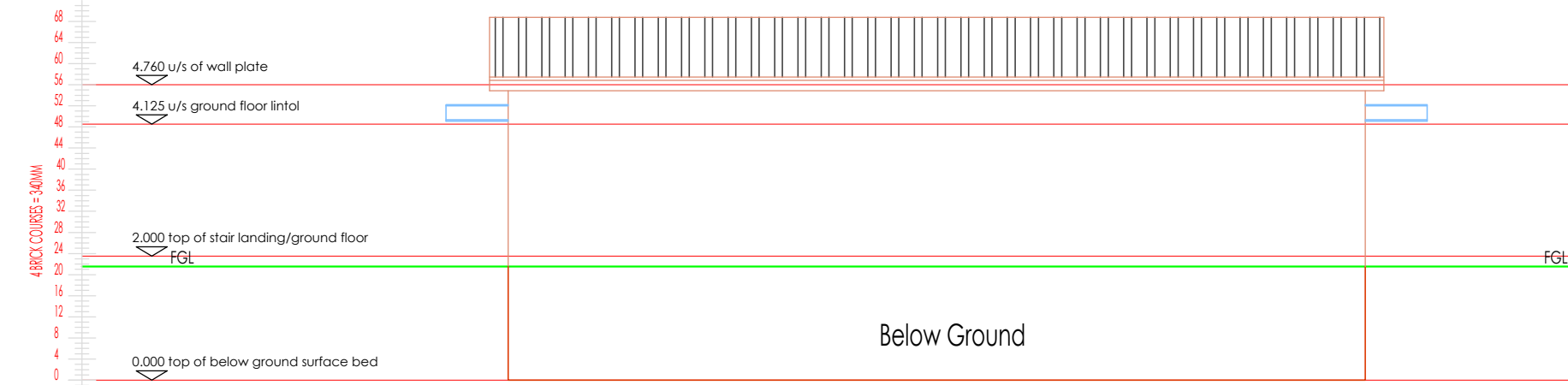
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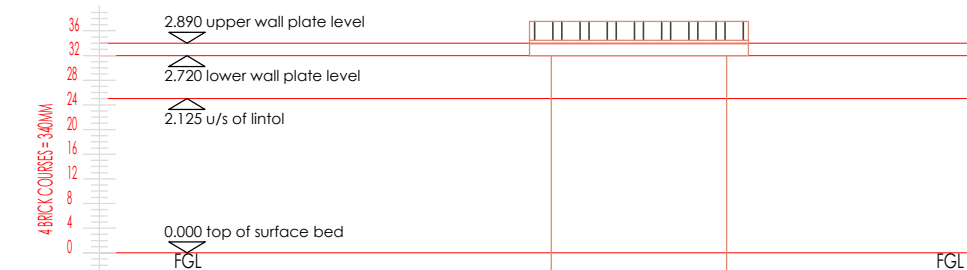
RIGHT ELEVATION
Scale 1:100



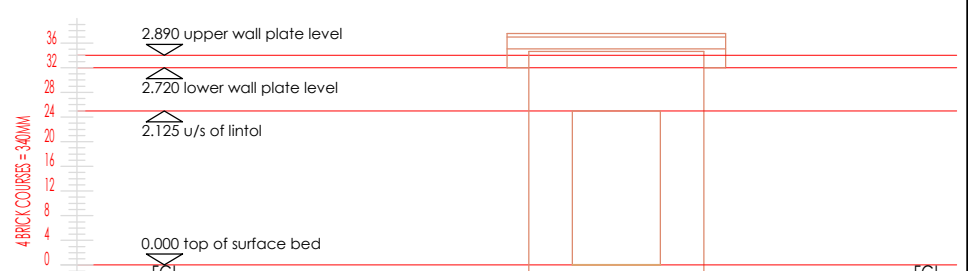
RIGHT ELEVATION
Scale 1:100



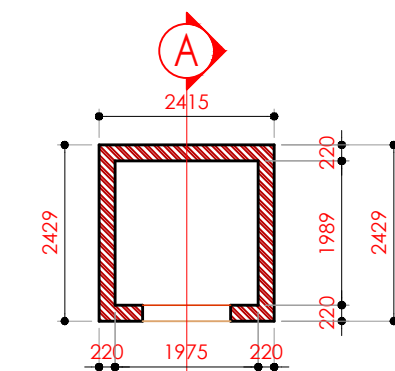
LEFT ELEVATION
Scale 1:100



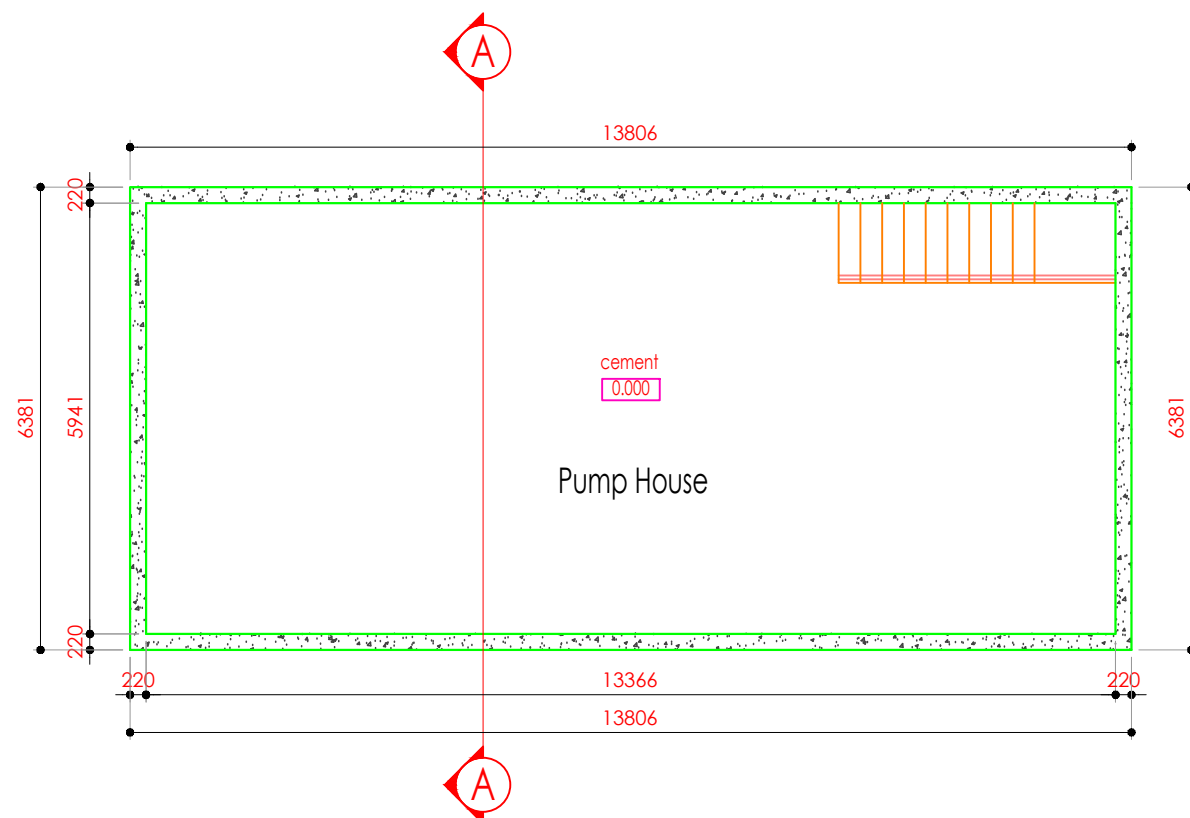
BACK ELEVATION
Scale 1:100



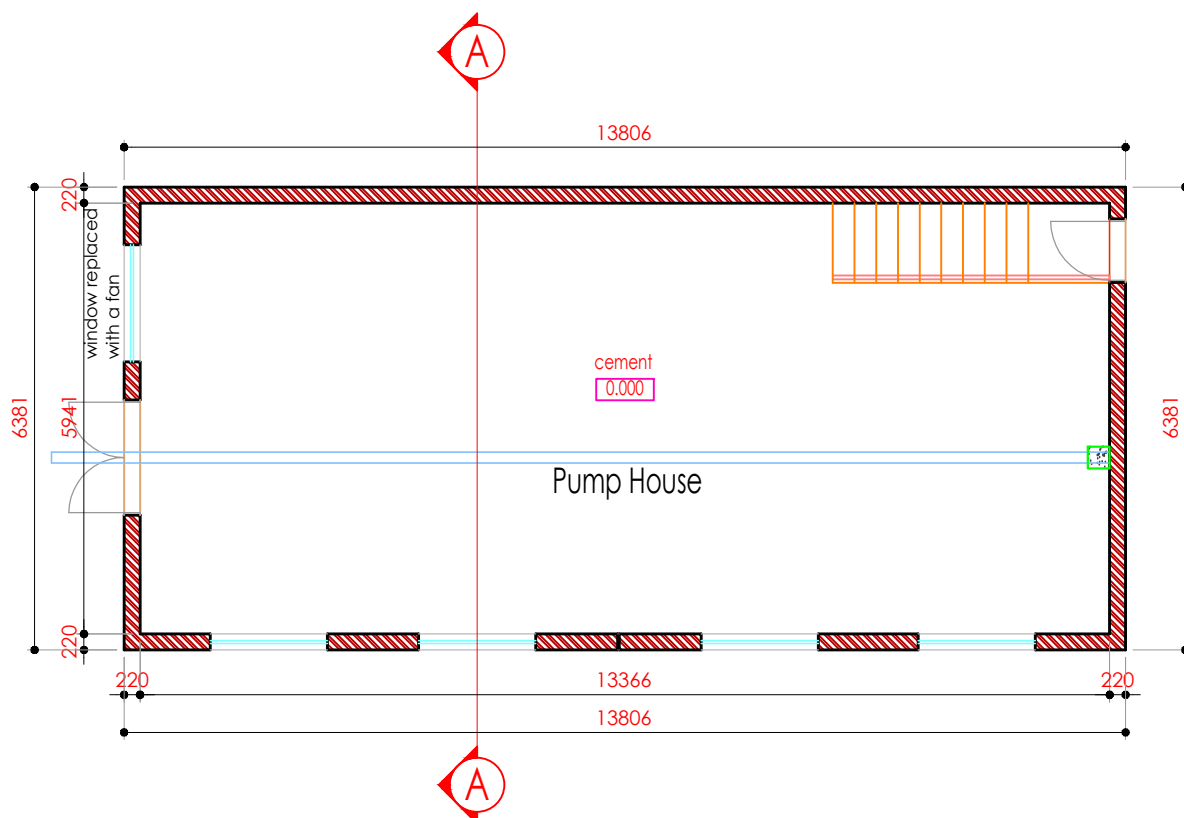
FRONT ELEVATION
Scale 1:100



UNKNOWN BUILDING
FLOOR PLAN
Scale 1:100



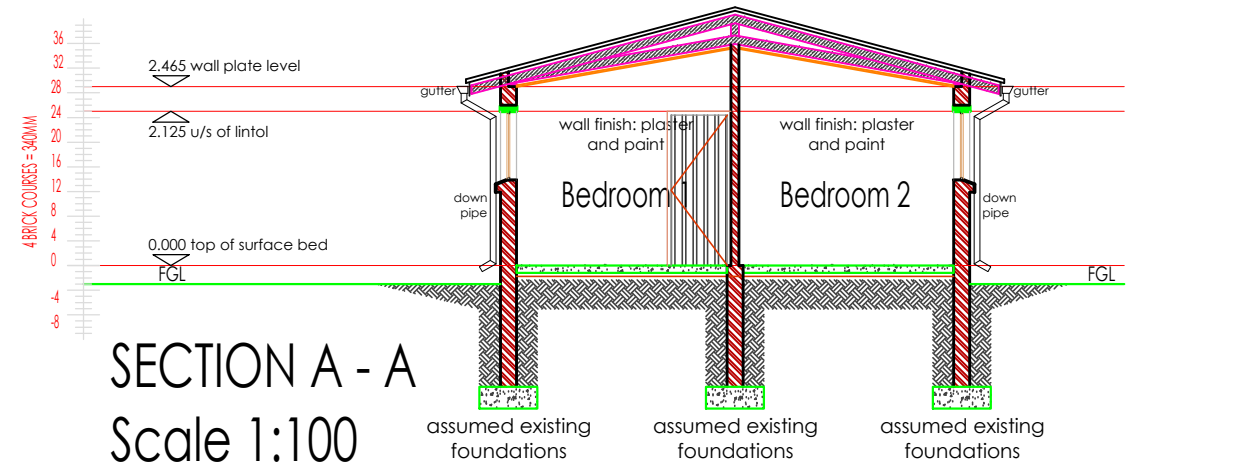
BELOW GROUND PLAN
Scale 1:100



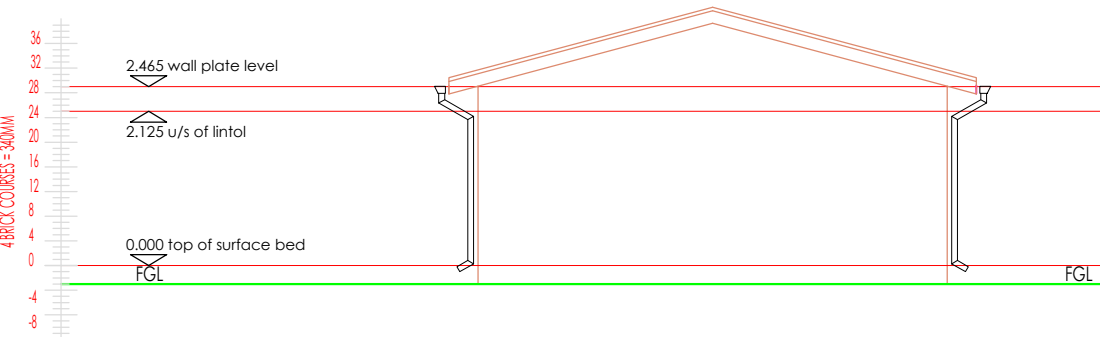
ABOVE GROUND PLAN
Scale 1:100

PUMP HOUSE

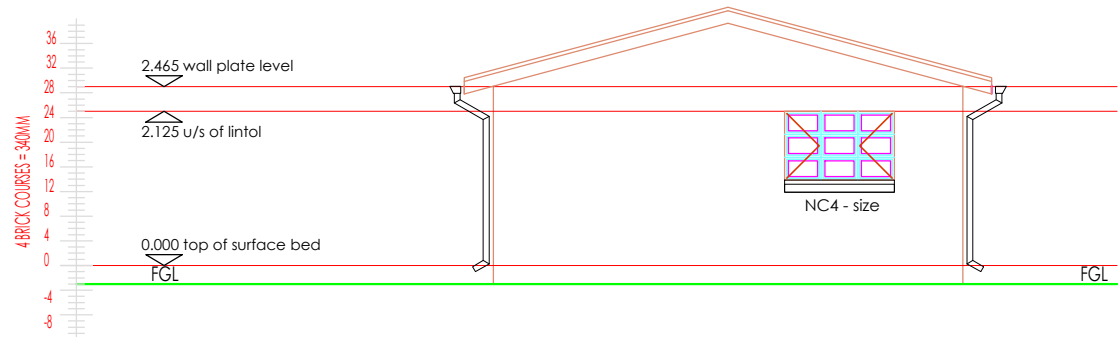
				DRAWING ISSUED FOR	Client		Consultant		APPROVED BY	E.MHANDU	Project	MALAMULELE WATER TREATMENT WORKS	Discipline	ARCHITECTURAL		
									DESIGNED BY	E.MHANDU						
									DRAWN BY	E.MHANDU						
									DATE	2025.05.28						
				ECSA	202001408	Revision Schedule	COPY RIGHT RESERVED		SIGNATURE		SCALE	As indicated	SHEET SIZE	A1	Description	PUMP HOUSE LAYOUT
A	2025.05.28	EM	AS-BUILT													
Rev	Date	by														



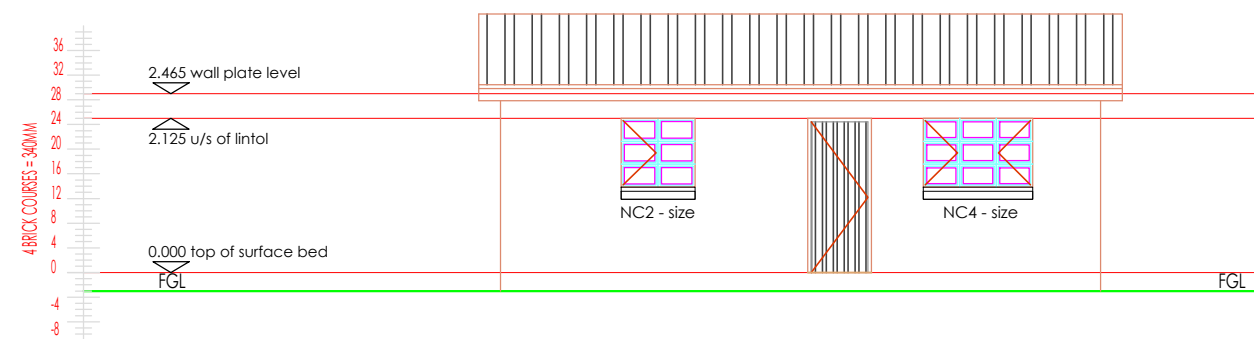
SECTION A - A
Scale 1:100



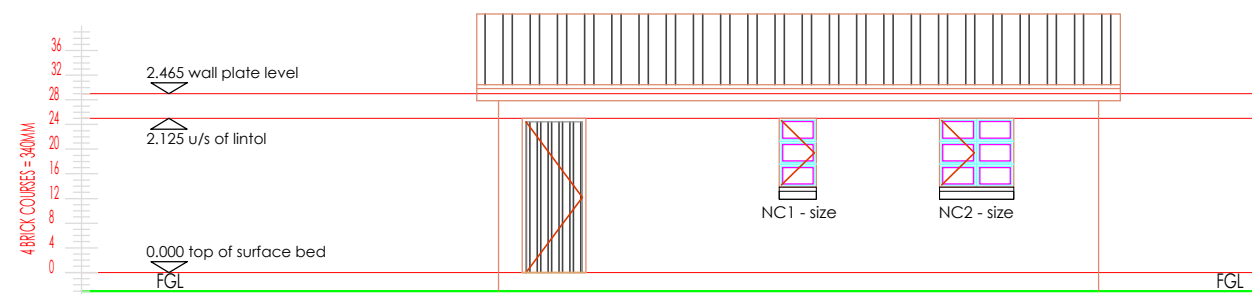
LEFT ELEVATION
Scale 1:100



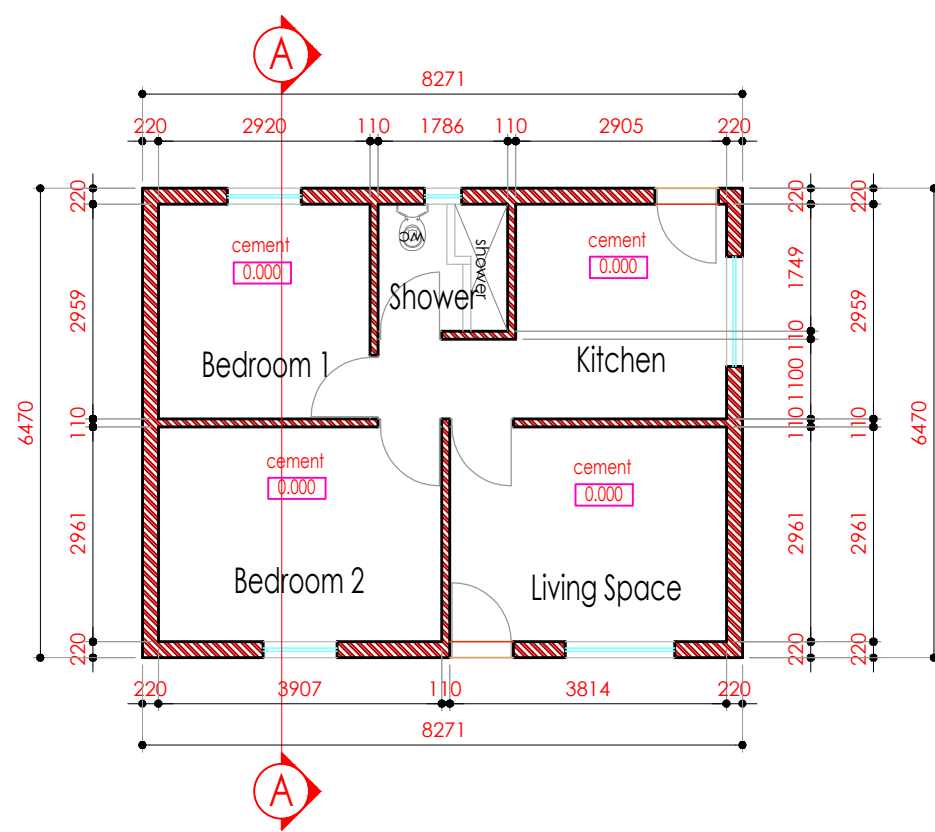
RIGHT ELEVATION
Scale 1:100



FRONT ELEVATION
Scale 1:100



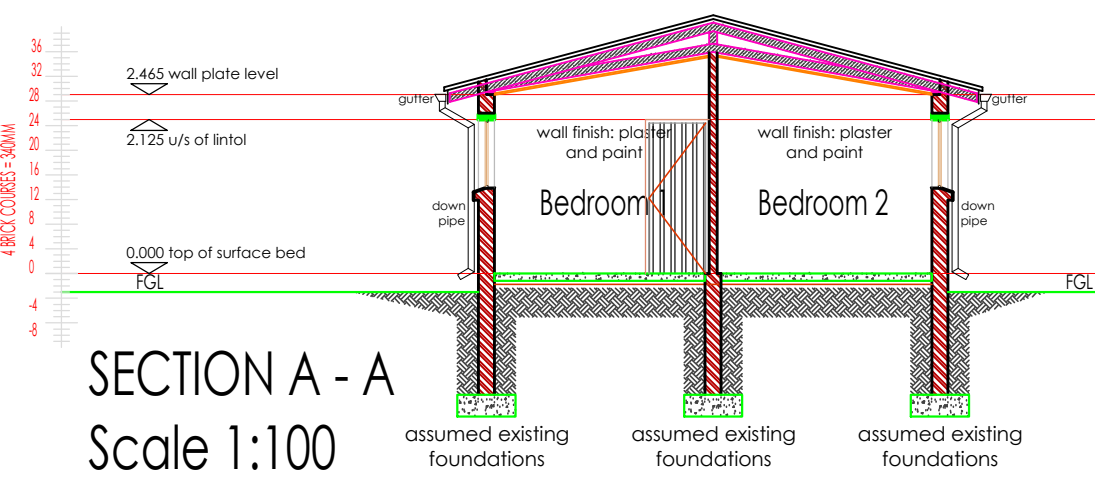
BACK ELEVATION
Scale 1:100



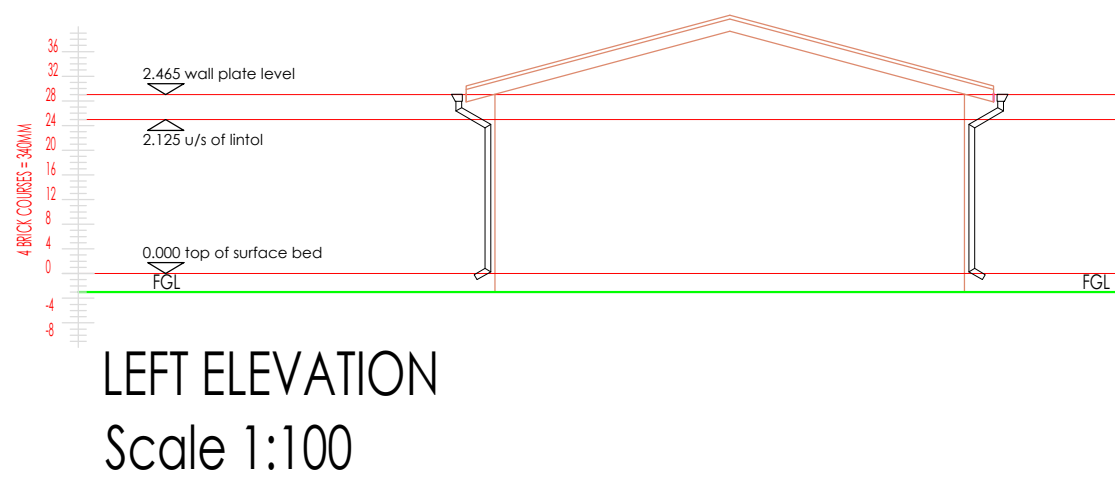
WORKERS HOUSE 1
FLOOR PLAN
Scale 1:100

WORKERS HOUSE 1

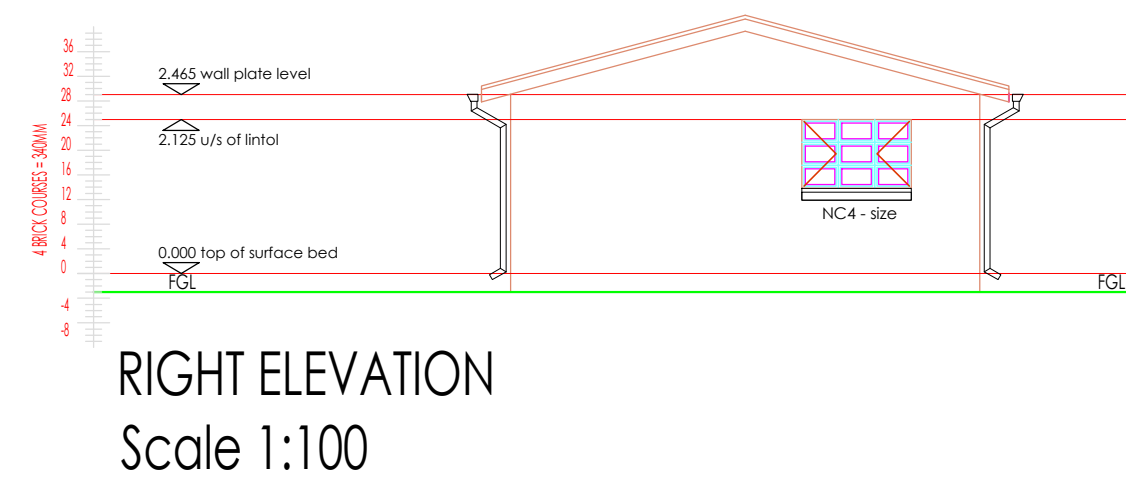
				DRAWING ISSUED FOR				Client  VHEMBE District Municipality	Consultant  MUTEO CONSULTING	APPROVED BY	E.MHANDU	Project MALAMULELE WATER TREATMENT WORKS	Discipline ARCHITECTURAL			
										DESIGNED BY	E.MHANDU		Description WORKERS HOUSE 1 LAYOUT			
										DRAWN BY	E.MHANDU					
										DATE	2025.05.28					
										ECSA	202001408					
								SIGNATURE								
										SCALE	As indicated	SHEET SIZE	A1			
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										VDM/TECH/13/10/2020/01		AR-409				
Revision Schedule				COPY RIGHT RESERVED												



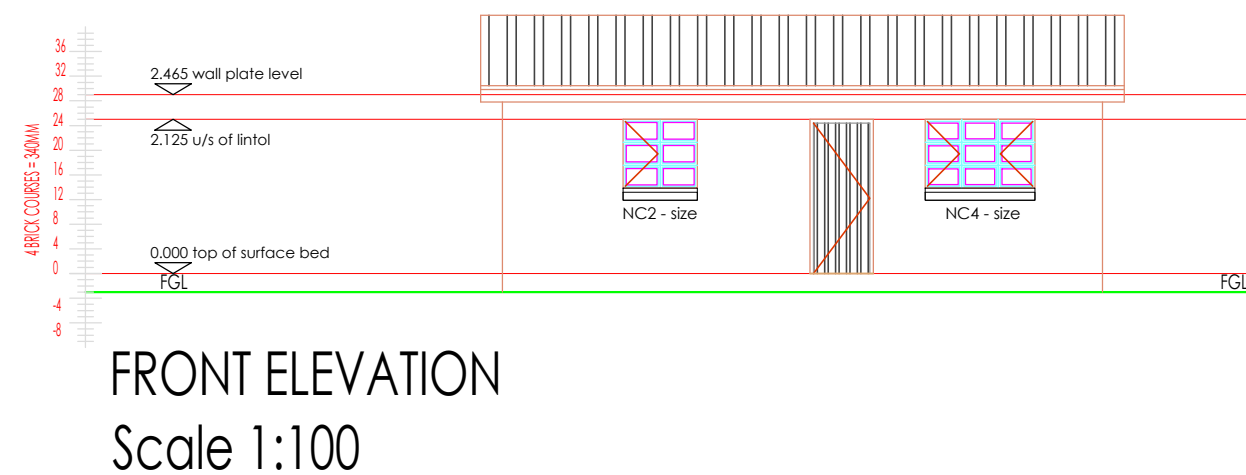
SECTION A - A
Scale 1:100



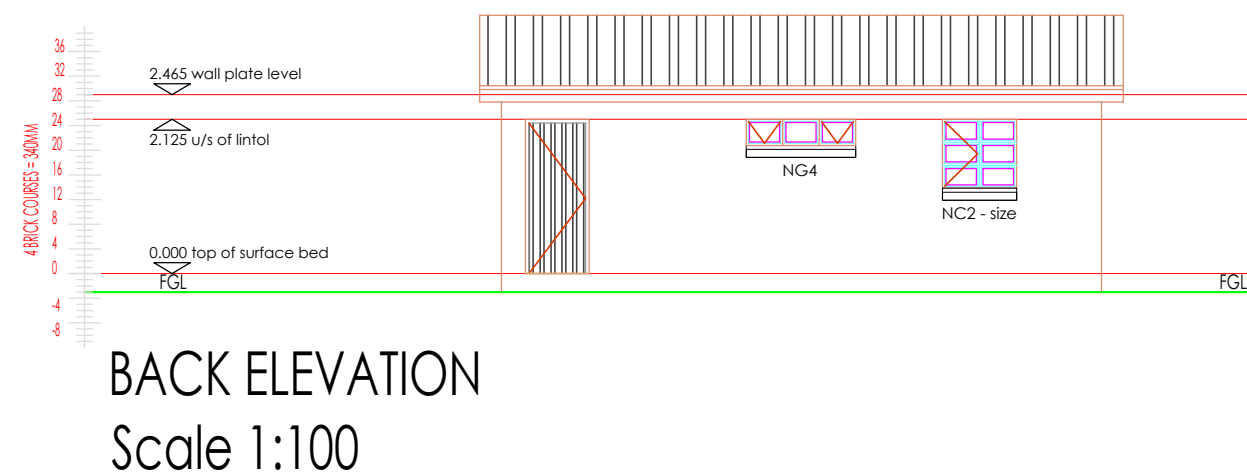
LEFT ELEVATION
Scale 1:100



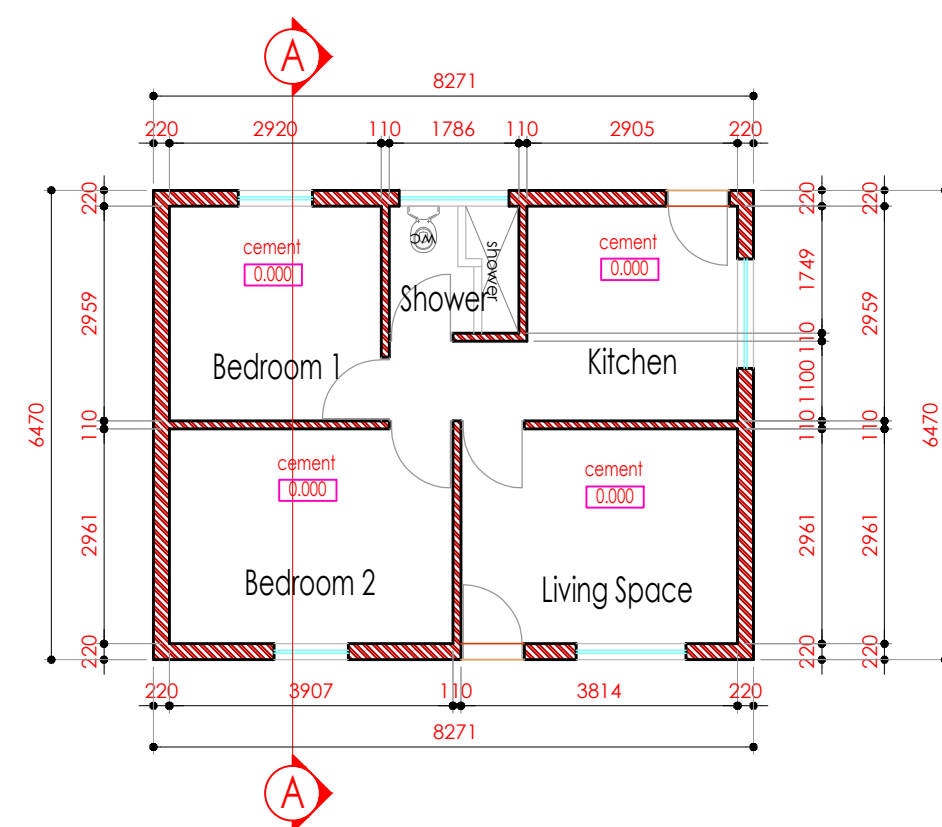
RIGHT ELEVATION
Scale 1:100



FRONT ELEVATION
Scale 1:100



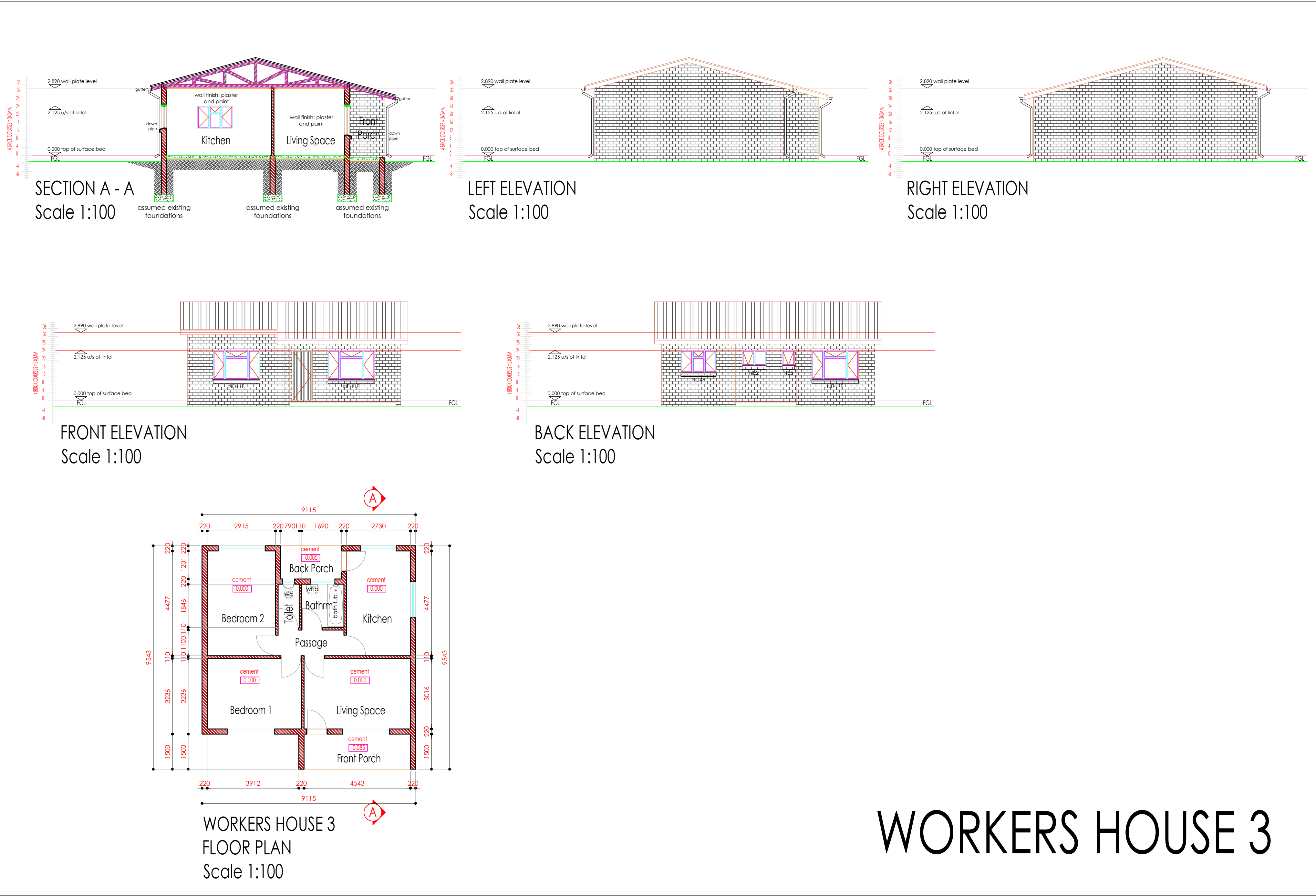
BACK ELEVATION
Scale 1:100



WORKERS HOUSE 2
FLOOR PLAN
Scale 1:100

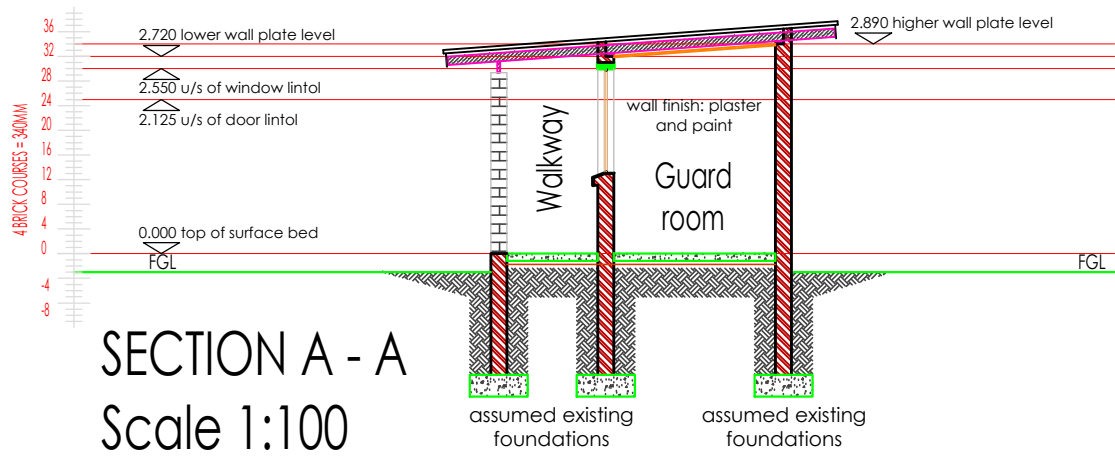
WORKERS HOUSE 2

				DRAWING ISSUED FOR				Client		 VHEMBE District Municipality		Consultant		 MUTEO CONSULTING		<table><tr><td>APPROVED BY</td><td>E.MHANDU</td></tr><tr><td>DESIGNED BY</td><td>E.MHANDU</td></tr><tr><td>DRAWN BY</td><td>E.MHANDU</td></tr><tr><td>DATE</td><td>2025.05.28</td></tr><tr><td>ECSA</td><td>202001408</td></tr><tr><td colspan="2">SIGNATURE</td></tr></table>		APPROVED BY	E.MHANDU	DESIGNED BY	E.MHANDU	DRAWN BY	E.MHANDU	DATE	2025.05.28	ECSA	202001408	SIGNATURE		Project		MALAMULELE WATER TREATMENT WORKS		Discipline		ARCHITECTURAL	
APPROVED BY	E.MHANDU																																				
DESIGNED BY	E.MHANDU																																				
DRAWN BY	E.MHANDU																																				
DATE	2025.05.28																																				
ECSA	202001408																																				
SIGNATURE																																					
																Description		WORKERS HOUSE 2 LAYOUT																			

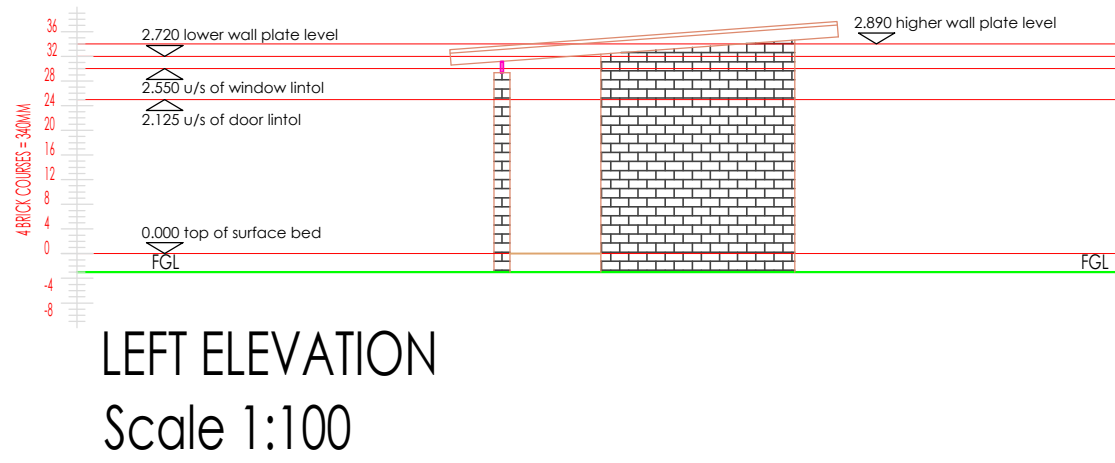


WORKERS HOUSE 3

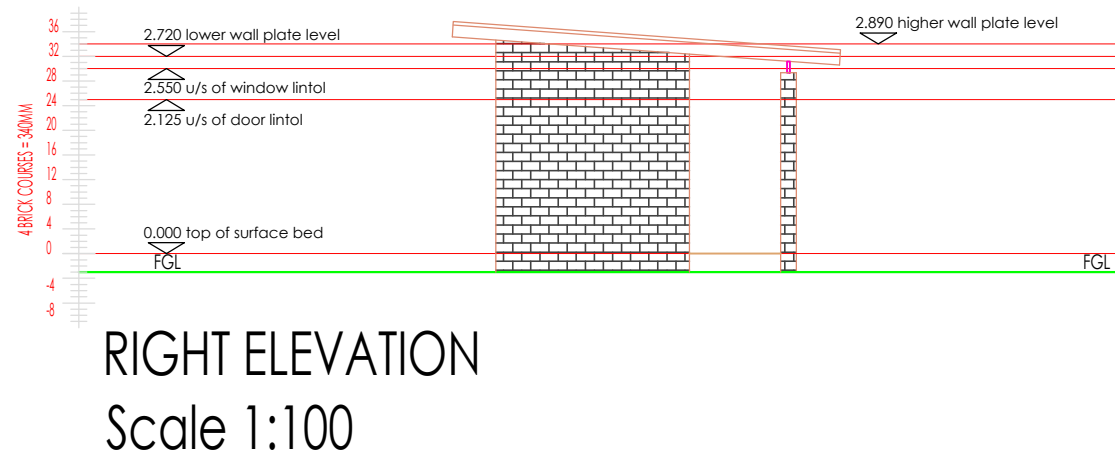
				DRAWING ISSUED FOR				Client 	Consultant 	APPROVED BY		E.MHANDU		Project				Discipline ARCHITECTURAL			
										DESIGNED BY		E.MHANDU									
				DRAWN BY		E.MHANDU															
				DATE		2025.05.28															
				ECSA		202001408				MALAMULELE WATER TREATMENT WORKS				Description WORKERS HOUSE 3 LAYOUT							
				SIGNATURE																	
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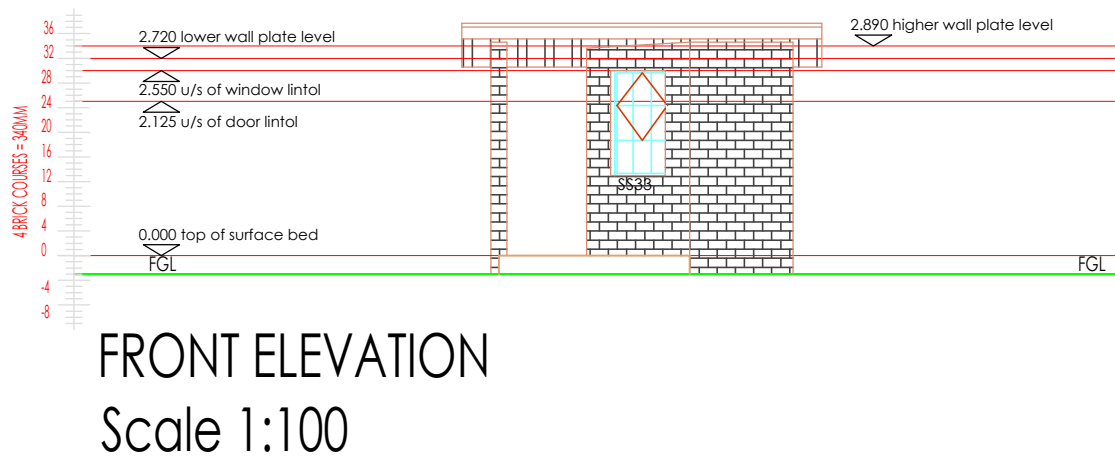
SECTION A - A
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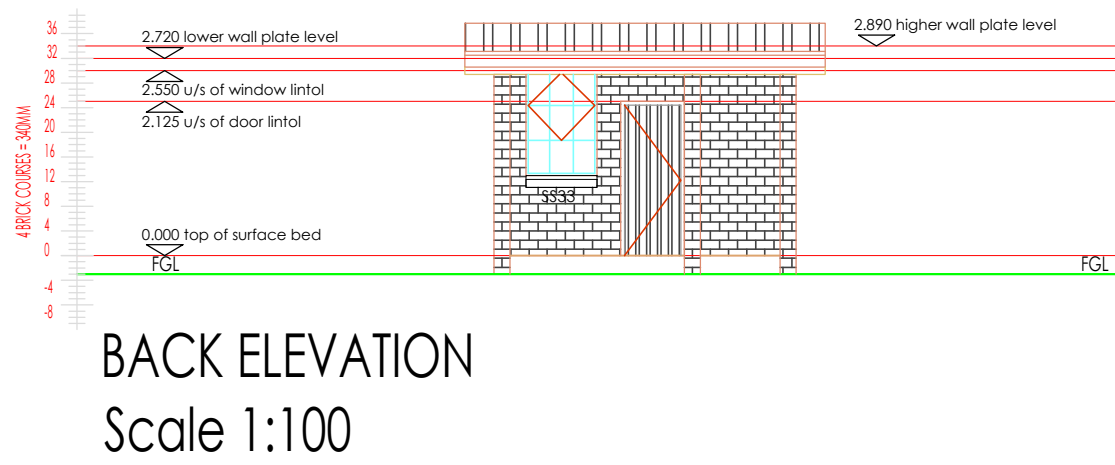
LEFT ELEVATION
Scale 1:100



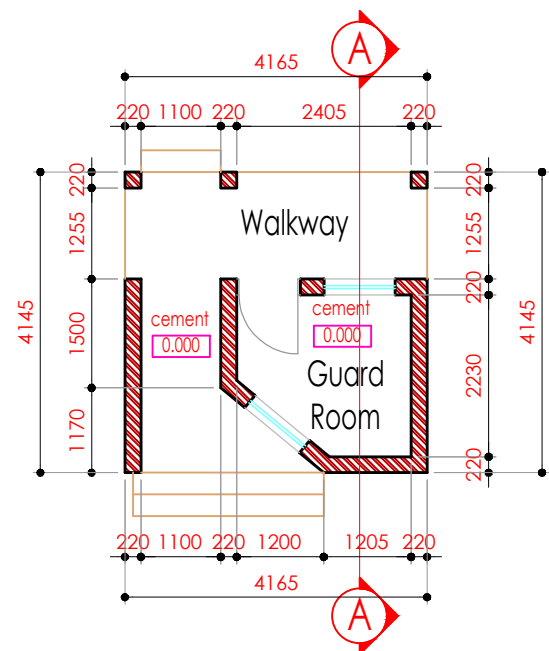
RIGHT ELEVATION
Scale 1:100



FRONT ELEVATION
Scale 1:100



BACK ELEVATION
Scale 1:100



GUARD HOUSE
FLOOR PLAN
Scale 1:100

GUARD HOUSE

				DRAWING ISSUED FOR				Client		Consultant		APPROVED BY		E.MHANDU		Project MALAMULELE WATER TREATMENT WORKS				Discipline ARCHITECTURAL					
												DESIGNED BY		E.MHANDU						Description GUARD HOUSE LAYOUT					
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												DATE		2025.05.28											
														ECSA		202001408									
														SIGNATURE											
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