

BID NUMBER: LDPWRI-B/20289

APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITION OF 12 PIT TOILETS, REFURBISHMENT OF 12 CLASSROOMS, THE CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK AND EXTERNAL WORKS AT MAKHWESE SECONDARY SCHOOL IN PENGE (GA-MOKGOTO VILLAGE), GREATER SEKHUKHUNE DISTRICT.

for

LIMPOPO DEPARTMENT OF EDUCATIONECON (LDOE),

LIMPOPO PROVINCE

FRAMEWORK CATEGORY B (6GB AND ABOVE)

Issued by:

Limpopo Department of Public Works, Roads and Infrastructure Works Towers Building 43 Church Street Polokwane 0700

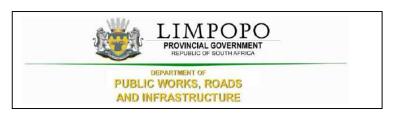
Contact Person: General Queries
Name : Mr NJ Motsopye,
Tel No. : 015 284 7126

Email : motsopyen@dpw.limpopo.gov.za

Technical: Technical QueriesName : Mr K Modjadji
Tel No. : 083 673 5436

Email : ModjadjiM@dpw.limpopo.gov.za

Name of the Bidder :....



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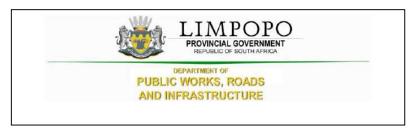
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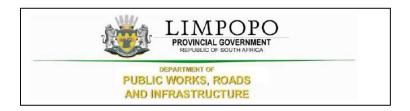
PART T1: TENDERING PROCEDURE

T1.1 Tender Notice and Invitation to Tender

The Limpopo Department of Public Works, Roads and Infrastructure invites tenderers from contractors appointed on the framework agreement on category B for APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITION OF 12 PIT TOILETS, REFURBISHMENT OF 12 CLASSROOMS, THE CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK AND EXTERNAL WORKS AT MAKHWESE SECONDARY SCHOOL IN PENGE (GA-MOKGOTO VILLAGE), GREATER SEKHUKHUNE DISTRICT FOR THE LIMPOPO DEPARTMENT OF EDUCATION (LDOE) for a period of 12 months. It is estimated that tenderers must have a CIDB contractor grading designation of 6 GB or higher.

The conditions of the CIDB Standard for for Indirect Targeting for Enterprise Development through Construction Works Contracts **Gazette Notice No. 36190 of 25 February 2013** will be applicable on this project

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Project Name	APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITION OF 12 PIT TOILETS, REFURBISHMENT OF 12 CLASSROOMS, THE CONSTRUCTION OF MEDIUM ADMINISTRATION BLOCK AND EXTERNAL WORKS AT MAKHWESE SECONDARY SCHOOL IN PENGE (GA-MOKGOTO VILLAGE), GREATER SEKHUKHUNE DISTRICT FOR THE LIMPOPO DEPARTMENT OF EDUCATION (LDOE)) FOR A PERIOD OF 12 MONTHS.					
Tender Number	LDPWRI- B/20289					
Tender documents availability		of Public Works, Roads and Infrastructure website				
Address for submission	DEPARTMENT OF PU	JBLIC WORKS, ROADS & INFRASTRUCTURE.				
of tenders						
	Physical address: Corr	ner River and Blaauwberg Streets, Ladanna, 0699.				
Closing date of the	As per Tender invite					
tender						
Closing time of the tender	As per Tender invite					
Compulsory briefing	Yes ⊠ No □					
meeting (Tenderers must	Mantinguia	As you Tanday invite				
sign the attendance register	Meeting venue	As per Tender invite				
in the name of the tendering						
entity. Addenda (if any) will						
be issued only to those	Date	As per Tender invite				
tendering entities appearing	Time:	As per Tender invite				
on the attendance register)	-					
Evaluation criteria		th mandatory or compulsory requirements				
		ent on current projects				
	3. Price					
	4. Preference					
Mandatory or		e appointed on category B registered with the				
Compulsory		Development Board (CIDB) with designation of 6 GB				
Requirements (failure to	or higher than a contractor grading designation determined in accordance					
submit or comply with these	with the sum tendered, or a value determined in accordance with Regulation					
requirements will lead to	25 (1B) or 25(7A) of the	e Construction Industry Development Regulations are				
automatic disqualification)	eligible to have their tenders evaluated					
	Priced Bills of Quantities					
	SBD 1.					
	Declaration on the stat	us of Administration compliance.				
	Completed and signed	Form of Offer				
	Completed and digited Form of One					



T1.2 Tender Data

Clause number	Tender Data
	The conditions of tender are the Standard Conditions of Tender as contained in Annex C of Board Notice 423 of 2019 in Government Gazette No. 42622 of 08 August 2019, Construction Industry Development Board (CIDB) Standard for Uniformity in Construction Procurement. (See www.cidb.org.za) which are reproduced without amendment or alteration for the convenience of tenderers as an Annexure to this Tender Data.
	The Standard Conditions of Tender make several references to the Tender Data for details that apply specifically to this tender. The Tender Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the standard conditions of tender. Each item of data given below is cross-referenced to the clause in the Standard Conditions of Tender to which it mainly applies.
	The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts Gazette Notice <i>No. 36190 of 25 February 2013</i> . In this case, contractor shall provide a <i>minimum Contract Participation Goal (CPG) of 5%</i> of the total project value and develop targeted enterprises stated under C3 of this document.
	The following variations, amendments and additions to the Standard Conditions of Tender as set out in the Tender Data below shall apply to this tender. Add the following to clauses in Standard Conditions of Tender:
C.1.1	The Employer is the Department of Public Works, Roads and Infrastructure

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	C2.2 Bills of Quantities
	Part 3: Scope of work
	C3.1 Special Notes to Bidders
	C3.2 OHS Specifications
	Part 4: Site information C4 Drawings
	O4 Diawings
C.1.4	The employer's representative is:
	Name : Mr K Modjadji
	Tel No. : 083 673 5436
	Email : ModjadjiM@dpw.limpopo.gov.za
	However, all communications related to this bid should be directed to the persons indicated under
	Enquires on this tender document.
	Attention is also drawn to the fact that verbal information, given by the Employer's agent during site
	visits/clarification meetings or at any other time prior to the award of the Contract, will not be regarded
	as binding on the Employer. Only information issued formally by the Employer in writing to Tenderers
	will be regarded as amending the Tender Documents.
C.1.5	The employer reserve to cancel the tender prior to the award of the tender.
C1.6.2	A competitive negotiation procedure will not be followed.
C1.6.3	A two-stage system will not be followed.
C.2.1	Eligibility in respect of CIDB grading
	Only tenderers who are appointed on framework agreement category A and registered with the
	Construction Industry Development Board (CIDB) with designation of 6 GB or higher than a
	contractor grading designation determined in accordance with the sum tendered, or a value
	determined in accordance with Regulation 25 (1B) or 25(7A) of the Construction Industry
	Development Regulations, are eligible to have their tenders evaluated.
C2.2	Cost of tendering
	The tenderer accept that, unless otherwise stated in the tender data, the employer will not
	compensate the tenderer for any costs incurred in the preparation and submission of a tender offer,
	including the costs of any testing necessary to demonstrate that aspects of the offer complies with
	requirements.

C.2.7	Compulsory site briefing
	A compulsory briefing meeting will be held as per Tender invite
	Tenderers must sign the attendance list in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance list.
C.2.11	Alterations to the documents
	Bidders are required to 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
C.2.12	Alternative tender offer
	No alternative tender offer is permitted in this tender.
C.2.13.2	Replace sub-clause C.2.13.2 with the following; Return all returnable documents to the employer after completing them in their entirety by writing in non-erasable black ink (Black pen)
C.2.13.3	Parts of each tender offer communicated on paper shall be submitted as an original
C.2.13.4	The tender shall be signed by a person duly authorized to do so.
C.2.13.5	The employer's details and address for delivery of tender offers and identification details that are to be shown on each tender offer package are:
	Location of tender box: DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE. Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699 Identification details: Sealed Tender with Tender reference number, Title of Tender and the closing date and time of the tender.
C.2.15.1	The closing time for submission of tender offers is as stated in the Tender Notice and Invitation to Tender. Telephonic, telegraphic, telex, facsimile or e-mailed tender offers will not be accepted.
C.2.16.1	The tender offer validity period is 12 weeks or 90 days.
C.2.16.2	The tender accepts that a tender submission that has been submitted to the employer may only be withdrawn or substituted by giving the employer's agent written notice before the closing time for tenders that a tender is to be withdrawn or substituted. If the validity period stated in C.2.16.1 lapses before the employer evaluating tender, the contractor reserves the right to review the price based on Consumer Price Index (CPI).
C.3.1	The tenderer is required to indicate how they claim points for each preference point system and attached relevant supporting documents. The specific goals for claiming of preference points include the following: - Persons who had no franchise in national elections prior to 1983 and 1993 - Women - Disabled persons - Promotion of SMMEs - Enterprises located in Limpopo Province - Promotion of youth - South African owned enterprises

	CIDB Grading Certificate						
	Tenders are required to provide proof of registration with the CIDB register of contractors indicating the category of registration, grading as well as the CRS number of the tenderer.						
	Letter of Good Standing						
	Tenderer's are required to submit, bound with the tender submission, a letter of good standing from the compensation commissioner indicating that the bidder is in good standing.						
C3.2	Notwithstanding any requests for confirmation of receipt of Addenda issued, the tenderer shall be deemed to have received such addenda if the employer can show proof of transmission thereof (or a notice in respect thereof) via electronic mail, facsimile or registered post.						
C.3.4.1	Tenders will not be opened immediately after the closing time for tenders.						
C.3.11	The tenderers will be evaluated in four stages (i) Stage 1: Compliance with mandatory requirements as stated in Part T1.1 (ii) Stage 2: Risk assessment on current projects (iii) Stage 3: Price (iv) Stage 4: Preference						
	The technical capacity (functionality) of the contractors will not be evaluated any further during evaluation of the RFQ. However, the contractors will be required to declare the status of their key staff and any administrative compliance. In cases where there are changes in the key staff, the contractor should provide CVs and qualifications of the new staff to LDPWR&I. The new staff should have similar skills, qualifications and experience as the staff submitted during tender. Similarly, the contractors will be expected to provide an update on any changes in their administrative compliances – and should submit the required SBD document/forms in such cases.						
	The award will only be issued to contractors with valid Tax Clearance certificates, active CIDB grading and the contractor who meets all the legislative requirement – this shall be verified by SCM in line with the departmental SCM Policy.						
	The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade. ¹						
	a) Stage 1: Administrative Compliance: The Compliance or compulsory documents and returnables are detailed in Section T.2.1 of this tender document. Failure to submit, complete or comply with these requirements will lead to automatic disqualification.						
	b) Stage 2: Risk assessment on current projects						
	The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade.						

Stage 3 and 4:

The procedure for final evaluation of responsive tenders is Method 2 (Financial offer and preference). The total number of tender evaluation points (T_{EV}) shall be determined in accordance with the following formula.

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

a) N_{FO} is the number of tender evaluation points awarded for the financial offer made. The score for financial offer is calculated using the following formula:

$$P = A * \left(1 - \frac{(P_o - P_m)}{P_m}\right)$$

Where:

A is 80 since the estimated financial value of works inclusive of VAT is equals or is less than R 50,000,000.00.

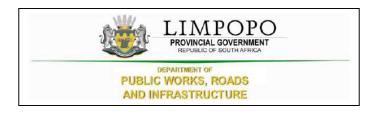
P is the points awarded to the bid under consideration

 P_m is the lowest Comparative bid price

 P_o is the comparative price under consideration

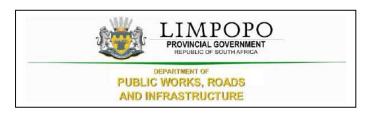
b) N_P is the number of tender evaluation points awarded for preferences claimed in accordance with the Preferencing Schedule in 3.18

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PART T2: RETURNABLE DOCUMENTS

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T2.1: LIST OF RETURNABLE DOCUMENTS

The following documents will form part of the documents submitted to the Contractors as part of the Request for Proposals:

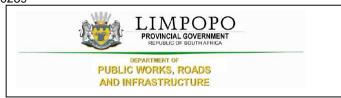
- 2.1 Fully completed Form of Offer
- 2.2 Bills of Quantities
- 2.3 Record of Addenda to tender documents (if applicable)
- 2.4 Proposed amendments and qualifications (if applicable)
- 2.5 Proof of specific goal for award of the preference points as determined on the Request for Proposal
- 2.6 SBD 1.
- 2.7 SBD 6.1
- 2.8 Declaration on the status of Administration compliance.
- 2.9 CIDB grading certificate
- 2.10 CSD Report
- 2.11 Tax clearance certificate
- 2.12 Declaration of current projects

Failure by the service provider to submit or complete item 2.1, 2.2, 2.3, 2.4, 2.6, 2.8, and 2.12 will render their proposal not responsive and will not be considered.

Failure by the service provider to fully complete SBD 6.1 item 4.3 to 4.6 (Declaration with regard to company/firm) will render their proposal not responsive and will not be considered.

The bidder should also not appear on the National Treasury's list of black listed entities.

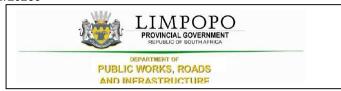
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T 2.2: RETURNABLE SCHEDULE

	Document Name	Returi docui	
1.	Fully completed Form of Offer	□Yes	□ No
2.	Priced Bills of Quantities	□Yes	□ No
3.	Record of Addenda to tender documents (if applicable)	□Yes	□ No
4.	Proposed amendments and qualifications (if applicable)	□Yes	□ No
5.	Proof of specific goals for award of the preference points	□Yes	□ No
6.	SBD 1. Invitation to Tender	□Yes	□ No
7.	SBD 6.1: Reference Points claim form in terms of the Preferential Procurement Regulations 2022 or amended	□Yes	□ No
8.	Declaration on the status of Administration compliance.	□Yes	□ No
9.	Proof of CIDB class grading: 6GB or higher.	□Yes	□ No
10.	CSD Summary report	□Yes	□ No
11.	Original tax clearance certificate or tax pin	□Yes	□ No
12.	Declaration of current projects	□Yes	□ No

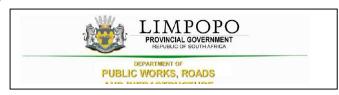
CONTRACT No. LDPWRI-B/20289



Declaration on the status of administrative compliance

Р	lease indicate, by	circling eitner Yes or No, whethe	r the administrative informat	ion submitted with the original
fr	amework tender	documents have changed or no	ot. If yes, kindly provide the	e particulars below with any
sı	upporting docum	ents.		
• •				
•				
	Signed		Date	
	Name		Position	
	rame		1 OSITION	
	Enterprise			

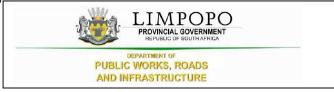
CONTRACT No. LDPWRI-B/20289



Record of Addenda to tender documents

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
Attac	h additional pages	more space is required.
	. •	
Signe	ed	Date
		Position

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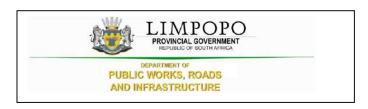
Proposed amendments and qualifications

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 5.8 of SANS 10845-3 regarding the employer's handling of material deviations and qualifications.

ge Clause	or item Proposal			
Signed	1	Da	te	
Name		Po:	sition 	

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SBD 1 PART A: INVITATION TO BID

YOU ARE HERE INFRASTRUCTU	eby invited to bi Ire	D FOR REQUIREM	IENTS OF T	HE LIMPOPO	DEPARTMENT	OF PU	BLIC WORKS,	ROADS AND
			CLOSING D	DATE	As per Tender			As per Tender
BID NUMBER:	LDPWRI-B/20289				Advert		NG TIME:	Advert
DESCRIPTION REFURBISHMENT AND ADDITIONS AT MAKHWESE SECONDARY SCHOOL IN PENGE (GA-MOKGOTO VILLAGE), GREATER SEKHUKHUNE DISTRICT								
BID RESPONSE	DOCUMENTS MAY E	BE DEPOSITED IN 1	THE BID BOX	SITUATED A	AT (STREET ADD	RESS)		
	T OF PUBLIC WO							
Physical addre	ess: Corner River	and Blaauwberg	Streets, La	idanna, 069	99.			
BIDDING PROCE	DURE ENQUIRIES N		ТО					
CONTACT PERS	ON	Mr. NJ Motsopye	<u> </u>					
TELEPHONE NU	MBER	0152847126	E-MAIL A	DDRESS		motsop	yen@dpw.limpo _l	o.gov.za
CONTACT PERS	ON (TECHNICAL)	Mr. K Modjadji	1					
TELEPHONE NU		083 673 5436	E-MAIL A	DDRESS		Modjad	jiM@dpw.limpop	o.gov.za
SUPPLIER INFO								
NAME OF BIDDE								
POSTAL ADDRE								
STREET ADDRE								
TELEPHONE NUMBER CODE NUMBER								
CELLPHONE NU								
E-MAIL ADDRES								
VAT REGISTRAT	TION NUMBER PLIANCE STATUS	TAX		1	CENTRAL			
SUPPLIER COM	PLIANCE STATUS	COMPLIANCE		OR	SUPPLIER			
		SYSTEM PIN:			DATABASE No	: MA	4 A	
				T				
REPRESENTA	E ACCREDITED				I A FOREIGN UPPLIER FOR	THE	□Yes	□No
SOUTH AFRIC		□Yes	□No		SERVICES /W		TIE VEO ANOV	ED THE
	VICES /WORKS	[IF YES ENCLOSE	E PROOF1	OFFERE			[IF YES, ANSV QUESTIONNA	
OFFERED?		[,
QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS								
IS THE ENTITY A	A RESIDENT OF THE	REPUBLIC OF SOL	JTH AFRICA	(RSA)?			_ Y	ES NO
DOES THE ENTI	TY HAVE A BRANCH	IN THE RSA?					□ Y	ES NO
DOES THE ENTI	DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?					∕ES □ NO		
DOES THE ENTI	TY HAVE ANY SOUR	CE OF INCOME IN	THE RSA?					ES NO
IS THE ENTITY L	IABLE IN THE RSA F	OR ANY FORM OF	TAXATION?					ES 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 BELOW.								

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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 IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.
- 1.3. THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2022, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
- 1.4. THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM.

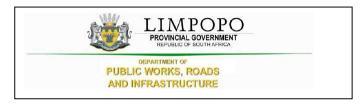
2. TAX COMPLIANCE REQUIREMENTS

- 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 VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
- 2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.
- 2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
- 2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
- 2.6 WHERE NO TCS PIN IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
- 2.7 NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.

SIGNATURE OF BIDDER:	
CAPACITY UNDER WHICH THIS BID IS SIGNED: (Proof of authority must be submitted e.g. company resolution)	
DATE:	

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SBD 6.1

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

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

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

1. GENERAL CONDITIONS

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

1.2 To be completed by the organ of state

(delete whichever is not applicable for this tender).

- a) The applicable preference point system for this tender is the 90/10 preference point system.
- b) The applicable preference point system for this tender is the 80/20 preference point system.
- c) Either the 90/10 or 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.
- 1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:
 - (a) Price; and
 - (b) Specific Goals.

1.4 To be completed by the organ of state:

The maximum points for this tender are allocated as follows:

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

- 1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.
- 1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. **DEFINITIONS**

- (a) "tender" means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;
- (b) "price" means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) "rand value" means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) "tender for income-generating contracts" means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) "the Act" means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

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

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

80/20 90/10

$$Ps = 80\left(1 - rac{Pt - P\,min}{P\,min}
ight)$$
 or $Ps = 90\left(1 - rac{Pt - P\,min}{P\,min}
ight)$

Where

Ps Points scored for price of tender under consideration

Pt Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

POINTS AWARDED FOR PRICE 3.2.1.

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

$$Ps = 80\left(1+rac{Pt-P\,max}{P\,max}
ight)$$
 or $Ps = 90\left(1+rac{Pt-P\,max}{Pmax}
ight)$

Where

Ps Points scored for price of tender under consideration

Pt Price of tender under consideration Price of highest acceptable tender Pmax =

POINTS AWARDED FOR SPECIFIC GOALS 4.

- 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-

4.3.

(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 20 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)
Persons who had no franchise in national elections prior to 1983 and 1993 (Attach certified copy of South African ID as proof)	2	6		
Women (Attach Director's certified copy of South African ID as proof + company registration documents)	1	3		
Disabled persons (Attach letter from a Health Professional as proof)	1	2		
Promotion of SMMEs (Attach latest financial statement as proof)	1	2		
Enterprises located in Limpopo Province (Attach proof of address / Lease agreement as proof)	2	4		
Promotion of youth (Attach Director's certified copy of South African ID as proof)	1	1		
South African owned enterprises (Attach Director's certified copy of South African ID as proof + company registration documents)	2	2		

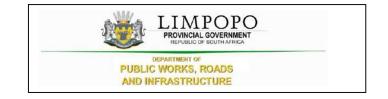
DECLARATION WITH REGARD TO COMPANY/FIRM

4.4.	Name of company/firm				
4.5.	Company registration number:				
4.6.	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] 				

- 4.7. 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)



DECLARATION OF CURRENT PROJECTS

Current value refers to current value of projects for both General Building (GB) and Civil Engineering (CE).

Please list the current projects which your company is busy executing in the table below.

If no projects at the moment the tender must indicate/write on this table.

Misrepresentation of facts will render your bid non-responsive.

Table 1 List of current projects executed by the bidder

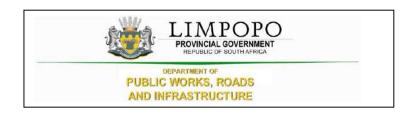
- 1. Do you have the current projects being executed Yes/No?
- 2. Please note that it is compulsory to answer the question above and if the answer is yes, complete the table below. Failure by the service provider/tenderer to answer the question above or complete the table below will render their proposal not responsive and will not be considered.

Project Description	Project Value	Start date	Planned end date	Client Name	Contact Person number

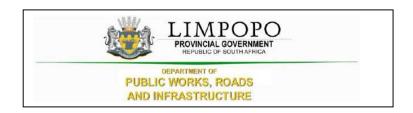
Signed	 Date	
Name	 Position	
Enterprise		



THE CONTRACT



PART C1: AGREEMENT AND CONTRACT DATA



C1.1. FORM OF OFFER AND ACCEPTANCE

Offer

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

REFURBISHMENT AND ADDITIONS AT MAKHWESE SECONDARY SCHOOL IN PENGE (GAMOKGOTO VILLAGE), GREATER SEKHUKHUNE DISTRICT.

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 the 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 PRICE INCLUSIVE OF VALUE ADDED TAX IS (CONTRACT PRICE)

nd (in words); R
figures) R
is offer may be accepted by the employer by signing the acceptance part of this form of offer and acceptance direturning one copy of this document to the tenderer before the end of the period of validity stated in the der data, whereupon the tenderer becomes the party named as the contractor in the conditions of contract ntified in the contract data.
ignature(s)
ame(s)
apacity
or the enderer:
ame & gnature of itness Date

Acceptance (To be completed by the employer – not the bidder)

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

The terms of the contract, are contained in:

Part C1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)

Part C2 Pricing Data

Part C3 Scope of Work

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Returnable 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 Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule.

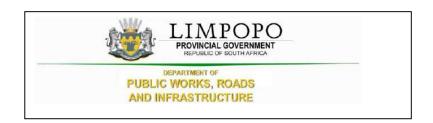
The tenderer shall within two weeks of receiving a completed copy of this agreement, including the Schedule of Deviations (if any), contact the *Employer's* agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the *conditions* of contract identified in the Contract Data. Failure to fulfil any of these obligations in accordance with those terms shall constitute a repudiation of this agreement.

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

For the Em	ployer				
Signature					
Name					
Capacity					
Name and address of organization					
Signature and Name of Witness					
Signature					
Name					
Capacity					

Schedule of Deviations

Details .	
2 Subject .	
Details .	
Details .	
foregoing s addenda th offer agree	y authorised representatives signing this agreement, the <i>Employer</i> and the Tenderer agree to and accept the chedule of deviations as the only deviations from and amendments to the documents listed in the Tender Data and the returnable schedules, as well as any confirmation, clarification or changes to the terms of the d by the Tenderer and the <i>Employer</i> during this process of offer and acceptance.
issue of the	ssly agreed that no other matter whether in writing, oral communication or implied during the period between the tender documents and the receipt by the tenderer of a completed signed copy of this Agreement shall have any effect in the contract between the parties arising from this agreement.



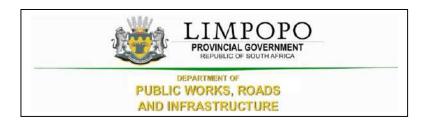
C2.1 CONTRACT DATA

The Conditions of Contract are clauses 1 to 41 of the **JBCC Series 2000 Principal Building Agreement (Edition 4.1 of March 2005)** published by the Joint Building Contracts Committee.

Copies of these conditions of contract may be obtained from the Association of South African Quantity Surveyors (011-3154140), Master Builders Association (011-205-9000; 057- 3526269) South African Association of Consulting Engineers (011-4632022) or South African Institute of Architects (051-4474909; 011-4860684; 053-8312003;)

The JBCC Principal Building Agreement makes several references to the Contract Data for specific data, which together with these conditions collectively describe the risks, liabilities, and obligations of the contracting parties and the procedures for the administration of the Contract. The Contract Data shall have precedence in the interpretation of any ambiguity or inconsistency between it and the JBCC Principal Building Agreement.

The contractor shall achieve in the performance of the contract the Contract Participation Goals (CPG) relating to the engagement of targeted enterprises as established in the CIDB Standard for Indirect Targeting for Enterprise Development through Construction Works Contracts Gazette Notice No. 36190 of 25 February 2013."



PART C2: PRICING DATA

C2.1 Pricing instruction

- The Bills of Quantities have been drawn up in accordance with the Standard System of Measuring Building Work in accordance with the provisions of the Model Bills of Quantities or Electrical Work, published by the South African Association of Quantity Surveyors, (July, 2005).
- The agreement is under the JBCC N/S Subcontractor Agreement for use with the JBCC PBA (Edition 4.1 code 2101 March 2005) form of contract with Preliminaries (Code 2103 May 2005) incorporating the State Provisions of cl 41.0.
- It will be assumed that prices included in the Bills of Quantities are based on Acts, Ordinances, Regulations, By-laws, International Standards and National Standards that were published 28 days before the closing date for tenders.
- The prices and rates in these Bills of Quantities are fully inclusive prices for the work described under the items. Such prices and rates cover all costs and expenses that may be required in and for the execution of the work described in accordance with the provisions of the Scope of Work, and shall cover the cost of all general risks, liabilities, and obligations set forth or implied in the Contract Data, as well as overhead charges and profit. These prices will be used as a basis for assessment of payment for additional work that may have to be carried out.
- An item against which no price is entered will be considered to be covered by the other prices or rates in the Bills of Quantities. A single lump sum will apply should a number of items be grouped together for pricing purposes.
- The Contract Data and the standard form of contract referenced therein must be studied for the full extent and meaning of each and every clause set out in Section 1 (Preliminaries) of the Bills of Quantities.
- The Bills of Quantities is not intended for the ordering of materials. Any ordering of materials, based on the Bills of Quantities, is at the Contractor's risk.
- The bidder shall set aside a minimum of 5 % of the project value for sub-contractor/s and determine the amount to be paid for the Contract Participation Goal (CPG).



PART C2.2: BILLS OF QUANTITIES

Item No

SECTION NO.1

BILL NO.1

MEANING OF TERMS "TENDER / TENDERER"

Any reference to the words "Tender" or Tenderer" herein and/or in any other documentation shall be construed to have the same meaning as the words "Bid" or "Bidder"

PRELIMINARIES

The JBCC Preliminaries Edition 4.1 Code 2103, May 2005 edition for use with the JBCC Principal Building Agreement Edition 4.1 Code 2101, March 2005 is taken to be incorporated herein. The tenderer is deemed to have referred to these documents for the full intent and meaning of each clause. These clauses are referred to by number and heading only. Where standard clauses or options are not applicable to the contract such modifications or corrections as are necessary are given under each relevant clause. Where an item is not relevant to this specific contract such item is marked. "N/A" signifying "Not Applicable".

PRICING OF PRELIMINARIES

Should Option A, as set out in clause B10.3.1 hereinafter be used for the adjustment of preliminaries then each item priced is to be allocated to one or more of the three categories Fixed, Value Related or Time Related and the respective amounts entered in the spaces provided under each item.

Items not priced in these Preliminaries shall be deemed to be included elsewhere in these Bills of Quantities.

SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT

Carried to Collection

Section No. 1 **PRELIMINARIES** Bill No. 1

DE	FINITIONS.		
A1	DEFINITIONS AND INTERPRETATIONS		
Clau	ise 1.0 Clause		
1.1	Definition of "Commencement Date" is added:		
agr	DMMENCEMENT DATE" means the date that the eement , made in terms of the Form of Offer and eptance, comes into effect.		
	use 1.1 Definition of "Construction Period" is amended by acing it with the following:		
on t	DNSTRUCTION PERIOD" means the period commencing the commencement date and ending on the date of practical upletion.		
	use 1.1 Definition of "Interest" is amended by replacing it the following:		
whe	TEREST means the interest rates applicable on this contract, wither specifically indicated in the relevant clauses or not, will n terms of the legislation of the Republic of South Africa, in particular.		
(a)	In respect of interest owed by the employer, the interest rate as determined by the Minister of Justice and Constitutional Development, from time to time, in terms of section 1(2) of the Prescribed Rate of Interest Act, 1975 (Act No. 55 of 1975), will apply; and		
(b)	in respect of interest owed to the employer , the interest rate as determined by the Minister of Finance, from time to time, in terms of section 80(1)(b) of the Public Finance Management Act, 1999 (Act No. 1 of 1999), will apply.		
Clau	se 1.6.4 is amended by replacing it with the following:		
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Section No. 1 PRELIMINARIES Bill No. 1

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	No clause		
	Fixed:Value related:		
	Time related:	item	
	OBJECTIVE AND PREPARATION		
2	A2 OFFER, ACCEPTANCE AND PERFORMANCE		
	Clause 2.0		
	Fixed:Value related: Time related:	item	
	Time reduced:	icem	
3	A3 DOCUMENTS		
	Clause 3.0		
	Clause 3.7 is amended by the addition of the following:		
	The contractor shall supply and keep a copy of the JBCC Series 2000 Principal Building Agreement and Preliminaries applicable		
	to this contract on the site, to which the employer, principal agent and agents shall have access at all times		
	Fixed:Value related:		
	Time related:	item	
4	A4 DESIGN RESPONSIBILITY		
	Clause 4.0		
	Fixed:Value related:		
	Time related:	item	
5	A5 EMPLOYEES AGENTS		
	Clause 5.0		
	Clause 5.1.2 is amended to include clauses 32.6.3,34.3 and 34.4		
	Fixed:Value related:		
	Time related:	item	
	Carried to Collection	R	

Section No. 1 PRELIMINARIES Bill No. 1

6	A6 SITE REPRESENTATIVE		
O	Clause 6.0		
	Fixed:Value related:		
	Time related:	item	
7	A7 COMPLIANCE WITH REGULATION		
	Clause 7.0		
	Note: The provisions herein include inter alia, compliance with all the requirements set out in the Construction Regulations, 2003 issued under the Occupational Health and Safety Act, 1993 (Act No 85 of 1993), and in particular with Regulation 5(1) requiring the compilation of a health and safety plan, as well as Regulation 6(1) requiring the appointment of a construction supervisor		
	See also clause C10 of Section C - Specific Preliminaries		
	Fixed:Value related:	item	
8	A8 WORKS RISK		
	Clause 8.0		
	Fixed:Value related: Time related:	item	
9	A9 INDEMNITIES		
	Clause 9.0		
	Fixed:Value related:	item	
LO	A10 WORKS INSURANCES		
	Fixed:Value related:		
	Time related:		
	Clause 10.0		
	Clause 10.0 is amended by the addition of the following clauses:	item	
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10.5	Damage to the Works		
(a)	Without in any way limiting the contractors obligations in terms of the contract, the contractor shall bear the full risk of damage to and/or destruction of the works by whatever cause during construction of the works and hereby indemnifies and holds harmless the employer against any such damage. The contractor shall take such precautions and security measures and other steps for the protection and security of the works as the contractor may deem necessary		
(b)	The contractor shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair of works		
(c)	The employer shall carry the risk of damage to or destruction of the works and material paid for by the employer that is the result of the excepted risks as set out in 10.6		
(d)	Where the employer bears the risk in terms of this contract, the contractor shall, if requested to do so, reinstate any damage or destroyed portions of the works and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof		
	Carried to Collection	R	

).O II	njury to Persons or loss of or damage to Properties	
a)	The contractor shall be liable for and hereby indemnifies the employer against any liability, loss, claim or proceeding whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever arising out of or in the course of or caused by the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liable	
(b)	The contractor shall be liable for any hereby indemnifies the employer against any liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the site , whether belonging to or under the control of the employer or any other body or person, arising out of or in the course of or by reason of the execution of the works unless due to any act or neglect of any person for whose actions the employer is legally liable	
(c)	The contractor shall, upon receiving a contract instruction from the principal agent , cause the same to be made good in a perfect and workmanlike manner at his own cost and in default therefore the employer shall be entitled to cause it to be made good and to recover the cost thereof from the contractor or to deduct the same from amounts due to the contractor	
(d)	The contractor shall be responsible for the protection and safety of such portions of the premises placed under his control by the employer for the purpose of executing the works until the issue of the certificate of practical completion	
(e)	Where the execution of the works involves the risk of removal of or interference with support to adjoining properties including land or structures or any structures to be altered or added to, the contractor shall and will remain adequately insured or insured against the death of or injury to persons or damage to such property consequent on such removal or interference with the support until such portion of the works has been completed	
	Carried to Collection	

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(f) The contractor shall at all times proceed immediately at his own cost to remove or dispose of any debris and to rebuild, restore, replace and/or repair such property and to execute the works
10.7 High risk insurance
In the event of the project being executed in a geological area classified as a High Risk Area, that is an area which is subject to highly unstable subsurface conditions that might result in catastrophic ground movement evident by sinkhole or doline formation the following will apply:
10.7.1 Damage to the works
The contractor shall, from the commencement date of the works until the date of the certificate of practical completion bear the full risk of and hereby indemnifies and holds harmless the employer against any damage to and/or destruction of the works consequent upon a catastrophic ground movement as mentioned above. The contractor shall take such precautions and security measures and other steps for the protection of the works as he may deem necessary
When so instructed to do so by the principal agent, the contractor shall proceed immediately to remove and/or dispose of any debris arising from damage to or destruction of the works and to rebuild, restore, replace and/or repair the works at the contractor's own costs
10.7.2 Injury to persons or loss of or damage to property
The contractor shall be liable for and hereby indemnifies and holds harmless the employer against any liability, loss, claim or proceeding arising at any time during the period of the contract whether arising in common law or by statute, consequent upon personal injuries to or the death of any person whomsoever resulting from, arising out of or caused by a catastrophic ground movement as mentioned above
The contractor shall be liable for and hereby indemnifies the

Carried to Collection

	10.7.3 It is the responsibility of the contractor to ensure that he has adequate insurance to cover his risk and liability as mentioned in 10.7.1 and 10.7.2. Without limiting the contractors obligations in terms of the contract, the contractor shall, within twenty-one (21) calendar days of the commencement date but before commencement of the works, submit to the employer proof of such insurance policy, if requested to do so 10.7.4 The employer shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the contractors default of his obligations as set out in 10.7.1; 10.7.2 and 10.7.3. Such losses or damages may be recovered from the contractor or by deducting the same from any amount still due under this contract or under any other contract presently or hereafter existing between the employer		
	and the contractor and for this purpose all these contracts shall		
	be considered one indivisible whole		
	Fixed:Value related:		
	Time related:	item	
11	A11 LIABILITY INSURANCES		
	Clause 11.0		
	Final: Value valetad:		
	Fixed:Value related: Time related:	item	
	Time redeed:	licin	
12	A12 EFFECTING INSURANCES		
	Clause 12.0		
	Fixed:Value related:		
	Time related:	item	
13	A13.0 No clause		
14	A14 SECURITY		
	Clause 14.0		
	Clause 14.1 - 14.8 are amended by replacing them with the following:		
	14.1. In respect of contracts with a contract sum up to R1 million, the security to be submitted by the contractor to the employer will be as a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT)		
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14.1.1. The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(A) 14.1.2. The employer shall be entitled to recover expense and		
loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employers entitlement shall take precedence over his obligations to refund the payment reduction security or portions thereof to the contractor		
14.2. In respect of contracts with a contract sum above R1 million, the contractor shall have the right to select the security to be provided in terms of 14.3, 14.4, 14.5, 14.6, or 14.7 as stated in the schedule . Such security shall be provided to the employer within twenty-one (21) calendar days from commencement date . Should the contractor fail to select the security to be provided or should the contractor fail to provide the employer with the selected security within twenty-		
one (21) calendar days from commencement date , the security in terms of 14.7 shall be deemed to have selected. 14.3. Where security as a cash deposit of ten per cent (10%) of		
the contract sum (excluding VAT) has been selected: 14.3.1. The contractor shall furnish the employer with a cash deposit equal in value of ten per cent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date		
14.3.2. Within twenty-one (21) calendar days of the date of practical completion of the works the employer shall reduce the cash deposit to an amount equal to three per cent (3%) of the contract value (excluding VAT), and refund the balance to the contractor		
14.3.3. Within twenty-one (21) calendar days of the date of final completion of the works the employer shall reduce the cash deposit to an amount equal to one per cent (1%) of the contract value (excluding VAT) and refund the balance to the contractor		
14.3.4. On the date of payment of the amount in the final payment certificate, the employer shall refund the remainder of the cash deposit to the contractor		
Carried to Collection	R	

14.3.5. The employer shall be entitled to recover expense and loss from the cash deposit in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employers entitlement shall take precedence over his obligations to refund the cash deposit security or portions thereof to the contractor		
14.3.6. The parties expressly agree that neither the employer nor the contractor shall be entitled to cede the rights to the deposit to any third party		
14.4. Where security as a variable construction guarantee of ten percent (10%) of the contract sum (excluding VAT) has been selected. 14.4.1. The contractor shall furnish the employer with an acceptable variable construction guarantee equal in value to ten percent (10%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date		
14.4.2. The variable construction guarantee shall reduce and expire in terms of the Variable Construction Guarantee form include in the invitation to tender		
14.4.3. The employer shall return the variable construction guarantee to the contractor within fourteen (14) calendar days of it expiring		
14.4.4. Where the employer has a right of recovery against the contractor in terms of 33.0, the employer shall issue a written demand in terms of the variable construction guarantee		
14.5. Where security as a fixed construction guarantee of five per cent (5%) of the contract sum (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the payment certificate (excluding VAT) has been selected:		
14.5.1. The contractor shall furnish a fixed construction guarantee to the employer equal in value to five per cent (5%) of the contract sum (excluding VAT)		
14.5.2. The fixed construction guarantee shall come into force on the date of issue and shall expire on the date of practical completion		
14.5.3. The employer shall return the fixed construction guarantee to the contractor within fourteen (14) calendar days of it expiring		
14.5.4. The payment reduction of the value certified in a payment certificate shall be in terms of 31.8 (A) and 34.8		
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14.5.5. Where the employer has a right of recovery against the contractor in terms of 33.0, the employer shall be entitled to issue a written demand in terms of the fixed construction guarantee or may recover from the payment reduction or may do both			
14.6. Where security as a cash deposit of five per cent (5%) of the contract sum (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the payment certificate (excluding VAT) has been selected:			
14.6.1. The contractor shall furnish the employer with a cash deposit equal in value to five per cent (5%) of the contract sum (excluding VAT) within twenty-one (21) calendar days from commencement date			
14.6.2. Within twenty-one (21) calendar days of the date of practical completion of the works the employer shall refund the cash deposit in total to the contractor			
14.6.3. The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(A)			
14.6.4. Where the employer has a right of recovery against the contractor in terms of 33.0, the employer may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both			
14.7. Where security as a payment reduction of ten per cent (10%) of the value certified in the payment certificate (excluding VAT) has been selected:			
14.7.1. The payment reduction of the value certified in a payment certificate shall be <i>mutatis mutandi</i> in terms of 31.8(B)			
14.7.2. The employer shall be entitled to recover expenses and loss from the payment reduction in terms of 33.0 provided that the employer complies with the provisions of 33.4 in which event the employers entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the contractor			
14.8. Payments made by the guarantor to the employer in terms of the fixed or variable construction guarantee shall not prejudice the rights of the employer or contractor in terms of this agreement			
Carried to Collection	R		

14.9. Should the contractor fail to furn of 14.2, the employer , in his sole discrenotification to the contractors selected that of a ten per cent (10%) payment recertificate in the payment certificate (ex. 14.7 shall be applicable Fixed:	etion and without form the security to eduction of the value cluding VAT), whereafter CUTION OF THE WORKS it with: of the following clause: y plan, required in terms	item	
of the Occupational Health and Safety A with twenty-one (21) calendar days of			
Clause 15.2.1 is amended by replacing it	t with the following clause:		
Give the contractor possession of the s working days of the contractor comp 15.1.2 and 15.1.4			
Fixed:Value related:			
Time related:		item	
16 A16 ACCESS TO THE WORKS			
Clause 16.0			
Fixed:Value related: Time related:		item	
17 A17 CONTRACT INSTRUCTIO	INS		
Clause 17.0			
Fixed:Value related: Time related:		item	
Car	ried to Collection	R	

		I	Ī	I
18	A18 SETTING OUT OF THE WORKS			
	Clause 18.0			
	Fixed:Value related: Time related:	item		
19	A19 ASSIGNMENT			
	Clause 19.0			
	Fixed:Value related:			
	Time related:	item		
20	A20 NOMINATED SUB-CONTRACTORS			
	Clause 20.0			
	Clause 20.1.3 is amended by replacing it with the following:			
	No Clause			
	Note: See item B9.1 hereinafter for adjustment of attendance on nominated subcontractors executing work allowed for under provisional sums			
	Fixed:Value related:			
	Time related:	item		
21	A21 SELECTED SUBCONTRACTORS			
	Clause 21.0			
	Clause 21 is amended by replacing with:			
	No Clause			
	Fixed:Value related:			
	Time related:	item		
	Carried to Collection	Ь В		

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22	A22 EMPLOYERS DIRECT CONTRACTORS		
	Clause 22.0		
	Fixed:Value related:		
	Time related:	item	
23	A23 CONTRACTOR'S DOMESTIC SUBCONTRACTORS		
	Fixed:Value related:		
	Time related:		
24	A24 PRACTICAL COMPLETION		
	Clause 24.0		
	Fixed:Value related:		
	Time related:		
25	A25 WORK'S COMPLETION		
	Clause 25.0		
	Fixed:Value related:		
	Time related:	item	
26	A26 FINAL COMPLETION		
	Clause 26.0		
	Fixed:Value related:		
	Time related:	item	
27	A27 LATENT DEFECTS LIABILITY PERIOD		
	Clause 27.0		
	Fixed:Value related:		
	Time related:	item	
28	A27 SECTIONAL COMPLETION		
	Clause 28.0		
	Fixed:Value related:		
	Time related:	item	
	Carried to Collection	R	

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29	A29	REVISION OF DATE FOR PRACTICAL COMPLETION		
	Clause 29	9.0		
		Value related:		
	Time rela	ated:	item	
30	A30	PENALTY FOR NON-COMPLETION		
		Value related:		
	Time rela	ated:	item	
	PAYME	ENT		
31	A31	INTERIM PAYMENT TO THE CONTRACTOR		
	Clause 3	1.0		
		1.8 is amended by replacing it with the following two ve clauses:		
	Alternat	tive A		
	14.6, the and goo	1 Where a security is selected in terms of 14.1, 14.5 or evalue of the works in terms of 31.4.1 and materials ods in terms of 31.4.2 shall be certified in full. The value shall be subject to the following percentage adjustments:		
	paymer	2 Ninety-seven per cent (97%) of such value in interim nt certificates issued on the date of practical tion and up to but excluding the date of final completion		
	paymer	3 Ninety-nine per cent (99%) of such value in interim nt certificates issued on the date of final completion to but excluding the final payment certificate in terms		
	final pay amount of the payn	4 One hundred per cent (100%) of such value in the ment certificate in terms of 34.6 except where the certified is in favour of the employer. In such an event ment reduction shall remain at the adjustment level le to the final payment certificate		
		Carried to Collection	R	

Alternative B		
31.8(B) Where security is a payment reduction in terms of 14.7		
the value of the works in terms of 31.4.1 and materials and		
goods in terms of 31.4.2 shall be certified in full. The value		
certified shall be subject to the following percentage adjustments:		
per uned shall be subject to the following percentage adjustments.		
31.8(b).1 Ninety per cent (90%) of such value in interim		
payment certificates issued up to the date of practical		
completion		
31.8(B).1 Ninety-seven per cent (97%) of such value in interim		
payment certificates issued on the date of practical		
completion and up to but excluding the date of final completion		
Sompression and up to 200 stoleranty and units of miles compression.		
31.8(B).3 Ninety-nine per cent (99%) of such value in interim		
payment certificates issued on the date of final completion		
and up to but excluding the final payment certificate in terms		
of 34.6		
31.8(B).4 One hundred per cent (100%) of such value in the final		
payment certificate in terms of 34.6 except where the amount		
certified is in favour of the employer . In such an event the		
payment reduction shall remain at the adjustment level applicable		
to the final payment certificate		
Clause 31.12 is amended by deleting the following:		
Payment shall be subject to the employer giving the contractor a tax invoice for the amount due		
a tax invoice for the amount due		
Fixed:Value related:		
Time related:	item	
	100111	
A32 ADJUSTMENT TO THE CONTRACT VALUE		
Clause 32.0		
Clauses 32.5.1, 32.5.7 are amended by the addition of the		
following at the end of the sentence:		
Tollowing at the cha of the sentence.		
"due to no fault of the contractor "		
and to the distributer		
Fixed:Value related:		
Time related:	item	
Carried to Collection	R	

A33 RECOVERY OF EXPENSE AND LOSS			
Clause 33.0 Clause 33.2 is amended by adding the following clauses:			
33.2.9 the contractors failure or neglect to commence with the works on the dates prescribed in the contract			
33.2.10 the contractors failure or neglect to proceed with the works in terms of the contract			
33.2.11 the contractors failure or neglect for any reason to complete the works in accordance with the contract			
33.2.12 the contractors refusal or neglect to comply strictly with any of the conditions of contract or any contract instructions and/or orders in writing given in terms of the contract			
33.2.13 the contractors estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa			
Fixed:Value related: Time related:	item		
A34 FINAL ACCOUNT AND FINAL PAYMENT			
Clause 34.0			
Clause 34.13 is amended by replacing seven (7) calendar days with twenty-one (21) calendar days and deleting the words subject to the employer giving the contractor a tax invoice for the amount due			
Fixed:Value related:	item		
Fixed:Value related:	itam		
Time related:	item		
Carried to Collection	P		
	Clause 33.0 Clause 33.2 is amended by adding the following clauses: 33.2.9 the contractors failure or neglect to commence with the works on the dates prescribed in the contract 33.2.10 the contractors failure or neglect to proceed with the works in terms of the contract 33.2.11 the contractors failure or neglect for any reason to complete the works in accordance with the contract 33.2.12 the contractors refusal or neglect to comply strictly with any of the conditions of contract or any contract instructions and/or orders in writing given in terms of the contract 33.2.13 the contractors estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa Fixed:	Clause 33.0 Clause 33.2 is amended by adding the following clauses: 33.2.9 the contractors failure or neglect to commence with the works on the dates prescribed in the contract 33.2.10 the contractors failure or neglect to proceed with the works in terms of the contract 33.2.11 the contractors failure or neglect for any reason to complete the works in accordance with the contract 33.2.12 the contractors refusal or neglect to comply strictly with any of the conditions of contract or any contract instructions and/or orders in writing given in terms of the contract 33.2.13 the contractors estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa Fixed:	Clause 33.0 Clause 33.2 is amended by adding the following clauses: 33.2.9 the contractors failure or neglect to commence with the works on the dates prescribed in the contract 33.2.10 the contractors failure or neglect to proceed with the works in terms of the contract 33.2.11 the contractors failure or neglect for any reason to complete the works in accordance with the contract 33.2.12 the contractors refusal or neglect to comply strictly with any of the conditions of contract or any contract instructions and/or orders in writing given in terms of the contract or surrendered in terms of the insolvency laws in force within the Republic of South Africa Fixed:

CANCELLATION		
A36 CANCELLATION BY EMPLOYER - CONTRACTORS DEFAULT		
Clause 36.0		
Clause 36.3 is amended by removing the reference to No clause and replacing the words principal agent with employer		
Clause 36.0 is amended by the addition of the following clause:		
36.7 Nothwistanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor ; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site . The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever		
Fixed:Value related: Time related:	item	
	item	
A37 CANCELLATION BY EMPLOYER - LOSS AND DAMAGE		
Clause 37.0		
Clause 37.0 is amended by the addition of the following clause:		
37.5 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor ; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site . The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever		
Fixed:Value related:	item	
	item	
A38 CANCELLATION BY CONTRACTOR - EMPLOYERS DEFAULT		
Clause 38.0		
Carried to Collection		

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	Clause 38.0 is amended by the addition of the following clause:			
	38.7 Notwithstanding any clause to the contrary, on cancellation of this agreement either by the employer or the contractor ; or for any reason whatsoever, the contractor shall on written instruction, discontinue with the works on a date stated and withdraw himself from the site . The contractor shall not be entitled to refuse to withdraw from the works on the grounds of any lien or right of retention or on the grounds of any other right whatsoever			
	Wildisoever			
	Fixed:Value related: Time related:	item		
38	A39 CESSATION- CANCELLATION OF THE WORKS			
	Clause 39.0			
	Fixed:Value related:			
	Time related:	item		
39	A40 DISPUTE SETTLEMENT			
	Clause 40.0			
	Clause 40.2.2 is amended by replacing one (1) year with three (3) years			
	Clause 40.6 is amended by removing the reference to:			
	No clause			
	Clause 40.7.1 is amended by replacing (10) with (15) and by the additions of the following			
	Whether or not mediation resolves the dispute, the parties shall bear their own cost concerning the mediation and equally share the costs of the mediator and related costs			
	Fixed:Value related: Time related:	item		
	Carried to Collection			

	SUBSTITUTE PROVISIONS		
40	A41 STATE CLAUSES		
	Clause 41.0		
	Fixed:Value related: Time related:	item	
	CONTRACT VARIABLES		
	THE SCHEDULE (DPW04EC)		
41	A42 PRE-TENDER INFORMATION		
	Clause 42.0		
	Tenderers are referred to the document C1.2 Contract Data DPW04(EC) for variables pertaining to this contract		
	Fixed:Value related:	item	
	SECTION B: JBCC PRELIMINARIES		
	DEFINITIONS AND INTERPRETATION		
42	Definitions and interpretation		
	Fixed:Value related: Time related:	item	
	<u>DOCUMENTS</u>		
43	Checking of documents		
	Fixed:Value related:	item	
44	Provisional bills of quantities		
	Fixed:Value related: Time related:	item	
	Carried to Collection	R	

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45	Availability of construction documentation			
	Fixed:Value related:			
	Time related:	item		
46	Interests of agents			
	er ad Val a alated			
	Fixed:Value related: Time related:	item		
	Time related.	item		
47	Priced documents			
	Fixed:Value related:			
	Time related:	item		
48	Tender submission			
	Clause 2.6 is amended by replacing JBCC Form of Tender with			
	Form of Offer and Acceptance			
	Fixed:Value related:			
	Time related:	item		
	THE SITE			
49	Defined works area			
	er ad Val a abad			
	Fixed:Value related:	item		
	Time reduced.	item		
50	Geotechnical investigation			
	Fixed:Value related:			
	Time related:	item		
51	Inspection of the site			
	Tenderers shall complete the Site Inspection Certificate			
	included in the tender documents and return the same with the			
	tender submission.			
	Fixed. Value valeted.			
	Fixed:Value related: Time related:	item		
	Time reduced.	lterii		
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52	Existing premised occupied			
	Fixed:Value related:			
	Time related:	item		
53	Previous work dimensional accuracy			
	Fixed:Value related:			
	Time related:	item		
54	Previous work defects			
	Fixed:Value related:			
	Time related:	item		
55	Services known			
	Fixed:Value related:			
	Time related:	item		
56	Services unknown			
50				
	Fixed:Value related: Time related:	item		
57	Protection of trees			
5/	Protection of trees			
	Fixed:Value related:			
	Time related:	item		
58	Articles of value			
	Fixed:Value related:			
	Time related:	item		
59	Inspection of adjoining properties			
	Fixed:Value related:			
	Time related:	item		
	Carried to Collection	R		

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	MANAGEMENT OF CONTRACT			
60	Management of the works			
	Fixed:Value related:			
	Time related:	item		
61	Programme for the works			
	Fixed:Value related:			
	Time related:	item		
62	Progress meetings			
	Fixed:Value related:			
	Time related:	item		
63	Technical meetings			
	Fixed:Value related:			
	Time related:	item		
64	Labour and plant records			
	Fixed:Value related:			
	Time related:	item		
	SAMPLES, SHOP DRAWINGS AND MANUFACTURERS' INSTRUCTIONS			
65	Samples of materials			
	Fixed:Value related:	item		
66	Workmanship samples			
	Fixed:Value related:			
	Time related:	item		
67	Shop drawings			
	Fixed:Value related:			
	Time related:	item		
	Carried to Collection	R		

TEMPORARY WORKS AND PLANT		
Deposits and fees		
Fixed:Value related: Time related:	item	
Enclosure of the works		
Fixed:Value related:	item	
Advertising		
Fixed:Value related: Time related:	item	
Plant, equipment, sheds and offices		
Fixed:Value related: Time related:	item	
Main notice board		
Fixed:Value related: Time related:	item	
Subcontractors notice board		
Fixed:Value related:	item	
TEMPORARY SERVICES		
Location		
Fixed:Value related: Time related:	item	
Water		
Fixed:Value related: Time related:	item	
Electricity		
Fixed:Value related: Time related:	item	
Carried to Collection	R	

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78	Telecommunication facilities		
	Fixed:Value related: Time related:	item	
79	Ablution facilities		
	Fixed:Value related: Time related:	item	
	PRIME COSTS AMOUNTS		
80	Responsibility for prime cost amounts		
	Fixed:Value related: Time related:	item	
	ATTENDANCE ON N/S SUBCONTRACTORS		
81	General attendance		
	The schedule rates providing for attendance on nominated subcontractors and other contractors , will be adjusted only if the scope of the work has changed		
	Fixed:Value related: Time related:	item	
82	Special attendance		
	Fixed:Value related: Time related:	item	
83	Commissioning fuel, water and electricity		
	Fixed:Value related: Time related:	item	
	Carried to Collection	R	

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	FINANCIAL ASPECTS			
	FINANCIAL ASPECTS			
84	Statutory taxes, duties and levies			
	Fixed:Value related:			
	Time related:	item		
85	Payment for preliminaries			
	Fixed:Value related:			
	Time related:	item		
86	Adjustment of preliminaries			
	Fixed:Value related:			
	Time related:	item		
87	Payment certificate cash flow			
	Fixed:Value related:			
	Time related:	item		
	GENERAL			
88	Protection of the works			
	Fixed:Value related:			
	Time related:	item		
00	Sustantian / indution of suisting / antiquelly accoming			
89	Protection / isolation of existing / sectionally occupied works			
	Fixed:Value related:			
	Time related:	item		
90	Security of the works			
	Fixed:Value related:			
	Time related:	item		
91	Notice before covering work			
	Fixed:Value related:			
	Time related:	item		
	Carried to Collection	R		

Distu	urbance		
Fixed	:Value related: related:	item	
	ronmental disturbance	item	
	:Value related: related:	item	
Work	ks cleaning and clearing		
	:Value related: related:	item	
Vern		icciii	
	:Value related:		
Time	related:	item	
Over	rhand work		
	:Value related:	_	
Time	related:	item	
Insti	ruction manuals and guarantees		
	:Value related:		
Time	related:	item	
As be	uilt information		
	:Value related:		
Time	related:	item	
Tena	nt installations		
	:Value related:		
Time	related:	item	
	Carried to Collection	R	

	SCHEDULE OF VARIABLES		
100	Pre-tender information		
	Fixed:Value related: Time related:	item	
	Time related: This schedule contains all variables referred to in this document and is divided into pretender and post-tender categories. The pre-tender category must be completed in full and included in the tender documents. Both the pre-tender and post-tender categories form part of these Preliminaries. Spaces requiring information must be filled in, shown as not applicable or deleted and not left blank. Where choices are offered, the non-applicable items are to be deleted.	item	
	Carried to Collection	ь	

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.1	PRE-TENDER INFORMATION			
l.1	Provisional Bills of Quantities			
<i>2.2]</i>	The quantities are provisional			
		NO		
1.2	Availability of construction documental	tion		
.3]	Construction documentation is complete	YES		
		ILS		
1.3	Interest of agent Details:			
<i>4</i>]	Employer: Limpopo Department of of Infrastructure 43 Church Street Private Bag X9490 POLOKWANE, 0700 Tel: [015] 284 7000/1 Cell: 082 460 6271 Architect and Principal Agent:	Roads &		
	Ruben Reddy Architects 4 Ismini Office Park, POLOKWANE Tel: [015] 065 0645 Fax: [011] 475 8364 Email: Geshim.Francis@rubenreddyarch.	co.za		
	Quantity Surveyor: Phahlana-Hunadi QS 2760 Zone B LEBOWAKGOMO , 0737 Tel: [015] 633 6535 Fax: [015] 633 6477 Email: 'info@phqs.co.za			
	Civil/Structural: Muteo Consulting 39 Grobler Street POLOKWANE Tel: [015] 291 4065 Fax: 015 291 4043 Email: vonganim@muteo.co.za			
	Electrical/Mechanical Engineers: NSKECM 38 Burger Street Polokwane 0700 Tel: 015 295 2104 Fax: 015 295 2104 Email: mark@nskecm.co.za			
	Carried to Collect	ion	R	

12.1.8	N/A Previous work - defects		
[3.6]	Details:		
12.1.0	N/A		
12.1.9 <i>[3.7]</i>	Services - known Details: N/A		
12.1.10 <i>[3.9]</i>	Protection of trees Specific requirements:		
12.1.11 <i>[3.11]</i>	Inspection of adjoining properties Specific requirements:		
12.1.12 <i>6.2]</i>	Enclosure of the works Specific requirements:		
12.1.13 [6.4.3]	Offices Specific requirements: The contractor shall provide, maintain and remove on completion of the works an office for the exclusive use of the principal agent, minimum size 4 x 3 x 3m high internally, suitable insulated and ventilated, provided with electric lighting and fitted with boarded floor, desk, chair, drawing stool, drawing board and lock-up drawers for drawings. The office shall be kept clean and fit for use at all times.		
	Carried to Collection	R	

12.1.14 [6.5]	Main notice board Specific requirements: The contractor shall provide, erect where di maintain and remove on completion of the w notice board size 3 x 3m as type Drawing GE constructed of suitable boarding with flat sm surface and with edging bead 19mm thick a edges and projecting 12mm from face of bo rounded on front edge. The board shall be fixed to hoarding, where hoarding is provide to and including a suitable supporting structor tubular posts and braces. The board is to ivory white and the bead and 12mm wide didark green. All wording shall be inscribed in as per the coat of arms of SA. All working shinscribed in dark green painted sans serif let.	rorks a EN 063, Rooth round outer arding and securely ed, or fixed ture of timber to be painted widing lines an dark green hall be		
12.1.15 <i>[6.6]</i>	Subcontractor's notice board Specific requirements:	VEC/NO		
12.1.16	Water	YES/NO		
[7.2]	Option A (by contractor)	YES		
	Option B (by employer - free of charge)			
	Option C (by employer - metered)	NO		
12.1.17	Electricity	NO		
[7.3]	Option A (by contractor)			
	Option B (by employer - free of charge)	YES		
		NO		
	Option C (by employer - metered)	NO		
12.1.18 <i>[7.4]</i>	Telecommunications Telephone			
r	•	YES		
	Facsimile	YES		
	E-mail	YES		
12.1.19	Ablution facilities	123		
[7.5]	Option A (by contractor)	YES		
	Option B (by employer)	NO		
12.1.20	Protection of existing/sectionally occup			
[11.2]	Protection is required	NO		
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12.1.21 <i>[9.2]</i>	Special attendance Subcontractor (1) details:			
	Subcontractor (2) details:			
	Subcontractor (3) details:			
	Subcontractor (4) details:			
12.1.22 <i>[11.1]</i>	Protection of works Specific requirements			
12.1.23 [11.5]	Disturbance Specific requirements: The contractor shall keep the site, structures			
	watered during operations to prevent dust a provide and erect and remove on completion works all necessary temporary dust screens a satisfaction of the principal agent	of the		
12.1.22 <i>[11.1]</i>	Protection of works Specific requirements			
12.1.23 <i>[11.5]</i>	Disturbance Specific requirements: The contractor shall keep the site, structures watered during operations to prevent dust a provide and erect and remove on completion works all necessary temporary dust screens a satisfaction of the principal agent	nd shall n of the		
12.1.24 <i>[11.6]</i>	Environmental disturbance Specific requirements:			
12.2	POST-TENDER INFORMATION			
12.2.1 <i>[10.2]</i>	Payment of preliminaries Option A (prorated) Option B (calculates)	YES/NO YES/NO		
12.2.2	Adjustment of preliminaries	125/110		
[10.3]	Option A (three categories)	YES/NO		
	Option B (detailed breakdown)	YES/NO		
12.2.3	Additional agreed preliminaries items Details:	. 25,		

SECT	ION C: SPECIFIC PRELIMINARIES		
apply	on C contains specific preliminary items which to this contract except where N/A (Not able) appears against an item		
C1	CONTRACT DRAWINGS		
the compurpose tendere works	awings issued with the tender documents do not comprise applete set but serve as a guide only for tendering es and for indicating the scope of the work to enable the er the acquaint himself with the nature and extend of the and the manner in which they are to be executed any part of the drawings not be clearly intelligible to the		
	er he shall, before submitting his tender, obtain tion in writing from the principal agent		
	Value related:	item	
2 C2	GENERAL PREAMBLES		
(PW371 regiona with the	cument Specification of Materials and Methods to be used 1) is obtainable on request from the head office and all 2) offices of the Department, and shall be read in conjunction 3) be bills of quantities and be referred to for the full 4) tions of work to be done and materials to be used		
	Value related:	item	
СЗ	TRADE NAMES		
bills of the tend of equa	ver a trade name of any product has been described in the function is drawn to the fact that any other product all quality may be used subject to the written approval of the last agent being obtained to the closing date for submission ers		
	written approval for an alternative product is not obtained, duct described shall be deemed to have been tendered for		
Fixed:_ Time re	Value related:	item	
	Carried to Collection	R	

04	C4 IMPORTED MATERIALS AND EQUIPMENT		
	Where imported items are listed in the tender documents, the tenderer shall provide all the information called for, failing which the price of any such item, materials or equipment shall be excluded from currency fluctuations. (refer to Schedule of Imported Materials and Equipment to be completed		
	Nothwistanding any provisions elsewhere regarding the adjustment of contract prices, the price of any item, material or equipment listed in terms of this clause shall be excluded from the Contract Price Adjustment Provisions (if applicable)		
	Fixed:Value related: Time related:	item	
105	C5 VIEWING THE SITE IN SECURITY AREAS		
	The site is situated in a security area and the tenderer must arrange with the unit commander or other responsible officer to obtain permission to enter the site for tendering purposes		
	Fixed:Value related: Time related:	item	
106	C6 COMMENCEMENT OF WORKS IN SECURITY AREAS		
	As the works falls within a security area the contractor must give the unit commander or other responsible officer notice before commencement of the works . Should the contractor fail to make such arrangements, admission to the site may be refused and any additional costs will be for the contractors account		
	Fixed:Value related:	item	
	Carried to Collection		

107	C7 ENTRANCE PERMITS TO SECURITY AREAS		
	As the works falls within a security area the contractor shall obtain entrance permits for his personnel and workmen entering the area and shall comply with all regulations and instructions which may be issued from time to time regarding the protection of persons and property under the control of the Defence Force, Police or chief security officer		
	Fixed:Value related:	item	
108	C8 SECURITY CHECK OF PERSONNEL		
	The principal agent may require the contractor to have his personnel and workmen, or a certain number of them, security classified In the event of the principal agent requesting the removal of a person or persons from the works for security reasons, the contractor shall do so forthwith and shall thereafter ensure that such person or persons are denied access to the works and the site and/or to any document or information relating to the works Fixed:		
	related:value related:Time	item	
109	In terms of article 119 of the Defence Act, 44 of 1957, it is prohibited to sketch or to take photographs of any military site or installation or any building or civic works thereon or to be in possession of a camera or other apparatus used for taking of photographs except when authorized thereto by or on behalf of the Minister.		
	Fixed:Value related: Time related:	item	
	Carried to Collection	R	

C10 HIV/AIDS AWARENESS		
It is required of the contractor to thoroughly study the HIV/AIDS Specification of the Department that must be read together with and is deemed to be incorporated under this Section of the Bills of Quantities. Provision for pricing of HIV/AIDS awareness is made under items C10.1 TO C10.5 hereafter and it is explicity pointed out that all requirements of the aforementioned specification are deemed to be priced hereunder, as the said items represent the only method of measurement and no additional items or extras to the contract in this regard shall be entertained		
The contractor must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total noncompliance, the principal agent , notwithstanding the provisions of Clause A 31 of Section A: Preliminaries (Section A) or any other clause to the contrary, reserves the right to delay issuing any progress payment certificate until the contractor provides satisfactory proof of compliance. The contractor shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment		
110 C10.1 AWARENESS CHAMPION Selection, appointment, briefing and making available of an Awareness Champion including provision of all relevant services, all in accordance with the HIV/AIDS Specification		
Fixed:Value related: Time related:	item	
Selection and appointment of a completed Services Provider approved by the principal agent , provision of a Service Provider Workshop Plan and a suitable venue, conducting of awareness workshops by means of traditional and/or modern multi-media techniques, including follow-up courses, making available all tuition material and performing assessment procedures, all in accordance with the HIV/AIDS Specification Fixed:		
Time related:	item	
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112	C10.3 POSTERS, BOOKLETS, VIDEOS, ETC		
	Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the construction period , all in accordance with the HIV/AIDS Specification		
	Fixed:Value related:	item	
113	C10.4 ACCESS TO CONDOMS		
	Provision and maintenance of condom dispensers fixed in position, including male and female condoms, replenishing male and female condoms on a daily basis as required for the duration of the construction period , all in accordance with the HIV/AIDS Specification		
	Fixed:Value related: Time related:	item	
114	C10.5 MONITORING		
	Monitoring HIV/AIDS awareness of workers, providing the Principal Agent with access to information including making available all reports, thoroughly completed and reflecting the correct information, for the duration of the construction period and close out, all in accordance with the HIV/AIDS Specification		
	Fixed:Value related: Time related:	item	
	Carried to Collection		

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Bill No. 1

SECTION NO. 2 Demolitions and Renovations

					Makhwes	e SS
	I	Unit	Quantity	Rate	Amount	
	SECTION NO. 2					
	<u>Demolitions and Renovations</u>					
	BILL NO. 1					
	<u>DEMOLITIONS</u>					
	PREAMBLES PREAMBLES					
	<u>Preambles see "Specifications and methods to be used - PW371"</u>					
	<u>Description</u>					
	For proambles see "Specifications and methods to					
	For preambles see "Specifications and methods to be used - PW371"					
	DEMOLITIONS					
	Demolishing and removing					
1	4 seats pit toilet block with pitched roof, 2850mm high at					
I	eaves, comprising pits, unreinforced concrete surface					
	bed, external walls, 115mm thick internal walls, rafters,					
	sucking waste in pits, backfilling and level the ground.	No	3			
	Carried To Section Summary			R		
	Section No. 2					
	Bill No. 1					
	Demolitions 42					
	42					

I		Unit	Quantity	Rate	Amount
	SECTION NO. 2				
	Demolitions and Renovations				
	BILL NO. 2				
	<u>ALTERATIONS</u>				
	PREAMBLES				
	For preambles see "Specifications and methods to be used - PW371"				
	TEMPORARY BARRICADES, SCREENS, ETC				
	Temporary barricades, screens, roofs, etc including removal				
1	Dust screen 1800mm high between concrete floor and ceiling, of suitable timber framing with 375 micron polyethylene sheeting stapled on on one side, including corners, ends, etc	m	85		
	REMOVAL OF EXISTING WORK				
	Taking down and removing roofs, floors, panelling, ceilings, partitions, etc:				
2	10 x 250mm fascia and barge boards	m	270		
3	Take out and remove roof sheeting from roof trusses	m²	1 139		
	Taking out and removing sundry joinery work, fittings, etc				
4	Chalk boards size 4800 x 1220mm high from brick wall.	No	12		
5	Pinning boards size 2440 x 1220mm high from brick walls.	No	24		
	Taking out/off and removing glass and mirrors				
6	Glass from steel windows, including cleaning out rebates and preparing for new glass	m²	60		
	Taking down and removing roofs, floors, panelling, ceilings, partitions, etc				
7	Nutec fibre cement ceilings, including cornices, timber brandering, etc	m²	990		
	Taking out doors, windows, etc				
8	Timber single door size 813 x 2032mm high overall from steel frames.	No	12		
9	Steel gate size 813 x 2032mm high overall from steel frames.	No	12		
	Carried to Collection			R	
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	Bill No. 2				
	Alterations 43				
	43				

					Makhwese	e SS
		Unit	Quantity	Rate	Amount	
	Breaking up and removing unreinforced concrete					
10	100mm Thick surface beds	m²	261			
	Hook up and removing grapolithic caroods, plantar					
	Hack up and removing granolithic screeds, plaster, etc from concrete or brickwork and preparing					
	surfaces for new screed, plaster, etc					
11	30mm screed from floors	m²	720			
	Hacking up/off and removing granolithic, screeds,					
	plaster, etc from concrete or brickwork and					
	preparing surfaces for new screed, plaster, tile					
	<u>finishes, etc</u>					
12	Internal plaster from walls	m²	1 790			
	Taking up and removing, vinyl floor coverings,					
	carpets, etc and preparing screeds for new floor					
	coverings					
13	Vinyl tile floor covering	m²	720			
	Clean down external face bricks					
14		2	700			
	water and leave in good order.	m²	762			
	Carried to Collection			R		
	Section No. 2					
	Bill No. 2					
	Alterations					
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Alterations 45			
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I		Unit	Quantity	Rate	Amount
	SECTION NO. 2 Demolitions and Renovations				
	BILL NO. 3 EARTHWORKS				
	PREAMBLES For preambles see "Specifications and methods to be used - PW371"				
	EXCAVATIONS ETC				
	Open face excavation in earth over site				
1	Open face excavation	т³	12		
	FILLING ETC				
	Earth filling obtained from the excavations (not compacted)				
2	Over site to make up levels	т³	6		
	Compaction of surfaces				
3	Compaction of surfaces	m²	261		
	Comind To Continu Communication			_	
	Carried To Section Summary Section No. 2			R	
	Bill No. 3				
	Earthworks				
	46				

1	1	Unit	Quantity	Rate	Amount
	OFOTION NO. 0				
	SECTION NO. 2				
	<u>Demolitions and Renovations</u> <u>BILL NO. 4</u>				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	PREAMBLES				
	For preambles see "Specification of materials and				
	methods to be used - PW371"				
	UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES				
	UNREINFORCED CONCRETE				
	15Mpa/19mm Concrete				
1	Aprons cast in panels.	m³	26		
2	Ramps.	т³	4		
3	Thickening down the edge of apron 150mm deep, 200mm top and tapering to 100mm at bottom including all excavations, formwork, backfilling etc	m	261		
	REINFORCED CONCRETE				
	25 MPa/19mm Concrete:				
4	Surface beds cast in panels on waterproofing.	т³	3		
	TEST BLOCKS				
	Test blocks:				
5	Making and testing set of three 150 x 150 x 150mm concrete strength test cubes (Provisional).	Sets	5		
	FINISHING TOP SURFACE OF CONCRETE				
6	Paving to falls.	m²	261		
7	Ramps to falls.	m²	8		
	ROUGH FORMWORK				
	Rough Formwork to Sides:				
8	Edges and reveals not exceeding 300mm high or wide.	m	269		
	MOVEMENT JOINTS ETC				
	Two layers of .5mm galvanised mild steel slip joints between horizontal concrete and brick surfaces including cement mortar bed:				
9	Not exceeding 300mm wide.	m	3		
	<u> </u>				
	Carried to Collection			R	
	Section No. 2				
	Bill No. 4				
	Concrete, Formwork And Reinforcement 47				
	47				

I		Unit	Quantity	Rate	Amount	
<u>s</u>	xpansion joints with bitumen impregnated oftboard between vertical concrete and brick urfaces:					
) 12	2mm Joints not exceeding 300mm high.	m	2			
<u>D</u>	ividing Strips ,etc					
1 6	x 38mm Angle iron step guard cast into concrete with x 6mm anchors	m	12			
<u>R</u>	EINFORCEMENT(PROVISIONAL)					
<u>F</u>	abric reinforcement:					
2 T	ype 193 fabric reinforcement in concrete surface beds, abs, etc.	m²	30			
	Carried to Collection			R		
s	ection No. 2			K		
В	ill No. 4					
С	oncrete, Formwork And Reinforcement					
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CONCRETE, FORMWORK AND REINFORCEMENT			
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SECTION NO. 2					
Demolitions and Renovations					
BILL NO. 5					
MASONRY					
PREAMBLES					
For preambles see "Specification of materials and methods to be used - PW371"					
BRICKWORK					
Sizes in descriptions:					
Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick.					
Face bricks:					
Bricks shall be ordered timeously to obtain uniformity in size and colour.					
Pointing:					
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc.					
<u>SAMPLES</u>					
Samples of all masonry building units, except those for walls described as 'load bearing', shall consist of a minimum of 6 units. Samples of building units to be used in walls described as 'load bearing' shall consist of 30 units from every 30 000 units delivered to site.					
FACE BRICKWORK COPINGS, SILLS, ETC.					
Brick-on-edge header course copings, sills, etc of face bricks prime cost R5500/1000 delivered to site excluding VAT and pointed with recessed joints on all exposed faces:					
230mm Wide sill set sloping and slightly projecting.	m	12			
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Bill No. 5 Masonry					
50					
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I		Unit	Quantity	Rate	Amount
	SECTION NO. 2				
	Demolitions and Renovations				
	BILL NO. 6				
	ROOF COVERINGS				
	PREAMBLES				
	For preambles see "Specification of materials and methods to be used - PW 371				
	General				
	PROFILED METAL SHEETING AND ACCESSORIES				
	0.58mm "Klip-lok light industrial" galvanised troughed sheet steel with "chromadek" finish one side,fixed to 76 x 50mm purlin complete under 5year quarantee by an approved firm of specialists, all in accordance with the materials supplied and methods employed by the manufacturer				
1	Roof covering with pitch not exceeding 25 degrees.	m²	1 310		
	0.58mm galvanised sheet iron, with "chromadek" one side in:				
2	Standard type FK3 ridge or hip flashing	m	125		
	Carried To Section Summary			R	
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	Bill No. 6				
	Roof Coverings 51				

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Demolitions and Renovations					
BILL NO. 7					
CARPENTRY AND JOINERY					
PREAMBLES					
For preambles see "Specification of materials and methods to be used - PW371					
SUPPLEMENTARY PREAMBLES					
Particle board:					
Particle board shall comply with the following specifications: a) SABS 1300 Particle board: exterior and flooring type b) SABS 1301 Particle board: interior type.					
Joinery:					
Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.					
Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes.					
Fixing:					
Items described as nailed shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.					
Decorative laminate finish:					
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish.					
PREFABRICATED ROOF TRUSSES, ETC.					
Plate nailed timber roof truss construction:					
The following is applicable in respect of roof trusses: Trusses are at maximum 1200mm centres Roof covering is 'Klip-lok' roof sheeting on 76 x 50mm purlins. Ceilings are 6mm sheeting on 38 x 50mm brandering .Refer to drawings at the end of these bills of quantities for full details. All trusses are fabricated in a factory by specialists approved by the Architect. All trusses shall be designed by a Registered Professional Engineer(in accordance with the draft SABS Code of Practice for Design of Timber Trusses). The manufacturer of trusses shall supply a written quarantee that the trusses are designed, manufactured, and erected, to support the roof coverings specified. The quarntee shall be valid for 10(ten) years .					
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Bill No. 7 Carpentry And Joinery					
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		Unit	Quantity	Rate	Amount	
	ROOF SUNDRIES					
	Sawn softwood					
1	38 x 114mm timber bracing to existing trusses	m	400			
	Sundries:					
2	Two coats creosote on sawn timbers.	m²	91			
	EAVES, VERGES, ETC					
	Everite FC77 or equal approved pressed fibrecement:					
3	10 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips.	m	261			
	Wrought meranti doors:					
	Wrought meranti doors hung to steel frames:					
4	44mm Framed batten door 813 x 2032mm high of 44 x 150m top rail and stiles ,16 x 150mm middle ledge and braces and 22 x 220mm bottom rail, filled in with 22mmV-jointed one side boarding and covered on other side with 4mm plywood with veneer to match door, let into and including rebates all round.	No	12			
		INO	12			
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	BILL NO. 8				
	CEILINGS PARTITIONS AND ACCESS FLOORING				
	<u>PREAMBLES</u>				
	For preambles see "Specification of materials and methods to be used - PW371				
	SUPPLEMENTARY PREAMBLES				
	Descriptions:				
	Items described as nailed shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.				
	Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as bolted the bolts have been given.				
	INSULATION				
	Aerolite insulation:				
1	100mm insulation closely fitted and laid on top of brandering between roof timbers etc.	m²	990		
	Wrought softwood				
2	19 x 76mm cornices nailed	m	585		
	NAILED UP AND SCREW UP CEILINGS				
	6mm Everite Nutec or equal approved fibre-cement boards with H-type steel cover strips over joints:				
3	Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres.	m²	990		
4	Extra over ceiling for hinged trap door size 610 x 610mm	No	12		
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	Bill No. 8				
	Ceilings Partitions And Access Flooring 55				
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	SECTION NO. 2 Demolitions and Renovations					
	BILL NO. 9					
	IRONMONGERY					
	PREAMBLES					
	For preambles see "Specification of materials and methods to be used - PW371					
	SUPPLEMENTARY PREAMBLES					
	Finishes to ironmongery:					
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered: CH Chromium plated: SC Satin chromium plated: SE Silver enamelled: GE Grey enamelled: AS Anodised silver: AB Anodised bronze: AG Anodised gold: ABL Anodised black: PB Polished brass: PL Polished and lacquered: PT Epoxy coated.					
	SUNDRIES					
	Brass or equal approved:					
1	Sliding window stay plugged.	No	108			
2	Window handles plugged.	No	108			
	Locks:					
	Solid or equal approved:					
3	CZ682-24-95SC"Gower" three lever lockset.	No	12			
	CATCHES, CABIN HOOKS, ETC					
	Solid or equal approved					
4	100mm cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	12			
	LOCKS					
	Solid or equal approved					
5	'Code 63' or equal approved padlock plugged.	No	12			
	PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC					
6	Pinning board 2400 x 1200mm high plugged.	No	24			
7	Vitrex or equal approved system enamelled green folding ,writing board with wall mounted centre board 4800 x 1220mm high with chalk rail and two swing leaves each 1200 x 1220mm high plugged with chalk rail plugged.					
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	Section No. 2					
	Bill No. 9					
	Ironmongery					
	56					

		Unit	Quantity	Rate	Amount	
	Description					
	Vitrex system enamelled green folding ,writing board with wall mounted centre board 4800 x 1220mm high with chalk rail and two swing leaves each 1200 x 1220mm high plugged with chalk rail plugged.	No	12			
	Greenfield steel lockers with standard baked enamel finish					
8	Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork.	No	12			
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	Bill No. 9					
	Ironmongery 57					

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1		Unit	Quantity	Rate	Amount	
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	Demolitions and Renovations					
	BILL NO. 10					
	<u>METALWORK</u>					
	DDE AMBLEO					
	PREAMBLES					
	For preambles see "Specification of materials and methods to be used - PW371					
	SUPPLEMENTARY PREAMBLES					
	Descriptions:					
	Descriptions of bolts shall be deemed to include nuts and washers.					
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include					
	nuts, washers and mortices in brickwork or concrete.					
	Metalwork described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described.					
	MILD STEEL HANDRAILS AND BALUSTRADING					
	Mild steel handrails and balustrades fixed to base					
	plates constructed of two number 6mm steel flat bar cut to profile mounted to wall with 6mm thick steel fixing plate welded to two steel flat bars with 4mm fillet welds chemical anchors (bolts included), 12mm dia. Mild steel round spaced at 150mm centres,					
	pedrilled openning 3No. In each upright, top rail to be 30mm thick x 100mm wide steel					
1	Balustrading and handrails approximately 1000mm high fixed to concrete.	m	83			
	WELDED SCREENS, GATES, ETC.					
	Gates to external doors					
2	Single gate and frame 813 x 2032mm high of 25 x 25x 2mm hollow section frame and 25 x 25x 2mm hollow section horizontal middle rail filled in with 12 x 12mm square section vertical rails at 75mm centres and fitted with a pair of suitable hinges welded to frame and with locking mechanism for padlock all in and including outer frame of 25 x 25 x 2mm hollow section welded frame					
	bolted to brickwork.	No	12			
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	Bill No. 10					
	Metalwork					
	59					

ı		Unit	Quantity	Rate	Amount
	SECTION NO. 2				
	Demolitions and Renovations				
	BILL NO. 11				
	<u>PLASTERING</u>				
	PREAMBLES				
	For preambles see "Specification of materials and methods to be used - PW371				
	SCREEDS				
	Screeds on concrete:				
	Screeds of wood floated on concrete to receive ceramic tiles:				
1	30mm Thick on floors and landings.	m²	720		
	GRANOLITHIC				
	Untinted wood floated granolithic on concrete				
2	30mm Thick on floors and landings.	m²	61		
	INTERNAL PLASTER				
	Cement plaster steel trowelled, on brickwork				
3	On walls	m²	1 790		
	Carried To Section Summary			R	
	Section No. 2 Bill No. 11				
	Plastering				
	60				

ı		Unit	Quantity	Rate	Amount	
	SECTION NO. 2 Demolitions and Renovations BILL NO. 12					
	PREAMBLES For preambles see "Specification of materials and methods to be used - PW371 FLOOR TILING 300 x 300 x 11.5mm ceramic floor tiles (Prime Cost amount R250.00/m2 delivered excluding vat) fixed					
	with adhesive to screed (screed elsewhere) and flush pointed with tinted waterproof jointing compound					
1	On floors and landings.	m²	720			
2	Skirting formed of ceramic tile cut to 300 x 75mm high	m	585			
	Carried To Section Summary Section No. 2			R		
	Bill No. 12					
	Tiling 61					

				Makhwes	se SS
	Unit	Quantity	Rate	Amount	
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Demolitions and Renovations					
BILL NO. 13					
PLUMBING AND DRAINAGE					
PREAMBLES					
For preambles see "Specification of materials and methods to be used - PW371					
SUPPLEMENTARY PREAMBLES					
Concrete pipes:					
Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings.					
uPVC pressure pipes and fittings:					
Pipes for water supply shall be of the class stated.					
Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings.					
Pipes of 50mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.					
Copper pipes:					
Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be 'Cobra Watertech' type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.					
Fixing of pipes					
Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level					
Carried to Collection			R		
Section No. 2 Bill No. 13					
Plumbing And Drainage 62					
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I	Unit	Quantity	Rate	Makhwes Amount	.е
Reducing fittings:					
Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.					
Wire gratings:					
Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings.					
Septic tanks:					
Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions.					
Exposed concrete surfaces:					
Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster.					
Excavations:					
No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.					
'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.					
Laying, backfilling, bedding, etc of pipes:					
Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.					
Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L: Medium pressure pipelines LD: Sewers LE: Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SAB.					
Flush pans:					
Flush pans shall have straight or side outlets and 'P' or 'S' traps as necessary.					
Carried to Collection Section No. 2 Bill No. 13			R		
Plumbing And Drainage					
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	1	Unit	Quantity	Rate	Amount
	Stainless steel basins, sinks, wash troughs, urinals,				
	etc: Units shall have standard aprons on all exposed edges				
	and tiling keys against walls where applicable.				
	Waste unions:				
	Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.				
	RAINWATER DISPOSAL				
	Approved .6mm galvanised sheet iron with "chromadek" finish ,in:				
1	100 x 100mm Eaves gutters	m	408		
2	Extra over eaves gutter for stopped end	No	12		
3	Extra over eaves gutter for outlet for 75mm pipe.	No	30		
4	75mm Diameter rainwater pipes.	m	120		
5	Extra over rainwater pipe for bend.	No	30		
6	Extra over rainwater pipe for shoe.	No	30		
	FIRE APPLIANCES ETC.				
	'Chubb' or equal approved:				
7	9kg Dry chemical fire extinguisher plugged.	No	12		
	RAINWATER HARVESTING				
	Rainwater Harvesting				
8	Allow a sum of R15 000.00/each (Fifteen Thousand Rands) for provision of 5000l Jojo or equal approved				
	tank complete with lid, fittings, tap, concrete plinth as per Architect details	No	6		
		140			
	Carried to Collection			R	
	Section No. 2				
	Bill No. 13 Plumbing And Drainage				
	64				

		1	Amount	I
BILL NO. 13 PLUMBING AND DRAINA COLLECTION	AGE	Page No		
	Brought Forward from Page	62		
		63		
		64		
	Carried To Section Summany			
Section No. 2	Carried To Section Summary	R		
Bill No. 13 Plumbing And Drainage				
. J =	65			

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		Unit	Quantity	Rate	Amount	
	SECTION NO. 2 Demolitions and Renovations BILL NO. 14 GLAZING					
	PREAMBLES For preambles see "Specification of materials and methods to be used - PW371 GLAZING TO STEEL WITH PUTTY					
	5mm Clear float glass:					
1	Panes not exceeding 0,1m2.	m²	60			
	Carried To Section Summary Section No. 2 Bill No. 14			R		
	Glazing					
	66					

1		Unit	Quantity	Rate	Amount
	SECTION NO. 2				
	Demolitions and Renovations				
	BILL NO. 15				
	<u>PAINTWORK</u>				
	PREAMBLES				
	For preambles see "Specification of materials and methods to be used - PW371				
	ON FLOATED PLASTER				
	Prepare, etc as specified and apply two coats of super acrylic paint:				
1	On interior walls.	m²	1 790		
	ON FIBRE-CEMENT, ETC.				
	Prepare, etc as specified and apply two coats of super acrylic Pva paint:				
2	On ceilings and cornices.	m²	990		
3	On fascias and barge boards.	m	261		
	ON METAL				
	<u>Prepare, etc as specified and apply two coats of gloss enamel paint on :</u>				
4	Door frames	m²	18		
5	On windows with burglar bars (both sides measured).	m²	454		
6	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area).	m²	144		
	Inside eaves gutters				
7	Inside eaves gutters with waterproofing based paint	m²	91		
	ON WOOD, WOOD BOARD				
	Prepare, etc as specified and apply two coats of polyurethane suede varnish:				
8	On general surfaces of doors.	m²	40		
	Carried To Section Summary Section No. 2			R	
	Bill No. 15				
	Paintwork				
	67				

		[Amount	l
	SECTION NO. 2			
	Demolitions and Renovations			
	SECTION SUMMARY			
Bill No.		Page		
1	DEMOLITIONS	42		
2	ALTERATIONS	45		
3	EARTHWORKS	46		
4	CONCRETE, FORMWORK AND REINFORCEMENT	49		
5	MASONRY	50		
6	ROOF COVERINGS	51		
7	CARPENTRY AND JOINERY	54		
8	CEILINGS PARTITIONS AND ACCESS FLOORING	55		
9	IRONMONGERY	58		
10	METALWORK	59		
11	PLASTERING	60		
12	TILING	61		
13	PLUMBING AND DRAINAGE	65		
14	GLAZING	66		
15	PAINTWORK	67		
	Carried to Final Summary	R		
	Section No. 2			
	SECTION SUMMARY			
	68			

SECTION NO. 3 Medium Administration Block

1		Unit	Quantity	Rate	Amount
	SECTION NO. 3				
	Medium Administration Block				
	BILL NO. 1 FOUNDATIONS				
	PREAMBLES				
	For preambles see " Specification of materials and methods to be used - PW371"				
	SITE CLEARANCE ETC				
	Site clearance:				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m²	537		
	REMOVAL OF TREES, ETC.				
	Taking out and removing, grubbing up roots and filling in holes:				
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	1		
	EXCAVATION, FILLING, ETC OTHER THAN BULK				
	Excavation in earth not exceeding 2m deep:				
3	Trenches.	m³	134		
	Extra over trench and hole excavations in earth for excavation:				
4	Soft rock.	m³	9		
5	Hard rock.	m³	5		
	Risk of collapse of excavations:				
6	Sides of trench and hole excavations not exceeding 1,5m deep.	m²	312		
	Keeping excavations free of water:				
7	Keeping excavations free of all water other than subterranean water.	Item			
	Earth filling obtained from excavations and/or prescribed stock piles on site compacted to 93% Mod AASHTO:				
8	Backfilling to trenches, holes, etc.	m³	23		
9	Under floors, steps, pavings, etc.	m³	42		
	Carried to Collection			R	
	Section No. 3				
	Bill No. 1 Foundations				
	70				
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		Unit	Quantity	Rate	Amount	
	Earth filling supplied by the Contractor and compacted to 95% Mod AASHTO density):					
10	Under floors, steps, pavings, etc.	т³	173			
	Cart Away					
	Extra over excavation for cart away:					
11	Surplus material from excavations on site to a dumping site be located by the contractor	m³	28			
	Coarse river sand filling supplied by the Contractor:					
12	Under floors etc.	m³	15			
	COMPACTION					
	Compaction of surfaces:					
13	Compaction of ground surface under floors etc including scarifying for a depth of 150mm, breaking down oversize material, adding suitable material where necessary and compacting to 90%. Mod AASHTO density.	m²	297			
	Prescribed density tests on filling:					
14	Modified AASHTO Density test.	No	16			
	SOIL POISONING					
	Soil insecticide:					
15	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming.	m²	297			
16	To bottoms and sides of trenches etc.	m²	445			
	Coming to Cally attend			_		
	Carried to Collection Section No. 3			R		
	Bill No. 1					
	Foundations					
	71					

		1	Amount	I
BILL NO. 1 FOUNDATIONS COLLECTION		Page No		
	Brought Forward from Page	70		
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	Carried To Section Summary	R		
Section No. 3 Bill No. 1				
Foundations	72			

I		Unit	Quantity	Rate	Amount
	SECTION NO. 3				
	Medium Administration Block				
	BILL NO. 2				
	CONCRETE, FORMWORK AND REINFORCEMENT				
	PREAMBLES				
	For preambles see "Specification of materials and methods to be used - PW371"				
	UNREINFORCED CONCRETE				
	15Mpa/19mm Concrete				
1	Aprons cast in panels.	m³	11		
2	Ramps.	m³	4		
3	Thickening down the edge of apron 150mm deep, 200mm top and tapering to 100mm at bottom including all excavations, formwork, backfilling etc	m	79		
	REINFORCED CONCRETE				
	25MPa/19mm Concrete:				
4	Surface beds cast in panels on waterproofing.	m³	27		
5	Footings.	m³	27		
6	Slabs.	m³	2		
	TEST BLOCKS				
	Test blocks:				
7	Making and testing set of three 150 x 150 x 150mm concrete strength test cubes (Provisional).	Sets	20		
	FINISHING TOP SURFACE OF CONCRETE				
8	Paving to falls.	m²	79		
	ROUGH FORMWORK (DEGREE OF ACCURACY III)				
	Rough Formwork to Sides:				
9	Edges and reveals not exceeding 300mm high or wide.	m	25		
	Rough Formwork to Soffits:				
10	Slabs propped up exceeding 1.5 and not exceeding				
	3.5m high.	m²	10		
				_	
	Carried to Collection Section No. 3			R	
	Bill No. 2				
	Concrete, Formwork And Reinforcement				
	73				

		Unit	Quantity	Rate	Amount
	MOVEMENT JOINTS ETC				
	Two layers of .5mm galvanised mild steel slip joints				
	between horizontal concrete and brick surfaces including cement mortar bed:				
11	Not exceeding 300mm wide.	m	70		
	Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces:				
12	12mm Joints not exceeding 300mm high.	m	75		
	Dividing Strips ,etc				
13	6 x 38mm Angle iron step guard cast into concrete with 3x 6mm anchors	m	8		
	REINFORCEMENT(PROVISIONAL)				
	Fabric reinforcement:				
14	Type 193 fabric reinforcement in concrete surface beds, slabs, etc.	m²	297		
15	Type 395 fabric reinforcement in concrete surface beds, slabs, etc.	m²	10		
	Mild steel reinforcement to structural concrete work:				
16	10mm Diameter bars.	Tonnes	1,00		
	High tensile steel reinforcement to structural concrete work:				
17	20mm Diameter bars.	Tonnes	1,00		
18	16mm Diameter bars.	Tonnes	2,00		
19	12mm Diameter bars.	Tonnes	1,00		
	Carried to Collection			R	
	Section No. 3 Bill No. 2				
	Concrete, Formwork And Reinforcement				
	74				

	1	Amount	
BILL NO. 2 CONCRETE, FORMWORK AND REINFORCEMENT COLLECTION	Page No		
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Carried To Section Summary Section No. 3 Bill No. 2 Concrete Formwork And Reinforcement	R		
Concrete, Formwork And Reinforcement 75			
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SECTION NO. 3 Madium Administration Block BILL NO. 3 MASONRY PREAMBLES For preambles see "Specification of materials and methods to be used - PW371" BRICKWORK Sizes in descriptions: Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick. Face bricks: Bricks shall be ordered timeously to obtain uniformity in size and colour. Pointing: Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. SAMPLES Samples of all masonny building units, except those for walls described as load bearing; shall consist of a minimum of 6 units. Samples of building units to be used in walls described as load bearing; shall consist of 30 units from every 30 000 units delivered to site. BRICKWORK IN FOUNDATIONS (PROVISIONAL) Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 1 Half brick walls BRICKWORK IN SUPERSTRUCTURE Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 3 Piers 3 Piers 3 Piers 4 Half brick walls 5 Half brick walls 6 One brick walls Carried to Collection Carried to Collection Section No. 3 Bill No. 3						Makhwes	e SS
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Medium Administration Block BILL NO. 3 MASONRY PREAMBLES For preambles see "Specification of materials and methods to be used - PW371" BRICKWORK Sizes in descriptions: Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick. Face bricks: Bricks shall be ordered timeously to obtain uniformity in size and colour. Pointing: Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. SAMPLES Samples of all masonry building units, except those for walls described as 'load bearing', shall consist of a minimum of 6 units. Samples of building units to be used in walls described as 'load bearing' shall consist of 30 units from every 30 000 units delivered to site. BRICKWORK IN FOUNDATIONS (PROVISIONAL) Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: Half brick walls. 7 One brick walls 8 BRICKWORK IN SUPERSTRUCTURE Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 9 Piers 130 Half brick walls in beam filling. 6 One brick walls in beam filling. Carried to Collection Section No. 3							
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BILL NO. 3 MASONRY PREAMBLES For preambles see "Specification of materials and methods to be used - PW371" BRICKWORK Sizes in descriptions: Where sizes in descriptions are given in brick units, 'one brick' shall represent the length and 'half brick' the width of a brick. Face bricks: Bricks shall be ordered timeously to obtain uniformity in size and colour. Pointing: Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. SAMPLES Samples of all masonry building units, except those for walls described as load bearing', shall consist of a minimum of 6 units. Samples of building units to be used in walls described as load bearing', shall consist of 30 units from every 30 000 units delivered to site. BRICKWORK IN FOUNDATIONS (PROVISIONAL) Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 1 Half brick walls BRICKWORK IN SUPERSTRUCTURE Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 3 Piers 4 Half brick walls 5 Piers 6 One brick walls in beam filling. Carried to Collection Section No. 3							
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Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc. SAMPLES Samples of all masonry building units, except those for walls described as 'load bearing', shall consist of a minimum of 6 units. Samples of building units to be used in walls described as 'load bearing' shall consist of 30 units from every 30 000 units delivered to site. BRICKWORK IN FOUNDATIONS (PROVISIONAL) Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 1 Half brick walls. 2 One brick walls BRICKWORK IN SUPERSTRUCTURE Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 3 Piers 4 Half brick walls 5 Half brick walls in beam filling. Carried to Collection Section No. 3		Bricks shall be ordered timeously to obtain uniformity in size and colour.					
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Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 1 Half brick walls. m² 36 2 One brick walls m² 130 BRICKWORK IN SUPERSTRUCTURE Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 3 Piers m³ 3 4 Half brick walls m² 138 5 Half brick walls in beam filling. m² 28 6 One brick walls m² 357 Carried to Collection Section No. 3		walls described as 'load bearing', shall consist of a minimum of 6 units. Samples of building units to be used in walls described as 'load bearing' shall consist of 30					
Compressive strength) in Class I mortar: 1 Half brick walls. 2 One brick walls BRICKWORK IN SUPERSTRUCTURE Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 3 Piers Half brick walls Half brick walls in beam filling. Carried to Collection Section No. 3		BRICKWORK IN FOUNDATIONS (PROVISIONAL)					
2 One brick walls BRICKWORK IN SUPERSTRUCTURE Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 3 Piers m³ 3 4 Half brick walls 5 Half brick walls in beam filling. 6 One brick walls Carried to Collection Section No. 3							
BRICKWORK IN SUPERSTRUCTURE Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 3 Piers m³ 3 4 Half brick walls 5 Half brick walls in beam filling. m² 28 6 One brick walls Carried to Collection Section No. 3	1	Half brick walls.	m²	36			
Brickwork of NFX bricks (14 MPa nominal compressive strength) in Class I mortar: 3 Piers m³ 3 4 Half brick walls 5 Half brick walls in beam filling. m² 28 6 One brick walls Carried to Collection Section No. 3	2	One brick walls	m²	130			
Compressive strength) in Class I mortar: Piers m³ 3 Half brick walls Half brick walls in beam filling. m² 28 One brick walls Carried to Collection Section No. 3		BRICKWORK IN SUPERSTRUCTURE					
4 Half brick walls 5 Half brick walls in beam filling. 6 One brick walls Carried to Collection Section No. 3							
5 Half brick walls in beam filling. 6 One brick walls Carried to Collection Section No. 3	3	Piers	m³	3			
6 One brick walls Carried to Collection Section No. 3	4	Half brick walls	m²	138			
Carried to Collection Section No. 3	5	Half brick walls in beam filling.	m²	28			
Section No. 3	6	One brick walls	m²	357			
Section No. 3							
Section No. 3		Carried to Callaction			ь		
					K		
Masonry		- 1					
76		76					

I		Unit	Quantity	Rate	Amount	
	BRICKWORK SUNDRIES					
	Brickwork reinforcement:					
7	75mm Wide reinforcement built in horizontally.	m	749			
8	150mm Wide reinforcement built in horizontally.	m	3 125			
	Prestressed fabricated lintels:					
9	110 x 75mm Lintels in lengths not exceeding 3m.	m	55			
	Turning pieces:					
10	110mm Wide turning piece to lintels etc.	m	55			
11	220mm Wide turning piece to lintels etc.	m	20			
	Galvanised wire ties etc:					
12	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork (Provisional)	No	125			
	Galvanised hoop iron cramps, ties, etc:					
13	30 x 1,6mm Cramp 500mm long with one end fixed to wood and other end built into brickwork (Provisional)	No	125			
	FACE BRICKWORK					
	Face bricks (Prime cost R5 500/1000 delivered to site excluding VAT) pointed with flush horizontal and vertical joints:					
14	Extra over brickwork for face brickwork.	m²	297			
15	Extra over brickwork for face brickwork in foundations (Provisional).	m²	51			
16	Extra over brickwork for face brickwork to piers.	m²	4			
17	Half brick in facings in beamfilling	m²	27			
	FACE BRICKWORK COPINGS, SILLS, ETC.					
	Brick-on-edge header course copings, sills, etc of face bricks (Prime cost R5 500/1000 delivered to site excluding VAT) and pointed with recessed joints on all exposed faces:					
18	Extra over brickwork for brick-on-edge header course lintel pointed on face and 110mm soffit.	m	54			
19	Extra over brickwork for brick-on-edge header course lintel pointed on face and 220mm soffit	m	17			
20	110mm cut brick Wide sills set flat	m	14			
	Carried to Collection			R		
	Section No. 3					
	Bill No. 3 Masonry					
	77					

1		Unit	Quantity	Rate	Amount	I
21	230mm Wide sill set sloping and slightly projecting.	m	10			
22	Coping on top of one brick wall pointed on exposed	m	14			
	faces					
	NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS					
	Natural grey sills in single lengths bedded in class I					
	mortar including metal fixing lugs etc:					
23	12 x 152mm Wide sills set flat and slightly projecting.	m	8			
	Carried to Collection			R		
	Section No. 3					
	Bill No. 3					
	Masonry					
	78					

I		1	Amount
BILL NO. 3 MASONRY COLLECTION		Page No	
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	Carried To Section Summary	R	
Section No. 3 Bill No. 3 Masonry	79		
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		Unit	Quantity	Rate	Amount
	SECTION NO. 3				
	Medium Administration Block				
	BILL NO. 4				
	WATERPROOFING				
	PREAMBLES				
	For preambles see "Specification of materials and methods to be used - PW371				
	DAMPPROOFING OF WALLS AND FLOORS				
	One layer of 375 micron Consol Plastics Brikgrip DPC embossed damp proof course:				
1	In walls.	m²	38		
	One layer of 250 micron Consol Plastics Gunplas USB Green waterproof sheeting sealed at laps with Gunplas Pressure Sensitive Tape:				
2	Under surface beds.	m²	297		
	JOINT SEALANTS ETC				
	Silicone sealing compound including backing cord, bond breaker,primer,etc				
3	12 x 20mm in expansion joints in floors including raking out expansion joint filler as necessary (Provisional).	m	46		
4	12 x 20mm in vertical expansion joints in walls including raking out expansion joint filler as necessary.	m	40		
	Carried To Section Summary			R	
	Section No. 3 Bill No. 4				
	Waterproofing				
	80				

		Unit	Quantity	Rate	Amount	
	SECTION NO. 3					
	Medium Administration Block					
	BILL NO. 5					
	ROOF COVERINGS					
	PREAMBLES					
	For preambles see "Specification of materials and methods to be used - PW 371					
	<u>General</u>					
	PROFILED METAL SHEETING AND ACCESSORIES					
	0.58mm "Klip-lok light industrial" galvanised troughed sheet steel with "Globalcoat" finish one side (colour Traffic Green), fixed to 76 x 50mm purlin complete under 5year quarantee by an approved firm of specialists, all in accordance with the materials supplied and methods employed by the manufacturer					
1	Roof covering with pitch not exceeding 25 degrees.	m²	376			
	0.58mm galvanised sheet iron, with "chromadek" one side in:					
2	Standard type FK3 ridge or hip flashing	m	26			
3	Standard valley flashing	m	16			
	Carried To Section Summary			R		
	Section No. 3			K		
	Bill No. 5					
	Roof Coverings					
	81					

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I	Unit	Quantity	Rate	Amount	
SECTION NO. 3					
Medium Administration Block					
BILL NO. 6					
CARPENTRY AND JOINERY					
PREAMBLES					
For preambles see "Specification of materials and methods to be used - PW371					
SUPPLEMENTARY PREAMBLES					
Particle board:					
Particle board shall comply with the following specifications: a) SABS 1300 Particle board: exterior and flooring type b) SABS 1301 Particle board: interior type.					
Joinery:					
Descriptions of frames shall be deemed to include frames, transoms, mullions, rails, etc.					
Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes.					
Fixing:					
Items described as nailed shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete.					
Decorative laminate finish:					
Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish.					
PREFABRICATED ROOF TRUSSES, ETC.					
Plate nailed timber roof truss construction:					
The following is applicable in respect of roof trusses: Trusses are at maximum 1200mm centres Roof covering is 'Klip-lok' roof sheeting on 76 x 50mm purlins. Ceilings are 6mm sheeting on 38 x 50mm brandering. Refer to drawings at the end of these bills of quantities for full details. All trusses are fabricated in a factory by specialists approved by the Architect. All trusses shall be designed by a Registered Professional Engineer(in accordance with the draft SABS Code of Practice for Design of Timber Trusses). The manufacturer of trusses shall supply a written quarantee that the trusses are designed, manufactured, and erected, to support the roof coverings specified. The quarntee shall be valid for 10(ten) years.					
Carried to Collection			R		
Section No. 3					
Bill No. 6					
Carpentry And Joinery 82					
02				II	

		Unit	Quantity	Rate	Amount	
	Sawn softwood:					
1	Roof construction to double pitched roof with two hipped ends approximately 297m2 (Administration Block) on plan including trusses, hipped ends, jack rafters, purlins, permanent bracing, etc (measured flat).	No	1			
	ROOF CONSTRUCTION					
	Sawn softwood :					
2	114 x 38mm Wall plates.	m	134			
3	50 x 228mm support beam	m	50			
	ROOF SUNDRIES					
	Sundries:					
4	Two coats creosote on sawn timbers.	m²	52			
	EAVES, VERGES, ETC					
	Everite FC77 or equal approved pressed fibre- cement:					
5	10 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips.	m	86			
	JOINERY SUNDRIES					
	Wrought Meranti					
6	450mm wide slatted seats, etc of 76 x 38mm thick (50mm centres) screwed under and including steel 50 x 50 x 3mm L section steel holed to concrete fixed with bolts	m²	10			
	SEMI SOLID CORE FLUSH DOORS					
	44 semi-solid flush doors with 3,2mm standard					
	hardboard covering on both sides hung to steel frames:					
7	40mm Door 813 x 2032mm high.	No	11			
		110				
	Carried to Collection			R		
	Section No. 3 Bill No. 6					
	Carpentry And Joinery					
	83					

		I	Amount	
BILL NO. 6				
CARPENTRY AND JOINE	<u>ERY</u>			
COLLECTION				
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Bill No. 6				
Carpentry And Joinery	0.4			
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		Unit	Quantity	Rate	Amount	
	SECTION NO. 3					
	Medium Administration Block					
	BILL NO. 7					
	CEILINGS PARTITIONS AND ACCESS FLOORING					
	PREAMBLES					
	For preambles see "Specification of materials and methods to be used - PW371					
	SUPPLEMENTARY PREAMBLES					
	Descriptions:					
	Items described as nailed shall be deemed to be fixed with hardened steel nails or pins or shot pinned to brickwork or concrete.					
	Items described as plugged shall be deemed to include screwing to fibre, plastic or metal plugs at not exceeding 600mm centres, and where described as bolted the bolts have been given.					
	INSULATION					
	Aerolite insulation:					
1	100mm Insulation closely fitted and laid on top of brandering between roof timbers etc.	m²	297			
	Wrought softwood					
2	19 x 76mm cornices nailed	m	482			
	NAILED UP AND SCREW UP CEILINGS					
	6mm Everite Nutec or equal approved fibre-cement boards with H-type steel cover strips over joints:					
3	Ceilings including 38 x 38mm sawn softwood brandering at 400mm centres.	m²	297			
4	Extra over ceiling for hinged trap door size 610 x 610mm	No	2			
	Carried To Section Summany			R		
	Carried To Section Summary Section No. 3			ĸ		_
	Bill No. 7					
	Ceilings Partitions And Access Flooring					
	85					

		Unit	Quantity	Rate	Amount	6 33
		Offic	Quantity	ixate	Amount	
	SECTION NO. 3					
	Medium Administration Block					
	BILL NO. 8					
	IRONMONGERY					
	PREAMBLES					
	For preambles see "Specification of materials and methods to be used - PW371					
	SUPPLEMENTARY PREAMBLES					
	Finishes to ironmongery:					
	Where applicable finishes to ironmongery are indicated by suffixes in accordance with the following list: BS Satin bronze lacquered: CH Chromium plated: SC Satin chromium plated: SE Silver enamelled: GE Grey enamelled: AS Anodised silver: AB Anodised bronze: AG Anodised gold: ABL Anodised black: PB Polished brass: PL Polished and lacquered: PT Epoxy coated.					
	HINGES, FLOOR SPRING HINGES, BOLTS, PANIC BOLTS, ETC					
	"Solid" or equal approved:					
1	150mm 8052-150 Brass flush bolt with keep fixed to metal.	No	2			
2	150mm 8052-150 Brass flush bolt with keep let into concretet.	No	2			
3	CZ 80941 or equal approved WC indicator bolt with keep fixed to metal.	No	2			
	CATCHES, CABIN HOOKS, ETC					
	Solid or equal approved:					
4	100mm cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged.	No	4			
	LOCKS					
	Solid or equal approved:					
5	"Code 630" padlock.	No	2			
	'Solid" or equal approved					
6	CZ682-24-95SC"Gower" two lever lockset.	No	11			
	DOOR CLOSERS					
	"Yale" or equal approved					
7	Y202RC Door closer with cover fixed to metal	No	2			
	Carried to Collection			R		_
	Section No. 3 Bill No. 8					
	Ironmongery					
	86					

		Unit	Quantity	Rate	Makhwes Amount	e 55
		Offic	Quartity	rate	Amount	
	BATHROOM FITTINGS					
	Kimberley-Clark or equal approved:					
8	19mm Diameter chromium plated towel rail 900mm long including flanged end brackets.	No	2			
9	Lockable toilet roll holder plugged.	No	2			
	SUNDRIES					
	Solid or equal approved:					
10	38mm Diameter rubber door stop plugged.	No	15			
	MATS					
	Squeegee or equal approved					
11	1500 x 800 x 17mm Door mat laid loose in mat surround					
	fixed with 25 x 25mm aluminium angle plugged to concrete (Provisional).	No	2			
	VEDTICAL AND DOLLED DLINDS		_			
	VERTICAL AND ROLLER BLINDS 127mm wide non-fade material vertical blinds as per					
	"Windowvert" or similar approved ,fitted as per manufacturere's instructions					
12	To fit window 2 044 x 954mm high.	No	1			
13	To fit window 1 511 x 1 245mm high.	No	14			
14	To fit window 1 022 x 1 224mm high.	No	3			
15	To fit window 533 x 949mm high.	No	5			
	PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC					
	Vitrex or equal approved:					
16	Pinning board 2400 x 1200mm high plugged.	No	1			
17	Pinning board 3000 x 1200mm high plugged.	No	4			
	STEEL LOCKERS					
	Greenfield steel lockers with standard baked enamel finish					
18	Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork.	No	4			
	Carried to Collection			R		
	Section No. 3			• •		
	Bill No. 8					
	Ironmongery					
	87					

		I	Amount	I
BILL NO. 8 IRONMONGERY COLLECTION		Page No		
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Section No. 3 Bill No. 8				
Ironmongery	88			

		Unit	Quantity	Rate	. Amount	6 33
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	SECTION NO. 3					
	Medium Administration Block					
	BILL NO. 9					
	METALWORK					
	PREAMBLES					
	For preambles see "Specification of materials and methods to be used - PW371					
	SUPPLEMENTARY PREAMBLES					
	Descriptions:					
	Descriptions of bolts shall be deemed to include nuts and washers.					
	Descriptions of expansion anchors and bolts and chemical anchors and bolts shall be deemed to include nuts, washers and mortices in brickwork or concrete.					
	Metalwork described as holed for bolt(s) shall be deemed to exclude the bolts unless otherwise described.					
	Mild steel handrails and balustrades fixed to base					
	plates constructed of two number 6mm steel flat bar cut to profile mounted to wall with 6mm thick steel fixing plate welded to two steel flat bars with 4mm fillet welds chemical anchors (bolts included), 12mm diameter mild steel round spaced at 150mm centres,					
	predrilled openning 3no in each upright, top rail to be 30mm thick x 100mm wide steel					
1	Balustrades including steel handrails approximately 1000mm high fixed to concrete.	m	16			
	WELDED SCREENS, GATES, ETC.					
	Gates to external doors					
2	Ditto, double gate and frame 1613 x 2032mm high overall as per Architectural drawing	No	2			
	PRESSED STEEL DOOR FRAMES					
	1,2mm Rebated frames suitable for half brick walls:					
3	Frame for door 813 x 2032mm high.	No	10			
	1,2mm Rebated frames suitable for one brick walls:					
4	Frame for door 813 x 2032mm high.	No	1			
	Carried to Collection			R		
	Section No. 3			IX.		
	Bill No. 9					
	Metalwork					
	89					

ı		Unit	Quantity	Rate	Amount	
	STEEL WINDOWS, DOORS, ETC.					
	Standard residential windows with 12 x 12(B33) solid burglar bars to all sashes:					
5	Window type SWE37S/SWE37S, size 2044 x 954mm high.	No	1			
6	Window type SWE418, size 1511 x 1245mm high.	No	14			
7	Window type SW37, size 1022 x 1224mm high.	No	3			
8	Window type SWE31S, size 533 x 949mm high.	No	5			
9	Composite window type NG9/D4HS, size 1511 x 1623mm high.	No	1			
	STEEL STRONGROOM DOORS, VENTILATORS, ETC.					
	Strongroom doors etc. suitable for 220mm walls fixed to brickwork or concrete					
10	Double ended strongroom ventilator.	No	1			
11	Record room door and frame 1030 x 2010mm high overall with a mass of 324kg, including one 7lever security lock and wall mounted door stop	No	1			
	ALUMINIUM DOORS AND WINDOWS, ETC					
	Purpose made natural anodised aluminium windows glazed with 6mm thick laminated safety glass and plugged to brickwall or concrete					
12	Window 1525 x 1300mm high overall in clear panes.	No	3			
13	Window 2400 x 1300mm high overall in clear panes.	No	1			
	Purpose made natural anodised aluminium doors glazed with 6mm thick laminated safety glass and plugged to brickwall or concrete					
14	Double door size 1575 x 2125mm high in four panes with each leaf side hung and one pair type TS550 satin chromium plated double action floor spring hinges with standard open feature, including adjustable top centre and box let into concrete, two double cylinder lockset, and two pairs of AL5512-300BB ABL aluminium pull handles fixing back to back.	No	2			
	SECURITY BARRIERS					
15	Trellidoor 1600 x 2125mm high plugged.	No	2			
	Carried to Collection			R		
	Section No. 3					
	Bill No. 9 Metalwork					
	90					

I	1	Unit	Quantity	Rate	Amount
	STEEL LOUVRES,ETC				
	Purpose made louvres:				
16	Triangular shaped (on elevation) residential section louvred ventilators 3138 wide (at the horizontal bottom) x 571mm high overall, filled in with type LC fixed horizontal louvre blades fixed to surround and covered at back with No. 256 galvanised mesh mosquito gauze, fixed with and including 3 x 20mm steel flat section cover strips screwed	No	2		
17	Ditto but approximately 3700 x 1000mm high overall	No	2		
	Carried to Collection Section No. 3 Bill No. 9 Metalwork			R	
	91				

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BILL NO. 9 METALWORK COLLECTION		Page No		
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Bill No. 9 Metalwork				
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ı		Unit	Quantity	Rate	Amount
	SECTION NO. 3				
	Medium Administration Block				
	BILL NO. 10				
	<u>PLASTERING</u>				
	PREAMBLES				
	For preambles see "Specification of materials and methods to be used - PW371				
	SCREEDS				
	Screeds on concrete:				
	Screeds of wood floated on concrete to receive ceramic tiles:				
1	30mm Thick on floors and landings.	m²	297		
	GRANOLITHIC				
	Untinted wood floated granolithic on concrete				
2	30mm Thick on floors and landings.	m²	4		
	INTERNAL PLASTER				
	Cement plaster on brickwork:				
3	On walls.	m²	658		
4	On narrow widths.	m²	6		
5	On concrete soffit.	m²	6		
	CORNER PROTECTORS, DIVIDING STRIPS, ETC				
6	30 x 3mm Flat section brass dividing strips between		_		
	different floor finishes.	m	7		
	Carried To Section Summary			R	
	Section No. 3				
	Bill No. 10 Plastering				
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		Unit	Quantity	Rate	Amount
	SECTION NO. 3 Medium Administration Block BILL NO. 11 TILING				
	PREAMBLES For preambles see "Specification of materials and methods to be used - PW371 WALL TILING 200 x 200 x 10mm White glazed ceramic tiles fixed with adhesive to plaster (plaster elsewhere):				
1	On walls in isolated panels, splashbacks, etc.	m²	32		
2	On narrow widths.	m²	1		
	FLOOR TILING 300 x 300 x 11.5mm ceramic floor tiles (Prime Cost amount R250.00/m2 excluding vat) fixed with adhesive to screed (screed elsewhere) and flush pointed with tinted waterproof jointing compound				
3	On floors and landings.	m²	297		
4	Skirting formed of ceramic tile cut to 300 x 75mm high	m	211		
	Carried To Section Summary Section No. 3 Bill No. 11 Tiling 94			R	
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T	Unit	Quantity	Rate	Amount	l
SECTION NO. 2					
SECTION NO. 3					
Medium Administration Block BILL NO. 12					
PLUMBING AND DRAINAGE					
PREAMBLES					
For preambles see "Specification of materials and methods to be used - PW371					
SUPPLEMENTARY PREAMBLES					
Concrete pipes:					
Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings.					
uPVC pressure pipes and fittings: Pipes for water supply shall be of the class stated.					
Pipes of 40mm diameter and smaller shall be plain					
ended with solvent welded uPVC loose sockets and fittings.					
Pipes of 50mm diameter and greater shall have sockets and spigots with push-in type integral rubber ring joints. Bends shall be uPVC and all other fittings shall be cast iron, all with similar push-in type joints.					
Copper pipes:					
Pipes shall be hard drawn and half-hard pipes of the class stated. Class 0 (thin walled hard drawn) pipes shall not be bent. Class 1 (thin walled half-hard), class 2 (half-hard) and class 3 (heavy walled half-hard) pipes shall only be bent with benders with inner and outer formers. Fittings to copper waste, vent and anti-syphon pipes, capillary solder fittings and compression fittings shall be 'Cobra Watertech' type. Capillary solder fittings shall comply with ISO 2016. Only compression fittings shall be used in walls or in ground.					
Fixing of pipes					
Unless specifically otherwise stated, descriptions of pipes shall be deemed to include for fixing to walls etc. casting in, building in or suspending not exceeding 1m below suspension level					
Carried to Collection			R		
Section No. 3					
Bill No. 12					
Plumbing And Drainage 95					
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	Unit	Quantity	Rate	Amount	
Reducing fittings:					
Where fittings have reducing ends or branches they are described as 'reducing'. In the case of pipes with diameters not exceeding 60mm only the largest end or branch size is given. Should the Contractor wish to use other fittings and bushes or reducers he may do so on the understanding that no claim in this regard will be entertained. In the case of pipes with diameters exceeding 60mm all sizes are given and no claim for extra bushes, reducers, etc will be entertained.					
Wire gratings:					
Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings.					
Septic tanks:					
Descriptions of septic tanks shall be deemed to include excavation, bedding and jointing, concrete base slabs, jointing to drains and backfilling, compaction, etc all in accordance with the manufacturer's instructions.					
Exposed concrete surfaces:					
Exposed surfaces of concrete stormwater channels, cover slabs, inspection eye marker slabs, gulley tops, cleaning eye tops, catchpits, inspection chambers, etc shall be finished smooth with plaster.					
Excavations:					
No claim for rock excavation will be entertained unless the Contractor has timeously notified the quantity surveyor thereof prior to backfilling.					
'Soft rock' and 'hard rock' shall be as defined in 'Earthworks'.					
Laying, backfilling, bedding, etc of pipes:					
Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions.					
Where no manufacturers' instructions exist pipes shall be laid in accordance with clauses 5.1 and 5.2 of each of the following: SABS 1200 L: Medium pressure pipelines LD: Sewers LE: Stormwater drainage Pipe trenches etc shall be backfilled in accordance with clause 3, 5.5, 5.6, 5.7 and 7 of SAB.					
Flush pans:					
Flush pans shall have straight or side outlets and 'P' or 'S' traps as necessary.					
Carried to Collection Section No. 3 Bill No. 12 Plumbing And Drainage			R		
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I		Unit	Quantity	Rate	Amount
	Stainless steel basins, sinks, wash troughs, urinals,				
	etc:				
	Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable.				
	Waste unions:				
	Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings.				
	RAINWATER DISPOSAL				
	Approved .6mm galvanised sheet iron with "chromadek" finish ,in:				
1	100 x 100mm Eaves gutters	m	79		
2	Extra over eaves gutter for angle/corner.	No	12		
3	Extra over eaves gutter for stopped end	No	6		
4	Extra over eaves gutter for outlet for 75mm pipe.	No	12		
5	75mm Diameter rainwater pipes.	m	48		
6	Extra over rainwater pipe for bend.	No	12		
7	Extra over rainwater pipe for shoe.	No	12		
	SANITARY FITTINGS				
	'Citimetal' stainless steel or equal approved:				
8	Series single end bowl overlay sink, size 1200 x 535mm fitted to top of cabinet.	No	1		
	"Vaal" or equal approved				
9	510 x 405mm "Hibiscus" (code 7050) white vitreous china rounded lavatory basin with two tapholes supported on and including two bolts(code 84467Z0)	No	3		
10	White vitreous china "Daisy" semi-close coupled 90degree outlet open rim washdown pan (code 774000) and matching 9litre cistern (code 710034) complete with lid, fitments and flush pipe elbow and conversion bend (code 710044) and "deluxe" toilet seat	No	2		
	WASTE UNIONS ETC				
	'Cobra Watertech" or equal approved				
11	38mm "Cobra 316" unslotted waste and plug with chain	No	1		
	TRAPS ETC				
	"Marley' or equal approved				
12	40mm Flexi butyl rubber trap with reseal "P" trap	No	1		
	Carried to Collection			R	
	Section No. 3				
	Bill No. 12				
	Plumbing And Drainage				
	97				

1		Unit	Quantity	Rate	Amount	
	"Cobra Watertech" or equal approved					
13	"Cobra Ref. 365/40" CP Bottle trap.	No	2			
	TAPS, VALVES, ETC					
	'Cobra Watertech' or equal approved:					
14	"Cobra Rf. 107EC-15" Bib tap plugged	No	3			
15	15mm Gate valves plugged	No	6			
16	"Cobra Ref. 232/350' Angle regulating valve	No	2			
17	"Cobra Ref. 166/041 wall type "Star" sink mixer with overarm swivel outlet	No	1			
	SANITARY PLUMBING					
40	uPVC pipes:		00			
18	50mm Pipes	m	60			
19	110m Pipes.	m	55			
20	50mm Pipes laid in and including trenches not exceeding 1m deep.	m	25			
21	110mm Pipes laid in and including trenches not exceeding 1m deep under surface beds.	m	25			
	Extra over uPVC pipes for fittings:					
22	50mm Bend.	No	10			
23	100mm Bend.	No	8			
24	110mm Junction.	No	6			
25	50mm Junction.	No	12			
26	110mm Reducing junction.	No	6			
27	110mm Double junction.	No	5			
28	110mm Pan connector	No	2			
29	110mm "G1 Two-way " vent valve	No	2			
	Sundries:					
30	Testing waste pipe system.	Item				
	WATER SUPPLIES					
	Class 9 uPVC pressure pipes:					
31	63mm Pipes laid in and including trenches not exceeding 1000mmm deep	m	60			
	Carried to Collection			R		
	Section No. 3 Bill No. 12					
	Plumbing And Drainage					
	98					

ı		Unit	Quantity	Rate	Amount	
	Extra over uPVC pressure pipes for solvent welded pressure fittings:					
32	63mm Elbow	No	6			
33	63mm Tee	No	4			
34	63mm Reducer.	No	4			
	Class o copper pipes:					
35	15mm Pipes	m	30			
36	22mm Pipes.	m	40			
	Extra over class o copper pipes for capillary fittings:					
37	15mm Fittings.	No	20			
38	22mm Fittings.	No	15			
	Copper overflow and service pipes:					
39	15mm Service pipe 300mm girth.	No	1			
	Sundries:					
40	450 x 450m cast iron stopcock box including brick chamber below not exceeding 750mm deep internally.	No	1			
41	'ZIP Hydroboil code 3800' 25 litre white powder coated water boiler as manufactured by Franke Kitchen Systems, plugged and screwed to wall.	No	1			
	ELECTRICAL WATER HEATERS	. 10				
	"Kwikot" or equal approved					
42	150 litre Horizontally floor mounted electric water heater	No	1			
	Testing:					
43	Testing water pipe system.	Item				
	FIRE APPLIANCES ETC.					
	'Chubb' or equal approved:					
44	'Everyway' hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall					
	bracket.	No	1			
45	9kg Dry chemical fire extinguisher.	No	2			
	Carried to Collection Section No. 3			R		
	Bill No. 12					
	Plumbing And Drainage					
	99					

1		Unit	Quantity	Rate	Amount
46	Rainwater harvesting Allow a sum of R15 000.00/each (Fifteen Thousand Rands) for provision of 5000l Jojo or equal approved tank complete with lid, fittings, tap, concrete plinth as per Architect details	No	2		
	Carried to Collection Section No. 3 Bill No. 12 Plumbing And Drainage			R	

I		1	Amount	ı
BILL NO. 12				
PLUMBING AND DRAIN	AGE			
COLLECTION				
		Page No		
		July		
	Brought Forward from Page	95		
	3	96		
		97		
		98		
		99		
		100		
	0 1 1 7 0 11 0	_		
Section No. 3	Carried To Section Summary	R		
Bill No. 12				
Plumbing And Drainage				
	101			

					Makhwes	e SS
		Unit	Quantity	Rate	Amount	
	CECTION NO. 2					
	SECTION NO. 3					
	Medium Administration Block					
	BILL NO. 13 GLAZING					
	<u>GEPERIO</u>					
	<u>PREAMBLES</u>					
	For preambles see "Specification of materials and methods to be used - PW371					
	GLAZING TO STEEL WITH PUTTY					
1	5 mm Clear float glass: Panes exceeding 0,1m2 and not exceeding 0,5m2.	m²	43			
1		111-	43			
	5mm Rough cast glass:					
2	Panes exceeding 0,1m2 and not exceeding 0,5m2.	m²	2			
	TOPS, SHELVES, DOORS, MIRRORS, ETC.					
	6mm Silvered float glass copper backed mirrors with					
	polished edges fixed with double sided adhesive tape:					
3	Mirror 450 x 600 mm high.	No	3			
J	Will of 450 X 000 Hill High.	NO	3			
	Carried To Section Summary			R		
	Section No. 3					
	Bill No. 13					
	Glazing					
	102					

		Unit	Quantity	Rate	. Amount	
	SECTION NO. 3					
	Medium Administration Block					
	BILL NO. 14 PAINTWORK					
	PREAMBLES					
	For preambles see "Specification of materials and methods to be used - PW371					
	ON FLOATED PLASTER					
	Prepare, etc as specified and apply two coats of super acrylic paint:					
1	On interior walls.	m²	658			
	ON FIBRE-CEMENT, ETC.					
	Prepare, etc as specified and apply two coats of super acrylic Pva paint:					
2	On ceilings and cornices.	m²	297			
3	On fascias and barge boards.	m	172			
	ON METAL					
	Prepare, etc as specified and apply two coats of gloss enamel paint on :					
4	Door frames	m²	16			
5	On windows with burglar bars (both sides measured).	m²	74			
6	On gates, grilles, burglar screens, balustrades, etc (both sides measured over the full flat area).	m²	21			
	Inside eaves gutter					
7	Inside eaves gutter with waterproofing paint	m²	60			
	ON WOOD, WOOD BOARD					
	Prepare,etc as specified and apply two coats of super acrylic Pva paint on:					
8	General surfaces of doors (interior).	m²	36			
	Prepare, etc as specified and apply two coats of polyurethane suede varnish:					
9	On open slatted seating.	m²	9			
10	On laminated beam.	m²	3			
	Carried To Section Summary			R		
	Section No. 3 Bill No. 14					
	Paintwork					
	103					

	I	[Amount	l
	SECTION NO. 3			
	Medium Administration Block			
	SECTION SUMMARY			
Bill No.		Page		
1	FOUNDATIONS	72		
2	CONCRETE, FORMWORK AND REINFORCEMENT	75		
3	MASONRY	79		
4	WATERPROOFING	80		
5	ROOF COVERINGS	81		
6	CARPENTRY AND JOINERY	84		
7	CEILINGS PARTITIONS AND ACCESS FLOORING	85		
8	IRONMONGERY	88		
9	METALWORK	92		
10	PLASTERING	93		
11	TILING	94		
12	PLUMBING AND DRAINAGE	101		
13	GLAZING	102		
14	PAINTWORK	103		
	Carried to Final Summary	R		
	Section No. 3			
	SECTION SUMMARY			
	104			

SECTION NO. 4

Provisional Sums

			Amount	: 33
			7 unount	
	SECTION NO. 4			
	<u>Provisional Sums</u>			
	NOTE: All provisional sums are nett The Client reserves the right to omit any or all provisional sums			
	allowed in his tender without claim for loss of profit by the Contractor			
	Flags, Flag Poles & Plaque			
1	Provide the amount of R30 000.00 (Thirty Thousand Rands) for flags and plaque by a specialist	Item	30 000	00
2	Profit on above item.	Item		
3	Attendance on ditto.	Item		
	<u>Signage</u>			
4	Provide the sum of R30 000.00 (Thirty Thousand Rands) for signage	Item	30 000	00
5	Profit	Item		
6	Attendance	Item		
	School furniture			
7	Provide the sum of R500 000.00 (Five Hundred Thousand Rands) for supply of school furniture	Item	500 000	00
8	Profit	Item		
9	Attendance	Item		
	Office equipments and furniture			
10	Provide the sum of R300 000.00 (Three Hundred Thousand Rands) for			
	supply of Office equipments, furniture, first aid kit and sick bed in the administration block by specialist.	Item	300 000	00
11	Profit	Item		
12	Attendance	Item		
	Community liason officer			
13	Provide the budgedary allowance of R120 000.00 (One Hundred and Twenty Thousand Rands) for employement of a community liason officer for labour			
	requirements by the contractor and deducted in whole or part if not required.	Item	120 000	00
14	Profit	Item		
15	Attendance	Item		
	Carried To Section Summer			
	Carried To Section Summary Section No. 4	R		
	Bill No. 1			
	Provisional Sums			
	106			I

1		I	Amount	
	Joinery fittings			
16	Provide the sum of R300 000 (Three Hundred Thousand Rands) for joinery fittings by specialist	Item	300 000	00
17	Profit	Item		
18	Attendance	Item		
	Occupational Health and Safety Consultancy Services			
19	Provide the sum of R500 000.00 (Five Hundred Thousand Rands) for occupational health and safety services to be appointed by the Employer	Item	500 000	00
20	Profit	Item		
21	Attendance	Item		
	Carried To Section Summary	R		
	Section No. 4			
	Bill No. 1 Provisional Sums			
	107			

	1		Amount	
SECTION NO. 4				
<u>Provisional Sums</u>				
SECTION SUMMARY				
		Page		
Bro	ought forward from page	106		
	ought forward from page	107		
51.	ought forward from page	107		
	Carried to Final Summary	R		
Section No. 4				
SECTION SUMMARY				
1	08			

Section No.	FINAL SUMMARY	Page	
1	Preliminaries and Generals	40	
2	Demolitions and Renovations	68	
3	Medium Administration Block	104	
4	Provisional Sums	108	
	ADD: CONTINGENCIES Allow the Amount of R700 000 (Seven Hundred Thousand Rands) for contingencies, to be used by the Architect in terms of Clause 17 of the Principal Building Agreement.		700 000 00
	ADD: CPAP ALLOWANCE Allow the amount ofR700 000 (Seven Hundred Thousand Rands) for CPAP (Contract Price Adjustment Provisions) as Item 38.5.3 of the Schedule in the Preliminaries Bill No.1, to be used in terms of Clause 28.11 of the		700 000 00
	Principal Building Agreement. ADD: PART B & PART C ELECTRICAL INSTALLATION & CIVIL WORKS		
	SubTotal excluding Value Added Tax		
	ADD VAT @ 15%:		
	Carried to Tender	R	
	FINAL SUMMARY		
	109		

REPUBLIC OF SOUTH AFRICA

LIMPOPO DEPARTMENT OF PUBLIC WORKS & INFRASTRUCTURE

MAKHWESE SECONDARY SCHOOL

LDPWRI-B/20217

PART B ELECTRICAL INSTALLATIONS BILLS OF QUANTITIES

Summary- Makhwese Sec School

Summary-	Makhwese Sec School	·		
BILL	DESCRIPTION	AMOUNT		
1A and 1B	Preliminary and General and Transport			
2	Internal Installation			
3	Site Reticulation			
4	PVC Sleeves for Electric Installation			
5	HVAC			
6	Prov Sum for Eskom Bulk Power Supply			
7	Provisional Sum for Guard house			
	CARRIED TO FINAL SUMMARY			
New Rate Items:	age on New Rate Items%. Labour cost shall be based on the bill of rates.			
CONTRACTOR:				
SIGNATURE:				
DATE:				

	DESCRIPTION	UNIT	Qty	Rate	TOTAL
	BILL 2				
	CONDUIT WORK				
	Flush in walls, floors and concrete slabs against wooden and steel structures and walls in ceiling void, indoor and outdoor, chasing of floors and walls where necessary, etc.				
2	CONDUIT				
	20 mm dia PVC				
2.1	Material	m	3000		
2.2	Installation	m	3000		
	50 mm dia PVC				
2.3	Material	m	1500		
2.4	Installation	m	1500		
3	STEEL BOXES AND COVER PLATES Round conduit boxes				
3.1	Material	No	122		
3.2	Installation	No	122		
	Galvanized Steel				
	100 x 50 x 50 mm				
3.3	Material	No	74		
3.4	Installation	No	74		
4	CONDUCTORS				
	PVC Insulated copper conductors				
	1,5sq mm				
4.1	Material	m	0		
4.2	Installation	m	0		
	2,5sq mm				
4.3	Material	m	6000		
4.4	Installation	m	6000		
	4sq mm				
4.5	Material	m	3000		
4.6	Installation	m	3000		
	TOTAL CARRIED FORWARD				
	LIGIAL CARVIED LOUMAND	1	1	l	1

	nal Installations Bill- Makhwese Sec School DESCRIPTION	UNIT	Qty	Rate	TOTAL
	DESCRIPTION	UNIT	Qty	Rate	TOTAL
IIEIVI	TOTAL BROUGHT FORWARD	UNIT	Qiy	Kale	IOIAL
	TOTAL BROOGITT ORWARD			+	
	6sq mm				
4.7	Material	m	0		
4.8	Installation	m	0		
7.0	Installation	'''	0		
	Stranded Bare Copper Earth Wire				
	1.5sq mm				
4.9	Material	m	0		
4.10	Installation	m	0		
	2,5sq mm				
	Material				
4.12	Installation	m	3000		
		m	3000		
	4,0sq mm				
	Material	m	1500		
4.14	Installation	m	1500		
	Galvanized Draw wire				
	1,5sq mm				
4.15	Material		4500		
4.16	Installation	m	4500 4500		
4.10	Installation	m	4500		
	SWITCHES, SOCKET OUTLETS AND ISOLATORS FOR FLUSH				
5	INSTALLATION INCLUDING COVERPLATES				
	Switches				
	16 A Single Lever 1 way				
5.1	Material	No	49		
5.2	Installation	No	49		
	16A 1 Lever 2 way				
5.3	Material				
	Installation				
	1				
	Socket Outlets with switch				
	16A 3 pin Double 100 x 100				
5.5	Material	No	52		
5.6	Installation	No	52		
	Isolators				
	20A 2 pole, 100 x 100				
5.6	Material	No	15		
5.7	Installation		15		
3.7	Installation	No	13		
	TOTAL CARRIED FORWARD			1	
L	TOTAL CARRIED FURWARD				1

	DESCRIPTION	UNIT	Qty	Rate	TOTAL
	DESCRIPTION	UNIT	Qty	Rate	TOTAL
	TOTAL BROUGHT FORWARD	_			
	40A 2 pole, 100 x 100				
5.8	Material	No	16		
5.9	Installation	No	16		
6	SQUARE TUBING				
	POWER SKIRTING				
	Supply and installation of power skirting complete with covers and end caps.				
	Tenderers shall make provision for plugs, telephone points, computer points and				
	isolators on the power skirting				
6.1	Material				
6.2	Installation				
7	PHOTOCELL / DAYLIGHT SWITCH				
	Royce Thompson type or equal				
7.1	Material	No	4		
7.2	Installation	No	4		
_					
8	BONDING OF DISTRIBUTION BOARDS TO WATER AND ROOF				
	Installation	lot	4		
9	EARTHING AND LIGHTING PROTECTION				
9.1	Material	lot	4		
9.1	Installation	lot	4		
9.2	mistaliation	101	7		
10	TESTS OF THE COMPLETE ELECTRICAL INSTALLATION AND ISSUING OF COC'S				
40.4			_		
10.1	Installation	lot	4		
	Total for Bill 2 carried to summary sheet				

ITEM	DESCRIPTION	UNIT	Qty	Rate	TOTAL
ITEM	DESCRIPTION	UNIT	Qty	Rate	TOTAL
	BILL 3				
11	LIGHT FITTINGS				
	Tenderer shall include tubes or lamps and 5A unswitched plug in his tender rates.				
	The light fittings shall be installed complete with lamps.				
	Colour to be advised where not specified				
	Light Fittings samples shall be submitted for approval before final order is made				
11.1	TYPE 1 - (Surface mounted LED Open Channel, IP20, fitted with 2 x 18W LED				
	tubes, minimum 2320lm output per tube, colour temp 4000k)				
	Material	No	112		
	Installation	No	112		
11.2	TYPE 2 - IP65, vapour proof, open channel with 2 x 24W T8 LED tubes with lumen				
	output of 1720lm per tube.		_		
	Material	No	4		
	Installation	No	4		
11.3	TYPE B1 - IP65 Wall and ceiling mounted mounted bulkhead complete with 1 x				
	30W LED bulb .		00		
	Material	No	33		
	Installation	No	33		
11.4	Type 3 - Open Channel complete with 2 x 24W T8 LED tubes .Each tube to have a				
	lumen output of 2315lm.	Na			
	Material	No	0		
	Installation	No	0		
	Total for Bill 3 carried to summary sheet			1	
	rotarior bir o carried to summary sheet		1	1	1

Internal Installations Bill- Makhwese Sec School ITEM | DESCRIPTION

	<u> </u>			1	
ITEM	DESCRIPTION	UNIT	Qty	Rate	TOTAL
	BILL 4				
	SILL 4				
12	DISTRIBUTION BOARDS AND KIOSKS				
	Site Kiosk. Refer to the Kiosk Schematics				
12.1	Material	No	1		
12.2	Installation, including Kiosk plinth	No	1		
	Block DBs, Refer to Schematics				
12.3	Material	No	6		
12.4	Installation	No	6		
	Telephone and Computer Distribution Board				
	500 x 500 x 250 mm surface type distribution board installed flush				
12.5	Material	No	1		
12.6	Installation	No	1		
	Telephone point	No			
12.7	Material	No	5		
12.8	Installation	No	5		
	Computer point				

UNIT

No

No

5 5

Qty

Rate

TOTAL

SUMMARY OF QUANTITIES

Total for Bill 4 carried to summary sheet

12.9 Material Installation

BILL	DESCRIPTION	Scheduled Value
2	Conduit Work	
3	Light Fittings	
4	Distribution Board	
	SUB TOTAL	

Site Reticulation Bill-Makhwese Sec School

ITEM	DESCRIPTION	UNIT	Qty	Rate	TOTAL
	BILL 5				
13	LOW VOLTAGE CABLES				
	Low Voltage cables 600 to 1000 PVC insulated steel wire armoured underground cable				
	Cable in trenches, sleeves and building duct also in ceiling void if necessary				
	70 mm sq x 4 core				
	Material Installation	m m	0 0		
	50mm sq x 4 core				
13.3 13.4	Material Installation	m m	0 0		
	25mm sq x 2 core				
13.5 13.6	Material Installation	m m	50 50		
	16mm sq x 2 core				
	Material Installation	m m	300 300		
	10mm sq x 2 core				
	Material Installation	m m	0 0		
	TERMINATIONS				
	70mm sq x 4 core				
	Material Installation	No No	0 0		
	50mm sq x 4 core				
	Material Installation	No No	0 0		
	25mm sq x 2 core				
·	TOTAL CARRIED FORWARD				

ITEM	DESCRIPTION	UNIT	Qty	Rate	TOTAL
11 - 141	TOTAL BROUGHT FORWARD	OIVII	Qty	Nate	TOTAL
	Material	No	2		
13.16	Installation 10mm sq x 4 core	No	2		
	Tomin sq x 4 core				
	Material Installation	No No	12 12		
	10mm sq x 3 core				
13 10	Material	No	0		
	Installation	No	0		
14	COPPER EARTH WIRE				
	70mm sq				
	Material	m	0		
14.2	Installation	m	0		
	25mm sq				
14.3 14.4	Material Installation	m	50 50		
14.4		m	50		
	16mm sq				
14.5 14.6	Material	m	300 300		
14.0	Installation	m	300		
	10mm sq				
	Material	m	0		
14.8	Installation	m	0		
	6mm sq				
	Material	m	0		
	Installation	m	0		
15	Yellow Cable Marker / Danger Tape				
	Material	m	25		
15.2	Installation	m	25		
	TOTAL CARRIED FORWARD TO SUMMARY SUMMARY OF QUANTITIES				
BILL	DESCRIPTION		Scheduled Value		
5	LOW VOLTAGE CABLES				
	SUB TOTAL				
				•	

Site Reticulation Bill- Makhwese Sec School

ITEM	DESCRIPTION	UNIT	Qty	Rate	TOTAL
	BILL 6				
	PVC SLEEVES FOR ELECTRIC AND				
16	COMMUNICATION				
	PVC SLEEVES				
	complete with bends				
	100mm dim				
16.1	Material	m	0		
16.2	Installation	m	0		
	50mm dim				
16.3	Material	m	100		
16.4	Installation	m	100		
	Excavation				
16.5	Soft Rock and Earth	m3	0		
16.6	Hard Rock	m3	80		
16.7	Very Hard Rock	m3	0		
	Sifted Soil Bedding and Cover				
16.8	Material	m3	40		
16.9	Labour	m3	40		
17	Prepare As Built Drawings for all Layouts				
	As Built Drawings	lot	1		
18	Mailloles oud x oddillill with fleavy duty				
18.1	Material	No	3		
18.2	Labour	No	3		
19	Concrete Cable Markers				
19.1	Material	Lot	1		
19.2	Labour	Lot	1		
	TOTAL CARRIED TO SUMMARY				

BILL 7 BULK POWER SUPPLY FROM ESKOM HVAC 10 HVAC: Supply, delivery, installation, commissioning and testing of a 2.4 kW cooling capacity high wall split units complete with insulated refrigerant piping, condensate drains, trunking, electric wiring and connection and controls (heat pump), RECOMMENDED BRANDS are GREE , CARRIER , YORK AND LG High-wall split units, 2.4 kW cooling capacity/ 9000 BTU (heat pump) unit. Material Installation No. 6 Installation No. 6 Refrigerant piping pair (liquid and gas) m Material Installation Drain piping Material Installation Material Installation Hand Dryers Hand drier (XLERATOR or equivalent) at toilets (1400W high speed air jet, motor speed of at least 20000 RPM)	ITEM	DESCRIPTION	UNIT	Qty	Rate	TOTAL
capacity high wall split units complete with insulated refrigerant piping, condensate drains, trunking, electric wiring and connection and controls (heat pump), RECOMMENDED BRANDS are GREE, CARRIER, YORK AND LG High-wall split units, 2.4 kW cooling capacity/ 9000 BTU (heat pump) unit. Material No. 6 Installation No. 6 Refrigerant piping pair (liquid and gas) Material Installation Drain piping Material Installation Material Installation Material Installation Material Installation Material Installation Material Installation Material Installation Material Installation Material Installation Drain piping Material Installation Material Installation	20	BULK POWER SUPPLY FROM ESKOM HVAC HVAC: Supply, delivery, installation,				
20.1 9000 BTU (heat pump) unit. Material Installation Refrigerant piping pair (liquid and gas) Material Installation Drain piping Material Installation Material Installation Material Installation Material Materia		capacity high wall split units complete with insulated refrigerant piping, condensate drains, trunking, electric wiring and connection and controls (heat pump), RECOMMENDED BRANDS are GREE, CARRIER, YORK AND				
Installation 20.2 Refrigerant piping pair (liquid and gas) Material Installation 20.3 Drain piping Material Installation Material 20.1						
Installation 20.2 Refrigerant piping pair (liquid and gas) Material Installation 20.3 Drain piping Material		Material	No.	6		
Material m 100 Installation m 100 20.3 Drain piping m 100 Installation m 100 Installation m 100 Hand Dryers Hand drier (XLERATOR or equivalent) at toilets (1400W high speed air jet, motor speed of at least 20000 RPM)		Installation	No.			
Installation m 100 Drain piping Material m 100 Installation m 100 Hand Dryers Hand drier (XLERATOR or equivalent) at toilets (1400W high speed air jet, motor speed of at least 20000 RPM)	20.2	Refrigerant piping pair (liquid and gas)	m			
20.3 Drain piping Material m 100 Installation m 100 Hand Dryers Hand drier (XLERATOR or equivalent) at toilets (1400W high speed air jet, motor speed of at least 20000 RPM)			m			
Material m 100 Installation m 100 Hand Dryers Hand drier (XLERATOR or equivalent) at toilets (1400W high speed air jet, motor speed of at least 20000 RPM)			m	100		
Installation m 100 Hand Dryers Hand drier (XLERATOR or equivalent) at toilets (1400W high speed air jet, motor speed of at least 20000 RPM)	20.3	1		400		
Hand Dryers Hand drier (XLERATOR or equivalent) at toilets (1400W high speed air jet, motor speed of at least 20000 RPM)						
Hand drier (XLERATOR or equivalent) at toilets (1400W high speed air jet, motor speed of at least 20000 RPM)		Installation	m	100		
toilets (1400W high speed air jet, motor speed of at least 20000 RPM)		Hand Dryers				
I -···		toilets (1400W high speed air jet, motor speed				
1 212 1		oi at least 20000 RPM)				
	21.2	Material	No	2		
Material No 2 23 Installation No 2	23					
	23	IllStallation	INO			
TOTAL CARRIED TO SUMMARY		TOTAL CARRIED TO SUMMARY				

SUMMARY OF QUANTITIES

BILL	DESCRIPTION	Scheduled Value
6	PVC SLEEVES FOR ELECTRIC AND COMMUNICATION	
7	HVAC	
	SUB TOTAL	

REPUBLIC OF SOUTH AFRICA

LIMPOPO DEPARTMENT OF PUBLIC WORKS & INFRASTRUCTURE

MAKHWESE SECONDARY SCHOOL

LDPWRI-B/20217

PART C CIVIL WORKS BILLS OF QUANTITIES

Item	Payment Reference	Description	Unit	Qty	Rate	Amount
	SABS 1200 D	SCHEDULE NO. 1: EARTHWORKS				
		SITE CLEARANCE				
Alternative	8.3.1	Clear and grub area for				
see 1200C 1200DM		Buildings	m²	494.5		
Alternative		PREPARATION AND STRIPPING OF SITE				
see 1200DB 1200DM	8.3.1	Remove topsoil to a depth of 150mm and				
1200DIVI		Stockpile on site within freehaul distance and maintain	m³	74.18		
		Spoil at designated spoil site	m³	29.67		
		EXCAVATION				
	8.3.2	Excavate in all materials and use as fill, compacted to 90% mod AASHTO density for:				
		Platforms	m³	89.01		
	8.3.2	Extra over item 8.3.2 (a) for				
		Intermediate excavation	m³	26.70		
		Hard rock excavation	m³	17.80		
		Boulder excavation class A	m³	1.78		
		Boulder excavation class B	m³	1.78		
		COMMERCIAL MATERIAL				
	8.3.4	Extra over item 8.3.2 (a) for importation of materials from:				
		Commercial sources selected by the Contractor	m³	59.34		
TOTAL CARRIE	D FORWARD	•				

Item	Payment Reference	Description	Unit	Qty	Rate	Amount
ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		TOTAL BROUGHT FORWARD				
		DESIGNATED BORROW PIT (ARRANGED BY EMPLOYER)				
	8.3.4	Extra over item 8.3.2 (a) for importation of materials from				
		Designated borrow pits	m³	296.70		
	8.3.4	Opening up and closing down of designated borrow pit	sum	1.00		
		OVERHAUL				
	8.3.6	Overhaul (Provisional)				
		Limited overhaul	m³	89.01		
		Long overhaul	m³.km	59.34		
		COMPACTION OF BACKFILLING				
	8.3.9	Selected material compacted to 93% mod AASHTO density	m³	356.04		
		Mod AASHTO Tests	No.	8.00		
Carried forwa	ard to Summa	ry of Schedules				

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		SCHEDULE 2: EARTHWORKS (ROADS AND SUBGRADE)				
1	SANS	EARTHWORKS				
1.2		TREATMENT OF ROAD-BED				
1.2.1	8.3.3(a)	Road-bed preparation and compaction of material compacted to 93% MOD AASHTO maximum density	m³	305.07		
1.2.2	8.3.3(b)	In-place treatment of road-bed in intermediate or hard material				
		Ripping	m³	61.01		
1.3		EARTHWORKS				
1.3.1	8.3.4	Cut to fill				
		Compact to 90 % mod. AASHTO maximum density	m ³	152.53		
		Selected layer compacted to 93 % mod. AASHTO maximum density	m ³	152.53		
1.3.2	8.3.6	Extra-over items 1.3.1 inclusive for excavating and breaking down material in:				
		Intermediate excavation	m³	30.51		
		Hard excavation	m ³	15.25		
1.3.3	8.3.7	Cut to spoil from				
		Soft excavation	m ³	305.07		
		Intermediate excavation	m ³	61.01		
		Hard excavation	m ³	9.15		
1.3.4	8.3.8	Removal of oversize material	m ³	4.58		
TOTAL (CARRIED F	ORWARD				

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		TOTAL BROUGHT FORWARD				
1.4	SABS 1200 DM	SUNDRIES				
	8.3.10	Materials bladed to windrow	m ³	0.00		
	8.3.11	Extra-over items 8.3.7 and 8.3.8 for temporary stockpiling of material	m ³	30.00		
		Construction of storm water berm allong the designated areas by engineer	m ³	0.00		
1.5	SABS 1200 ME	SECTION: SUBBASE				
	8.3.1	Construct gravel wearing course with material from borrow pits in all materials				
		150mm to main carriageways	m ³	305.07		
	8.3.4	Extra over items .1 to .2 inclusive for class of excavation				
		Intermediate excavation	m ³	61.01		
		Hard rock excavation	m ³	45.76		
1.6	SANS 1200 MFL	BASE				
	8.3.1	Construct base with material from borrow pit				
		Stabilized base using material from borrow 150mm to 95% mod AASHTO	m ³	305.07		
1.7	8.3.4	Stabilizing Agent				
		(b) Portland Cement	m ³	9.15		
1.8	SANS 1200 MJ	SEGMENTED BLOCK PAVING TO THE ACCESS ROAD				
	8.2.2	80mm Type S-A 35mPa for roadway (Grey Colouring)	m²	0.00		
	8.2.2	60mm Type S-A 35mPa for roadway (Grey Colouring)	m ²	2 033.77		
	8.2.1	The construction of edge restraints	m	90.39		
FOTAL (CARRIED F	ORWARD				

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
		TOTAL BROUGHT FORWARD				
1.8	SANS 1200 MK	KERBING AND CHANNELLING				
	8.2.2	Supply, bed, lay, & joint concrete sections:				
1.8.1		400X200 Concrete edge strip (Class 20/19 Concrete Strength).				
		a) 1m Length on straight	m	125.00		
		b) 330mm Length on curves	m	20.00		
1.8.2		300X150 Barrier Kerb (SABS 927 Fig 3).	m	320.00		
1.8.3		Mountable Kerb (SABS 927 Fig 3).	m	64.00		
9	1200 DK	SUBSOIL DRAINS				
9.1	1200 DK 8.2	Supply and install A4 Bidim Geosynthetic materials to the subsoil drains , as per drawings.	m²	40.00		
9.2	1200 DK 8.2	Supply and install 110mm Class 6 HDPE perforated pipe to the subsoil drains outlet, as per drawings.	m	50.00		
9.3	1200 DK 8.2	Supply and install 1,5mm smooth HDPE Geomembrane as the liner to the channel, as per drawings.	m²	44.00		
9.4	1200 DK 8.2	Supply and install A7 Bidim Geosynthetic proetction layer to channel liner, as per drawings.	m²	60.00		
9.5	SANS 1200 AH	CONCRETE				
9.5.1	8.4.3	Supply, place and shape 25MPa concrete in hyson cells on the A10 Bidim Geosynthetic proetction layer , as per drawings.	m³	50.03		
9.5.2	8.4.3	Supply, place and shape 25MPa concrete in hyson cells in the leachate outlet channel. as per drawings.	m³	12.51		
TOTAL (CARRIED F	ORWARD				

ITEM NO.	PAYMENT REFER.	DESCRIPTION	UNIT	QUANTITY	RATE	AMOUNT
		TOTAL BROUGHT FORWARD				
10		STORMWATER MANAGEMENT				
	SANS	EARTHWORKS				
10.1		EXCAVATIONS				
10.1.1	1200 D 8.3.2	Excavate and prepare all cut off trenches and berms around the site as shown on the drawings and as directed by the Engineer.	m³	7.50		
10.1.2		Disposal of unsuitable or surplus material off site	m³	2.25		
10.2	SANS 1200 G	Concrete				
10.2.1	8.4.1	Mass concrete backfilling to replace unsuitable material, prescribed mix, Grade 10MPa/20 mm	m³	2.25		
10.2.2	8.4.2	Blinding layer, 50 mm minimum, prescribed mix, Grade 15MPa/20 mm	m²	2.50		
10.2.3	8.4.3	Strength concrete Grade 25 MPa/20 mm for:				
10.3		Concrete Channels	m³	11.25		
10.3.1	8.1.1	Formwork				
10.3.2	8.2.5	Rough, vertical, circular, maximum height 300 mm.	m	90.00		
10.3.3	8.2.5	Smooth, circular, vertical, 175 mm high to outer edge of base footing, (including forming of drainage lips with 110 mm dia drips)	m	20.00		
10.3.4	PSA8-11	Forming of drainage lips with 110 mm dia drips as per detail, Drawing	No	4.00		
10.3.5	8.4.4	Unformed surface finishes				
10.3.6		Steel float finish	m²	50.00		
TOTAL (CARRIED T	O SUMMARY				

Item No.	Payment Refers	Description	Unit	Qty	Rate	Amount
2	SABS 1200A	SCHEDULE 2 - STEEL PALISADE FENCING				
2.1	PCC-4.1	Steel palisade fencingn 2,4m high according to specification including excavations, foundation concreting, posts, pales and ground beams. All as per drawing.	m	630.00		
2.2	PCC-4.1	Supply and install according to specification a 6m wide vehicular gate	No	1.00		
2.3	PCC-4.1	Supply and install according to specification 1.5m wide pedestrian gate as per drawing	No	1.00		
2.4	PCC-4.1	Repainting of the existing fence	m²	0.00		
SUB - TO	TAL CARRIE	ED TO SUMMARY				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
NO.	REFRES	SCHEDULE 4 : WATER SUPPLY PIPELINES AND WATER SOURCE				
	SABS 1200DB	EARTHWORKS : PIPE TRENCHES				
3.1		SITE CLEARANCE				
3.1.1	8.3.1(a)	Clear 2m wide vegetation and trees of girth up to 1m	m	145.00		
3.1.2	8.3.1(b)	Remove trees over 1 m and up to 2 m girth	No.	0.00		
3.2	PSDB12	EXCAVATION				
3.2.1		Excavate in all materials for trenches for pipes with a diameter between 20 mm and 100 mm, backfill compact and dispose of surplus/unsuitable material				
		Up to 1,5m in depth	m³	145.00		
3.2.1.1	8.3.2(b)	Extra-over item 3.2.1 incl. for excavation (provisional) in :				
		a) Intermediate material b) Hard rock material	m³ m³	29.00 21.75		
3.2.1.2		Extra over Item 3.2.1				
		a) Backfill and compact by means of labour intensive construction methods in layers of 200mm compacted to 90% mod AASHTO	m³	145.00		
3.2.2		EXCAVATION ANCILLARIES				
3.2.2.1	8.3.3.1(a)	Imported backfill materials from designated borrow pits (Only if approved by Engineer)	m³	50.75		
3.2.2.2	8.3.3.2	Opening up and closing down of designated borrow pit	P.Sum	1.00		
3.2.2.3	8.3.3.3	Compaction in road reserves	m³	0.00		
3.2.2.4	8.3.3.4	Overhaul :				
		a) Short haul b) Truck haul	m³ m³/km	-		
3.2.4	SABS1200	PROVISION OF BEDDING (PIPES)				
3.2.4.1	LB 8.2.1	Provision of bedding material from trench excavations				
		a) Selected granular material b) Selected fill material	m³ m³	21.75 50.75		
3.2.4.2		Provision of bedding material by importation from other necessary excavations (freehaul within the village boundaries)				
		Selected granular material Selected fill material	m³ m³	26.10 60.90		
TOTAL (CARRIED FO	RWARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT F	ORWARD				
3.2.4.4	8.2.3	Concrete bedding	m³	5.00		
3.2.4.5	8.2.4	Encasing of pipes in Class 19/20 concrete	m³	5.00		
3.2.4.6	8.2.5	Overhaul of material for bedding cradle and selected fill blanket	m³km	0.00		
3.2.5	1200L	PIPEWORK				
	8.2.1	Supply, lay, joint, bed, test and disinfect the following pipes complete with couplings and fittings to the relevant SABS standards including short lengths (all uPVC pipes to comply with DWS1160)				
3.2.5.1		uPVC pipes				
		a) 75 Class 12 b) 75 Class 9	m m	- -		
3.2.5.2		HDPE pipes Type IV				
		a) 20 mm class 6 b) 50 mm class 6 c) 75 mm class 10	m m m	40.00 385.00 20.00		
3.2.5.3		GMS pipes (medium duty)				
		a) 15 mm Ø b) 20 mm Ø c) 25 mm Ø	m m m	- - -		
3.2.6		VALVES				
3.2.6.1		Line valve assemblies.				
		Extra over item F.6 for supplying, installing, bedding and testing line valve assemblies as per Drawing complete cutting of pipes and couplings included (all valves to comply with DWS 2510)				
		a) 50 mm b) 75 mm	No. No.	4.00 0.00		
3.2.6.2		Scour valve assemblies				
		Extra over item F.6 for supplying, installing, bedding and testing scour valve assemblies as per Drawing complete. Scour tee, cutting of pipes and couplings included.				
		a) On 50 mm dia main	No.	5.00		
3.2.6.3		Ditto for 40 Ø and smaller pipes as detailed in Drawing for the following diameters				
		a) 25 Ø b) 32 Ø c) 40 Ø	No. No. No.	- - -		
3.2.6.4		Air valve assemblies				
		Extra over item D.6 for supplying, installing and testing air valve assemblies as per Drawing complete				
		a) On 50 mm and 64 mm Ø main	No.	1.00		
TOTAL (CARRIED FO	PRWARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
OTAL	BROUGHT F	ORWARD				
3.2.10		FITTINGS FOR HDPE PIPES				
3.2.11		SUNDRIES				
3.2.11.3		Thrust blocks as per typical details on specification Drawing				
		a) Concrete Class 15/19 b) Rough formwork	m³ m²	1.00 1.00		
3.2.14		BOREHOLE DEVELOPMENT - (PROVISIONAL)				
		Geohydrological Servies				
		Sitting of drilling sites. Alowance to be made for desk study, site assessment, drilling supervision, testing supervision, and reporting.	No	1.00		
		Borehole Drilling				
		Site Establishment/De-establishment				
		Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site of the drilling batch.	No	1.00		
		Drilling				
		Drilling of 165mm diameter borehole in non-collapsible material.	m	100.00		
		Odex drilling in collapsible material and where ordered by the Geohydrologist of 254mm diameter borehole. Rate to include supply, delivery and installation of at least 6mm sidewall Odex casing.	No	120.00		
		Steel casing (plain), 165 mm (state wall thickness here as 3 mm)	m	35.00		
		Steel casing (slotted), 165 mm (state wall thickness here as 4 mm)	m	0.00		
		Pump testing of borehole.				
		Rate to include the following:installation of pump testing equipment and remove after, calibration testing, 24hr constant testing, recovery measurements, data recording and reporting.	No	1.00		
		Sampling for water quality testing	No	1.00		
		Site finishing				
		Borehole finishing, rate to include borehole disinfection, concrete collar in Grade 20Mpa concrete, normal saintary seal, borehole making. Reporting	No	1.00		
		Complete Geohydrology report signed by a registered personnel	No	1.00		
3.2.15		BOREHOLE REHABILITATION - (PROVISIONAL)				
		Site Establishment/De-establishment				
		Mobilisation and set up of plant to/at first borehole. Rate to include inter-borehole moves and de-establishment from site	No	1.00		
OTAL	L CARRIED FO	I DRWARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	QTY	RATE	AMOUNT		
TOTAL I	TOTAL BROUGHT FORWARD							
		Removal of existing pumphouse	No	1.00				
		Removal of existing pump	No	1.00				
		Positive displacement pump						
		Removal using cable-tool (jumper) drilling rig of columns instalations diameter, 25mm-100mm upto 120m. Rate to include all pipe work and fittings	No	1.00				
		Site Establishment/De-establishment						
		Mobilisation and set up of plant to/at first borehole. Rate to including inter-borehole moves and de-estalishment from Site, of the given drilling batch	No	1.00				
		Pump testing of borehole.						
		Rate to include the following:installation of pump testing equipment and remove after, calibration testing, 24hr constant testing, recovery measurements, data recording and reporting.	No	1.00				
		Sampling for water quality testing	No	1.00				
		BOREHOLE PUMPS AND APPURTENANCES						
3.2.16		NEW BOREHOLE INSTALLATION Supply and commissioning and testing of New Borehole complete with electric wiring and connection and controls. All units are to be made good and neat in accodance to manufactures and Engineers' specification.						
		Submersible pumpsets and fittings						
		Supply and install new submersible pump - Grundfos or similar Quality. All internals of wet-end shall be 316 stainless steel\brass. Electrical motor will be 316 stainless steel. Complete with corrosion protection. Engineer to approve prior to installation.						
		Pump Installation, Head & Flow fas per borehole test report	No	1.00				
		Electric Motor installation, as per pump size requirements determined in item above.	No	1.00				
		Pump Protection						
		Mechanical pressure switch, PN16, Complete with cabling to panel : Limits between 160m and 80m, WIKA PSM-550 or Equivalent	No	1.00				
		Mechanical flow switch, PN16, Complete with cabling to panel	No	1.00				
		Float Switch for Switching off Pump on Low Level, c/w wiring to panel's liquid level control relay.	No	1.00				
		Electric Motor Control Panel						
		Supply and install control panel with all fittings required to operate pumps and motors efficiently, including 0-20 second delay timer and0-24 hour timer.	No	1.00				
TOTAL (CARRIED FO	RWARD						

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL	BROUGHT F	ORWARD				
		Pipework Supply and install borehole discharge pipework complete with flow meter, non return and pressure valves on the following pipework.				
		Submersed pipe: Ø 63mm HDPE, Class 12, 7,1mm Wall thickness, SANS 4427, Borehole to Surface	m	110.00		
		Metal Base plate - Double choke	No.	1.00		
		65 NB Schedule 40 pipe discharge Galvanised Steel pipe, Incl Elbows and fittings	m	5.00		
		65 NB Threaded Brass Type Isolation valve, PN10 65 NB Flanged Non Return Valve,tilted disc type, PN 10	No. No.	2.00 1.00		
		65 NB Flanged Mechanical flow meter, PN 10	No.	1.00		
		M16 galvanised bolts and nuts	No.	96.00		
		65 NB Gaskets, Incl Consumables	No.	24.00		
		Mechanical Pressure Gauge, Wika (100mm dial and filled with glycerine),with a range from 400 kPa to 1600 kPa, complete with ball isolating valve and piping	No.	1.00		
		T-Pieces and Bushes to mount Pressure gauge, Pressure Switch and Flow Switch Submersible pump steel cage	No.	3.00		
		Supply and install borehole discharge pipework complete as per	No	1.00		
3.2.18		TESTING AND COMMISSIONING				
		Testing and commission borehole installation includibg pumps, motrs, control system and verify discharge and head characteristics	No	1.00		
		Eletricity Supply				
		Supply material and erect a three phase electricity power line to the new borehole	No	1.00		
		Mark-up on item 4.2.1				
		Supply all material and install a 25kVa transformer	No	1.00		
		WATER TREATMENT (PROVISIONAL)				
		10kl PVC pre-treatment tank	No.	1		
		Supply, installation, connections, testing and handing over in working order of a 20m³/hr package water treatment plant	Prov. Sum	1		R350 000.00
		Overheads, charges and profit.	%			
TOTAL	L CARRIED FC	DRWARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL I	BROUGHT F	ORWARD				
		WATER STORAGE				
		Water Tanks 5 000 Litre polyethylene water tank (JoJo make or equiva-lent). Tank complete with 50 x 40 DN nylon bushes sealed into all inlets and outlets. Include for anchorage onto tank stand platform with 4mm diameter galvanized steel wire (bloudraad), 2 Strands/Anchor.	No	0		
		10 000 Litre polyethylene water tank (JoJo make or equiva-lent). Tank complete with 50 x 40 DN nylon bushes sealed into all inlets and outlets. Include for anchorage onto tank stand platform with 4mm diameter galvanized steel wire (bloudraad), 2 Strands/Anchor.	No	2		
		Elevated 4.5m Steel Stand Tankstand Refurbishment including, modification to concrete foundations, pipe work, brackets, surface preparation and re-painting	Sum	2		
		Elevated 4.5m Steel Stand Refurbishment (Provisional) Refurbish existing steel stand - including repainintg, rust protection and replacing corroded purlins	P.Sum	1		
		Outlet and overflow Pipe Schedule for items below:	Sum	2		
		a) 1½" to 50mm MALE ELBOW (Plasson)				
		b) 50mm Ø HDPE PIPE CLASS 10	m	2		Rate Only
		c) 50mm Ø PLASSON ELBOW	No	2		Rate Only
		d) 50mm Ø MALE ADAPTER (Plasson)	No	2		Rate Only
		e) 50GMS bend F/F	No	2		Rate Only
		f) 50mm Ø x 3000 GMS STAND PIPE	No	2		Rate Only
		g) 50mm Ø BRASS BALL VALVE (COBRA)	No	2		Rate Only
		h) 50mm Ø GMS NIPPLE	No	2		Rate Only
		i) 50mm Ø GMS UNION	No	2		Rate Only
		k) 50mm Ø GMS PIPE 6000 LONG	No	2		Rate Only
		I) 50mm Ø GMS ELBOW F/F m) 50mm Ø GMS STAND PIPE 300 LONG (400 long in sandy	No	2		Rate Only
		conditions)	No	2		Rate Only
		n) 50mm Ø GMS STAND PIPE 700 LONG	No	2		Rate Only
		o) 50mm Ø GMS SOCKET	No	2		Rate Only
		p) 50mm Ø GMS STAND PIPE 150mm	No	2		Rate Only
TOTAL (CARRIED FO	RWARD				

ITEM NO.	PAYMENT REFRES	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	BROUGHT F	ORWARD				
		Inlet Pipe Schedule (From Pump)	Sum	2		
		a) 1½ "TO 40mm MALE ELBOW (Plasson)	No	2		Rate Only
		b) 40mm Ø HDPE PIPE CLASS 10	m	2		Rate Only
		c) 40mm Ø PLASSON ELBOW	No	2		Rate Only
		d) 40mm Ø MALE ADAPTER (Plasson)	No	2		Rate Only
		k) 40mm Ø GMS PIPE 6000 LONG	No	2		Rate Only
		I) 40mm Ø GMS ELBOW F/F	No	2		Rate Only
		m) 40mm Ø GMS STAND PIPE 300 LONG (400 long in	No	2		Rate Only
		sandy conditions)				
		n) 40mm Ø GMS STAND PIPE 700 LONG	No	2		Rate Only
		o) 40mm Ø Galvanised socket	No	2		Rate Only
		p) 40mm Ø Galvanised standpipe 150 mm long	No	2		Rate Only
3.2.7		DRAW-OFFS				
3.2.7.1		Complete supply, install and test single rudimentary domestic drawoff standard type as detailed in Drawing with :				
		i) 2 Taps	No.	5.00		
		ii) 4 Taps	No.	0.00		
3.2.7.3		Complete supply, install and test garden standpipe as detailed in Drawing	No.	1.00		
		DECOMMISSIONING OF OLD SERVICES				
		Removal of old water supply equipment including old tanks, tank				
		stands, and pumps etc.	No	2		
TOTAL	CARRIED TO	SIIMMADY				
.OIAL	CANNED IC	, Comment				

Item	Description	Unit	Qty	Rate	Amount
	SCHEDULE 5 : EXTERNAL SEWER RETICULATION				
4.1	EARTHWORKS (PIPE TRENCHES)				
4.1.1	Excavation				
	Excavate in all material for trenches, backfill, compact and dispose of surplus material for pipes over 25mm dia up to 400mm dia for depths:				
	a) Exceeding 0,0m but not more than 1,0m	m³	65.00		
	b) Exceeding 1,0m but not exceeding 2.0m	m³	3.25		
4.2	Extra-over all excavations in pickable material irrespective of depth, for excavating in:-				
4.2.1	Intermediate excavation	m³	13.00		
4.2.2	Hard rock excavation	m³	9.75		
4.3	Excavation Ancilliaries				
4.3.1	Excavate and dispose of unsuitable material from trench bottom (provisional)	m³	3.25		
4.3.2	Make deficiency in backfill material (Provisional)				
	a) from other necessary excavation on Site	m³	3.25		
	b) by importation designated borrow pits	m³	3.25		
	c) Compaction in platform reserves	m³	3.25		
4.4	Existing services				
	a) Services that adjoin a trench	m	12.00		
	b) Services that intersect a trench	No	5.00		
Amount	Carried Forward				

Item	Description	Unit	Qty	Rate	Amount	
Amount Brought Forward						
4.5	BEDDING (PIPES)					
4.5.1	Provision of Bedding from Trench Excavation					
	a) Selected granular material	m³	9.75			
	b) Selected fill material	m³	27.30			
4.5.2	Supply only of Bedding by Importation From Commercial Sources (provisional)					
	a) Selected granular material	m^3	9.75			
	b) Selected fill material	m^3	27.30			
4.6	SEWERS PIPELINES					
4.6.1	Supply, Lay, Joint and Bed PVC Heavy Duty Class 34 solid wall pipe (conforming to SABS 891), complete with fittings					
	a) 110mm dia	m	65.00			
	b) 150mm diameter	m	-			
	c) 225mm diameter	m	-			
	d) 375mm diameter	m	-			
4.6.2	Extra over items 11.3.1 for specials					
	a) 110mm Access bends	No	12.00			
	b) 110mm Access junctions	No	6.00			
	c) 160mm Bends	No				
	d) 160mm Access bends	No	-			
	e) 160mm Access Junctions	No	-			

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Item	Description	Unit	Qty	Rate	Amount	
Amount Brought Forward						
4.7	Sundries					
4.7.1	Breaking into and connecting into existing manhole	No	6.00			
4.8	MANHOLES					
4.8.1	Supply and install manholes & slabs (SABS 1294)					
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 750mm and not exceeding 1m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No	1.00			
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 1000mm and not exceeding 1250m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No	1.00			
4.8.1.1	Precast concrete manholes 1200mm diameter, exceeding 1250mm and not exceeding 1500m deep, complete with precast concrete heavy duty cover and frame TYPE 4A	No	2.00			
4.9	PIPE ANCILLARIES					
4.9.1	Encasing around pipe					
4.9.1.1 4.9.1.2	Anchor blocks in strength concrete 25Mpa /19mm including all formwork, reinforcement, reinforcement, etc. Anchor block size 600 x 600mm	No	10.00			
4.10	EXISTING SERVICES					
4.10.1	Connection to existing sewer					
4.10.1.1	200mm Diameter pipe to existing manhole	No	1.00			
4.10.2	Raising or lowering of existing manholes	No	1.00			
4.10.2.1	Remove cover and frame then lower the manhole to required level, complete with all necessary accessories.	No	1.00			
Amount	Carried to Forward					

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ltem	Description	Unit	Qty	Rate	
nount	Brought Forward				
4.11	SEPTIC TANK				
1.11.1	Septic tank:				
	Excavate in soft material exceeding 2m deep.	m³	71.553		
	Extra over septic tank excavations for carting away surplus material from excavations or stock piles to a dumping site to be located by the Contractor.	m³	10.73		
	Risk of collapse to sides septic tank excavations not exceeding 1,5m deep.	m²	48.37		
	Earthfilling obtained from the excavations or stock piles compacted to 93% in septic tank.	m³	10.73		
	Modified AASHTO density tests	No	2		
	Extra over excavation in soft material for pipe trenches, chambers, etc. for excavation in intermediate material.	Item	1.5		
	25 MPa Reinforced concrete top slab.	m³	5.37		
	25 MPa Reinforced concrete base.	m³	5.37		
	Backfilling to sides of septic tank.	m³	7.16		
	Type 395 fabric reinforcement in concrete surface beds, floor slabs, etc.	m²	40		
	Rough formwork to soffit of slab.	m²	35.78		
	Plaster to vertical surfaces.	m²	48.37		
	One brick wall in commons including wire ties for septic tank walls.	m²	6.588		
	Two brick wall in commons including wire ties for septic tank walls.	m²	48.37		
	Lintels as permanent shatters	m	71.553		
	600 x 600mm Cast iron manhole covers	No	2		
	Pipework				
	Extra over excavation in soft material for pipe trenches, chambers, etc. for excavation in intermediate material.	m³	35		
	Connecting 110mm uPVC pipe including 110mm channel junction and making good concrete benching.	No	2		
	Connecting 160mm pipe including inserting 160mm channel junction and making good concrete benching.	No	2		
	Allow for testing the complete drainage installation by visual and Air Pressure test to the satisfaction of the Employer. (All defective work to be replaced at the Contractor's expense).	Item	1		
	160mm uPVC slotted drainage pipe laid in and including trench not exceeding 1,00m deep with 500 x 500mm washed 25mm stone casing wrapped in u24 non-woven, spunbonded, punched continuous polyester fabric, including fill, ram, carting away, etc.	m	35		

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Item	Description	Unit	Qty	Rate					
Amount	Amount Brought Forward								
	Soakaway: Excavate in earth for and build French drain size as indicated on drawings, fill in with 20mm crushed stone to within 0,2m of top, enclose stone with geofabric u 24 and fill in with earth filling.	m	35						
	Extra over soakaway excavations for carting away surplus material from excavations to a dumping site to be located by the Contractor.	m³	5						
	Risk of collapse to sides of soakaway excavations exceeding 1,5m and not exc. 2m deep.	m²	28						
	One layer of 250 micron waterproof sheeting and sealed at overlaps with pressure sensitive tape laid over soak away	m²	35						
	0,6mm IBR sheeting laid across walls.	m²	35						
	Lintels laid above soakaway	m	35						
Amount	Carried to Final Summary								

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ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	SABS 1200 GB	SCHEDULE 6: WALKWAYS AND CARPORTS				
5.1		FORMWORK				
5.1.1	8.2.1(b)	Normal formwork to				
		c) Column Foundations	m ³	149.76		
5.2		REINFORCEMENT				
5.2.1	8.2.4	Mild steel bars of nominal diameter				
5.2.1.1		12mm	t	5.99		
5.2.2		High-tensile steel bars of nominal diameter				
5.2.2.1		16mm	t	8.99		
5.2.3		High-tensile welded mesh of nominal mass				
5.2.3.1		a) 3.95 kg/m ²	m²	0.00		
5.3		CONCRETE				
5.3.1	8.2.5	Strength concrete, Grade 25MPa/19 mm in Column Footings	m ³	14.98		
5.3.2		Blinding layer, Grade 10/19,0 mm	m ³	1.87		
5.3.4	8.2.6	Unformed surface finishes				
5.3.4.1		Wood-float to all floors except	m²	37.44		
	SABS 1200 AH	SECTION : STRUCTURAL STEELWORK				
5.5	8.3.1	PRELIMINARY AND GENERAL				
5.5.1	8.3.1	SUPPLY AND FABRICATION				
5.5.1.1	8.3.1.1	Preparation of shop detail drawings	Sum	1.00		
5.5.2	8.3.1.2	Supply, delivery and installation of steelwork (see Drawings) complete with all the necessary cleats, brackets, gussets, packs, bolts & nuts etc. as follows:				
		a) Using steel to SABS 1431 Grade 350WA for walkways				
5.5.2.1		Simple Square Tubing - columns (welded)	t	2.23		
5.5.2.2		Square Tubing Beams - beams (welded)	t	0.77		
5.5.2.3		Square Tubing purlins	t	2.26		
5.5.2.4		Unequal Angle rafter bracing	t	2.61		
5.5.2.5		200 x 200 x 6mm Base Plates	No.	126.00		
TOTAL	CARRIED FO	DRWARD				

ITEM NO.	PAYMENT REF.	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
TOTAL	BROUGHT F	ORWARD				
		Fasteners for angles hexhead bolts with washers - Grade 8.8	No.	378.00		
		Sika Non-shrink grout or Similar	m ³	1.01		
		M12 Holding Down Bolta - Grade 8.8 hexhead bolts	No.	504.00		
		b) Using steel to SABS 1431 Grade 350WA for assembly				
		Simple Square Tubing - columns (welded)	t	1.75		
		Square Tubing Beams - beams (welded)	t	1.52		
		Square Tubing purlins	t	1.74		
		Unequal Angle rafter bracing	t	1.78		
		200 x 200 x 6mm Base Plates	No.	86.00		
		Fasteners for angles hexhead bolts with washers - Grade 8.8	No.	258.00		
		Sika Non-shrink grout or Similar	m ³	0.69		
		M12 Holding Down Bolta - Grade 8.8 hexhead bolts	No.	344.00		
		c) Using steel to SABS 1431 Grade 350WA for carports				
		Simple Square Tubing - columns (welded)	t	0.81		
		Square Tubing Beams - beams (welded)	t	0.50		
		Square Tubing purlins	t	3.21		
		Unequal Angle rafter bracing	t	2.45		
		Steel Fascia beams	t	1.54		
		200 x 200 x 6mm Base Plates	No.	22.00		
		Fasteners for angles hexhead bolts with washers - Grade 8.8	No.	66.00		
		Sika Non-shrink grout or Similar	m ³	0.18		
		M12 Holding Down Bolta - Grade 8.8 hexhead bolts	No.	88.00		
TOTAL	CARRIED FO	DRWARD			_	

Civil Works 21 175

8.3.5	ORWARD				
8.3.5					
	SITE WELDING				
	Site weld items inclusive	m	70.20		
	CLADDING AND SHEETING				
	ROOF CLADDING				
	Supply, deliver to Site, erect and fix green chromedeck sheeting/cladding etc, including the supply of all necessary fasteners etc. and cutting and notching: (See Drawings)	m²	1 022.80		
823	Approved troughed profile-sheeting to roofs, 0,6mm				
0.2.3	Ridge flashing 450-600mm girth x 1mm - 3 bends, baked enamel external finish	m	32.00		
8.3.1	GUTTERS AND RAINWATER PIPES				
	Galvanized mild steel				
	3mm Thick box gutter, 100mm girth 6 times bent along length to detail, including straps, stiffeners,etc as per drawing	m	270.00		
	Extra for stopped end	no	6.00		
	Extra for 150mm diameter outlet	no	37.00		
	1mm Thick 150mm diameter rainwater pipe including straps, fixed to steel columns	m	96.20		
	Extra for 45° bend	no	37.00		
ABS 1200 HC	CORROSION PROTECTION OF STRUCTURAL STEELWORK				
	Steelwork included under Items 1 to 7inclusive, of Section 1200H (Supply, Fabrication and Erection)	t	14.67	1	
8.2.1	SURFACE DRESSING AND REPAIRS AT PLACE OF FABRICATION				
	Remove slag and weld spatter, grind welds to smooth profile, radius sharp edges as specified.	t	14.67		
8.2.3	SURFACE PREPARATION AND COATING APPLICATION Shopwork. Prepare surface and apply coat(s) as specified.	t	14.67		
	Sitework. Clean down surfaces, touch up damaged shop coats and apply finish coats as specified	t	14.67		
	Cold-formed sections				
	Tonnage shall be gross quantities inclusive of unpainted steel (e.g. embedded portions and underside of baseplate,etc.				
		t	14.67		
	BS 1200 HC 8.2.1	Supply, deliver to Site, erect and fix green chromedeck sheeting/cladding etc, including the supply of all necessary fasteners etc. and cuttina and notchina: (See Drawinas) Approved troughed profile-sheeting to roofs, 0,6mm Ridge flashing 450-600mm girth x 1mm - 3 bends, baked enamel external finish 8.3.1 GUTTERS AND RAINWATER PIPES Galvanized mild steel 3mm Thick box gutter, 100mm girth 6 times bent along length to detail, including straps, stiffeners, etc as per drawing Extra for stopped end Extra for 150mm diameter outlet 1mm Thick 150mm diameter rainwater pipe including straps, fixed to steel columns Extra for 45° bend CORROSION PROTECTION OF STRUCTURAL STEELWORK HC Steelwork included under Items 1 to 7inclusive, of Section 1200H (Supply, Fabrication and Erection) 8.2.1 SURFACE DRESSING AND REPAIRS AT PLACE OF FABRICATION Remove slag and weld spatter, grind welds to smooth profile, radius sharp edges as specified. 8.2.3 SURFACE PREPARATION AND COATING APPLICATION Shopwork. Prepare surface and apply coat(s) as specified. Sitework. Clean down surfaces, touch up damaged shop coats and apply finish coats as specified Cold-formed sections Tonnage shall be gross quantities inclusive of unpainted steel (e.g.	Supply, deliver to Site, erect and fix green chromedeck sheeting/cladding etc, including the supply of all necessary fasteners etc. and cuttina and notchina: (See Drawinas) Approved troughed profile-sheeting to roofs, 0,6mm Ridge flashing 450-600mm girth x 1mm - 3 bends, baked enamel external finish 8.3.1 GUTTERS AND RAINWATER PIPES Galvanized mild steel 3mm Thick box gutter, 100mm girth 6 times bent along length to detail, including straps, stiffeners, etc as per drawing Extra for stopped end Extra for 150mm diameter outlet 1mm Thick 150mm diameter rainwater pipe including straps, fixed to steel columns Extra for 45° bend no BS 1200 CORROSION PROTECTION OF STRUCTURAL STEELWORK HC Steelwork included under Items 1 to 7inclusive, of Section 1200H (Supply, Fabrication and Erection) 8.2.1 SURFACE DRESSING AND REPAIRS AT PLACE OF FABRICATION Remove slag and weld spatter, grind welds to smooth profile, radius sharp edges as specified. 8.2.3 SURFACE PREPARATION AND COATING APPLICATION Shopwork. Prepare surface and apply coat(s) as specified. 8.2.4 Sitework. Clean down surfaces, touch up damaged shop coats and apply finish coats as specified Cold-formed sections Tonnage shall be gross quantities inclusive of unpainted steel (e.g. embedded portions and underside of baseplate, etc.	Supply, deliver to Site, erect and fix green chromedeck sheeting/cladding etc, including the supply of all necessary fasteners etc. and cuttina and notchina: (See Drawinos) Approved troughed profile-sheeting to roofs, 0,6mm Ridge flashing 450-600mm girth x 1mm - 3 bends, baked enamel external finish 8.3.1 GUTTERS AND RAINWATER PIPES Galvanized mild steel 3mm Thick box gutter, 100mm girth 6 times bent along length to detail, including straps, stiffeners, etc as per drawing Extra for stopped end Extra for 150mm diameter outlet 1mm Thick 150mm diameter outlet 1mm Thick 150mm diameter rainwater pipe including straps, fixed to steel columns Extra for 45° bend CORROSION PROTECTION OF STRUCTURAL STEELWORK HC Steelwork included under Items 1 to 7inclusive, of Section 1200H (Supply, Fabrication and Erection) 8.2.1 SURFACE DRESSING AND REPAIRS AT PLACE OF FABRICATION Remove slag and weld spatter, grind welds to smooth profile, radius sharp edges as specified. 8.2.3 SURFACE PREPARATION AND COATING APPLICATION Shopwork. Prepare surface and apply coat(s) as specified. 8.2.3 SURFACE PREPARATION SUCCESSION Shopwork. Prepare surface and apply coat(s) as specified. 8.2.4 Sitework. Clean down surfaces, touch up damaged shop coats and apply finish coats as specified Cold-formed sections Tonnage shall be gross quantities inclusive of unpainted steel (e.g. embedded portions and underside of baseplate, etc. t 14.67	Supply, deliver to Site, erect and fix green chromedeck sheeting/cladding etc, including the supply of all necessary fasteners etc. and cuttina and notchina: (See Drawinas) 8.2.3 8.2.3 8.2.3 8.2.3 8.2.3 8.2.3 8.2.3 8.2.3 8.2.3 8.2.3 8.2.3 8.2.3 8.2.4 Approved troughed profile-sheeting to roofs, 0,6mm Ridge flashing 450-600mm girth x 1mm - 3 bends, baked enamel external finish m 32.00 8.3.1 GUTTERS AND RAINWATER PIPES Galvanized mild steel 3mm Thick box gutter, 100mm girth 6 times bent along length to detail, including straps, stiffeners, etc as per drawing no 6.00 Extra for 150mm diameter outlet no 37.00 1mm Thick 150mm diameter rainwater pipe including straps, fixed to steel columns Extra for 45° bend no 37.00 BS 1200 CORROSION PROTECTION OF STRUCTURAL STEELWORK HC Steelwork included under Items 1 to 7 inclusive, of Section 1200H (Supply, Fabrication and Erection) 8.2.1 SURFACE DRESSING AND REPAIRS AT PLACE OF FABRICATION Shopwork. Prepare surface and apply coat(s) as specified. Sitework. Clean down surfaces, touch up damaged shop coats and apply finish coats as specified Cold-formed sections Tonnage shall be gross quantities inclusive of unpainted steel (e.g. embedded portions and underside of baseplate, etc. t 14.67

DEPARTMENT OF EDUCATION: LIMPOPO

MAKHWESE PRIMARY SCHOOL

MAKIWEGE I KIMAKI GONGGE				
CIVIL ENGINEERINGS SERVICES BOQS				
SUMMARY OF BILL OF QUANTITIES				
SCHEDULE NO. 1: EARTHWORKS				
SCHEDULE 2: EARTHWORKS (ROADS AND SUBGRADE)				
SCHEDULE 2: STEEL PALISADE FENCE				
SCHEDULE 3:WATER SUPPLY PIPELINES AND WATER SOURCE				
SCHEDULE 4:EXTERNAL SEWER RETICULATION				
SCHEDULE 5:COVERED WALKWAYS				
TENDER (CONTRACT) SUM (CIVIL AND STRUCTURAL WORKS)				

Civil Works 23 177

PART C3 SCOPE OF WORKS

SCOPE OF WORK

BID NUMBER: LDPWRI-B/20289

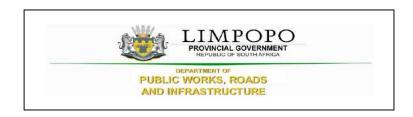
THE DEMOLITION OF 12 CLASSROOMS, OFFICES AND PIT 4 PIT TOILTES, REFURBISHMENT OF 10 CLASSROOMS, GUARD HOUSE AND 27 SEATER ENVIROLOO TOILETS, CONSTRUCTION OF 20 CLASSROOMS, MEDIUM ADMINISTARTION BLOCK, NEW 20 SEATER ENVIROLOO TOILETS, STEEL PALISADE FENCE AND EXTERNAL WORKS AT CHITA KEKANA SECONDARY SCHOOL IN MOLETLANE VILLAGE, CAPRICON DISTRICT FOR LIMPOPO DEPARTMENT OF EDUCATION (LDOE).



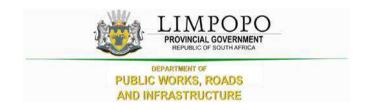
PART C3.1: SPECIAL NOTES TO BIDDERS

The following special conditions are for compliance and attention to bidders:

- 1.1. LDPWR&I reserve the right to call interviews with short-listed bidders before final selection.
- 1.2.LDPWR&I reserve the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include surprise site visits.
- 1.3. LDPWR&I reserve the right to appoint the bidder that proves to be fully capable and qualified to handle and execute the job.
- 1.4. The proposals submitted must be in line with the detailed specification.
- 1.5. LDPWR&I reserve the right to cancel or withdraw this bid if:
 - i. Due to changed circumstances, there is no longer a need for this services; or
 - ii. Funds are no longer available to cover the total envisaged expenditure; or
 - iii. No acceptable bids are received; or
 - iv. There is a material irregularity in the Bid process.
- 1.6. In the case of sub-contracting or joint venture agreement, LDPWR&I will enter into a single contract with the principal bidder.
- 1.7. Bidders who are not registered on Central Supplier Database (CSD) must register before submission of bids.
- 1.8. Any completion of the bid document in pencil or erasable ink will not be acceptable and will automatically disqualify the submitted bid.
- 1.9. Successful bidder will be required to sign and enter into a formal contract upon the award.
- 1.10. Notwithstanding shortcomings and/or inconsistencies, if any, in this specification, which is only a minimum specification, a bidder shall make provision for a complete solution that will deliver the required service efficiently and cost-effectively.
- 1.11. Bid documents must be submitted physically to the closing address as reflected on the Request for Quotations/Tender.
- 1.12. Quotations received after the closing date and time will not be accepted for consideration.
- 1.13. This request for bid document contains confidential information about LDPWR&I, which has been provided to supply potential bidders with the data necessary to provide a holistic response.
- 1.14. No part of the contents may be used, copied, disclosed or conveyed in whole or in part to any party, in any manner whatsoever without the prior written permission of LDPWR&I.
- 1.15. Any reproduction or transmission of information contained in this document except for the sole purpose of responding to this bid is strictly prohibited.
- 1.16. References to LDPWR&I must not be made in any literature, promotional material, and brochures or sales presentations without the express written consent of LDPWR&I.



PART C3.2: OHS SPECIFICATIONS



PART C4 SITE INFORMATION

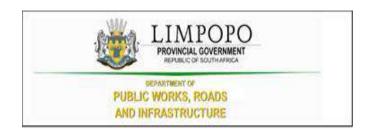
SITE INFORMATION

BID NUMBER: LDPWRI-B/20289

MAKHWESE SECONDARY SCHOOL IN PENGE (GA-MOKGOTO VILLAGE), GREATER SEKHUKHUNE DISTRICT LOCAL MUNICIPALITY, LIMPOPO PROVINCE.

CO-ORDINDATES

24°21'48.4"S 29°19'28.4"E



C4.1 DRAWINGS



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ROOF SCALE 1:

10 P

CONSTRUCTION NOTES

design
5) 2 x coats sealant on all exposed trusses (sand off all SABS & other markings)
6) 50 mm mineral wool insulation to be installed where there are ceilings.
Bubble plastic insulation with foil backing to be installed with wire supports in all areas that do not have ceilings
7) West Facing Facades to have standardised aluminium louvres from below eaves to drop of 1200 mm
8) Trusses to be designed in accordance with SABS 0400 & approved by Project Engineers

1) Workmanship to comply with Standard Specification, methods to be used - SABS 0400
2) Light Switch in Disabled toilet to be at 1200 mm above FFL
3) If Step over 900 mm Build in Balustrade
4) Gulley positions to be determined as per site prescribed overall of the standard of the stand

ment according to structural engineer's drawings. Top of (1 per 15m³ or 1 per batch). Finished sides and bottoms ar approved type applied at a rate of not less than 5 litres pecification 1165 and SANS Code of Practice 0124. Wide five year guarantee.

Note five year guarantee.

Note five year guarantee of 170mm filling to be provided by engineer (imported filling to be less to be approved by engineer (imported filling to be tests to be provided at a rate of one test per 125m² filling order floors to be treated with ant poison of the Prothor is of solution per m² by a firm of specialists in accordance crete to be casted within 24 hours of application.

stric footings to be 340mm minimum below N.G.L. Provide test cubes (1 per 15m² of 1 per batch). Finished sides and bottoms of trenches to be treated with ant poison of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialists in accordance with SANS Specification 1165 and SANS Code of Practice 0124. Concrete to be casted within 24 hours of application. Contractor to provide five year guarantee.

A2. Backfilling and filling under floors - in general, approved filling compacted to at least 93% Mod. AASHTO density in layers of maximum 150mm - refer to engineer's drawings for detail in case of poor soil conditions. Minimum of 170mm filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer's drawings, 10, compaction tests to be provided at a rate of one test per 12m² filling area under floors per each layer of 150mm compacted filling, Compaction tests to be provided at a rate of one test per 12m² filling area under floors per each layer of 150mm compacted filling. Compaction tests to be provided at a rate of one test per 12m² filling area under floors per each layer of 150mm compacted filling under floors to be treated with any toxon of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialists in accordance with SANS Specification 1165 and SANS Code of Practice 0124. Concrete to be casted within 24 hours of application. Contractor to provide flow year guarantee.

Surface bed - concrete mix as described on structural engineer's drawings but minimum 85mm thick on SANS Specification 527 type C approved USB Green 250 micron waterpoofing membrane with laps sealed with polysulfide sealer. Provide 1 maintenance and seal joint with polysulfide sealer. Provide 1 maintenance and seal joint with polysulfide sealer. Provide 1 maintenance and 1 maintenance and 1 per 15m² or 1 per batch)

B2. Surface bed cast in alternative section

76mm Meranti skirting plugged to walls at 400mm c/c with 19mm finish, stop with Polycell Woodfiller, stain with Plascon Woodcare Woodcare Ultra Varnish (X44), thinned with 1:3 mineral turpenting Ultra (X44) suede varnish to skirtings n meranti quadrand bead plated on. Sand down to a Stain (W-range)(colour meranti), apply one coat e (AZH1) and apply two finishing coats Plascon

Plascon Woodcare Ultra Varnish (X44), thinned with 1:3 mineral turpentine (Až Woodcare Ultra (X44) suede varnish to skirtings

Walls and structure

D1. External walls - Corobrik face bricks in stretcher bond with 10mm wide x 6i

D2. Brickforce - Brickforce to 115 and 230mm foundation walls - every 2nd cou

Over openings formed in brickwork as per table below

D3. 75 x 75 x 3mm Thick tubular section steel columns with 250mm girth x 4.5

200mm long, twice holed and welded to top, 200 x 200 x 10mm thick flat section

bottom. Columns to be fixed to top of brickwork below copings with four M10 x

"Plascon Aqualsolv Degreaser (GR1)", remove rust with "Plascon Rust Remov

(UC501) and apply two coats Plascon Enamel Door & Trims high gloss ename

50 x 228mm Laminated SA Pine beam twice bolted to steel columns. Sand do

Woodfiller, provide one coat raw linseed oil thinned with 1:3 mineral turpentine

Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine

Woodcare Sunproof (Amber - PNW22) suede varnish

D4. Lintol - Corobrik brick-on-edge face brick lintol over all window, door and contents girth x 4.5mm thick flat section U-shaped fixing bracket, that section baseplate, four times holed and welded to our M10 x 75mm masonry anchor bolts. Degrease with 1st Remover (RR1)", prime with Plascon Metal Primer 1st Remover (RR1) as per finishes schedule.

Sand down to a smooth finish, stop with Polycell turpentine (AZH1), apply one coat Plascon Woodcare urpentine (AZH1) and apply two finishing coats Plascon e x 6mm deep square recessed joints d course. Superstructure walls - every 6th cou

and clear openings with 10 x 6mm square recessed

DPC - SANS Specification 952 Type B approved 375 micron black dpc in walls at floor level and under all window sills [Internal walls - approved stockbrick walls in stretcher bond above to receive one coat smooth 1:5 cement plaster finished with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour ken white (EPL314) or French Chartreuse (Y5-D2-3) as per Principal Agent [Internal walls - face brick plinth up to 850mm with approved stockbrick walls in stretcher bond above to receive one coat ooth 1:5 cement plaster finished off with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & illings (EPL) PVA paint. Colour as per finishes schedule.

[All exposed expansion joints in walls and floors to be filled in with Urochem 205 polysulfide joint sealant after surfaces have a primed with Urochem 614 primer.

[Expansion joints in walls and ceilings to be covered with 2 x 50mm Migua KF250/30 aluminium cover strips]

15 x 150mm nutec-cement window sills, bedded and set flat in 1:4 cement mortar. Prime with one e Primer (WUP1) and apply two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour as sloping sill to match walls with 10 x 6mm squ

SCALE 1: 100

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n, two wall mounted side boards each 1000 x 1200mm high & two swing leaves each 1000 x 1200mm high with perman minium chalk rail

Vitrex System 2000 (code 2317) light grey wall mounted pinning board, size 2000 x 1200mm high (2 per classroom)

Greenfield G25 double door steel cupboard with standard baked enameled finish, 760 x 610 x 1700mm high with four sives (2 per classroom)

Five rows of 19mm Thick laminated SA Pine shelving, 350mm wide, evenly spaced & fixed from underside to 305mm vice epoxy powder coated steel brackets. Brackets to be fixed to 25mm wide x 2134mm long double slotted epoxy powderd. Shelco type FT6 wall bands, plugged to walls at maximum 600mm c/c. Sand down to a smooth finish, stop with Polodfiller, apply one coat Plascon Woodcare Ultra Varnish (X44) thinned with 1:3 mineral turpentine (AZH1) then apply two shing coats Plascon Woodcare Clear Ultra (X44) suede varnish to shelves Vitrex Model 2400 (code 2404) enameled green folding type writing board with wall mounted centre board 2000 x 1200mm, two wall mounted side boards each 1000 x 1200mm high & two swing leaves each 1000 x 1200mm high with permanent

DATE

RESPONSIBLE PROFESSIONAL SIGNATURE

PR NUMBER

DRAWN

DRAWING CO-ORDINATED

FLOOR, CEILING & ROOF PLAN

MEDIUM ADMINISTRATION BLOCK

evenly spaced & fixed from underside to 305mm wide m wide x 2134mm long double slotted epoxy powder m c/c. Sand down to a smooth finish, stop with Polycell with 1:3 mineral turpentine (AZH1) then apply two lives

on AL5066-06ASE05 aluminium engraved red fire rrow sign above fire hose reel. Water supply in posed parts of pipes with Plascon Aquasolv ime with Plascon Metal Primer (UC501) and apply two I (G7). Provide 150 x 150mm Union AL5066-E05/2AS sign above fire hose reel. ckplate with chamfered edges. Sand down to a dcare Ultra (X44) suede varnish thinned with 1:3 lcare Ultra (X44) suede varnish to back plate. Provide lcare Union AL5066-E08/2AS aluminium red down arrow

ruben reddy architects

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Office Building, s, D699 South Africa sex: +27 11 475 8364, exity-co.za ddyarch.co.za

SYSTEM

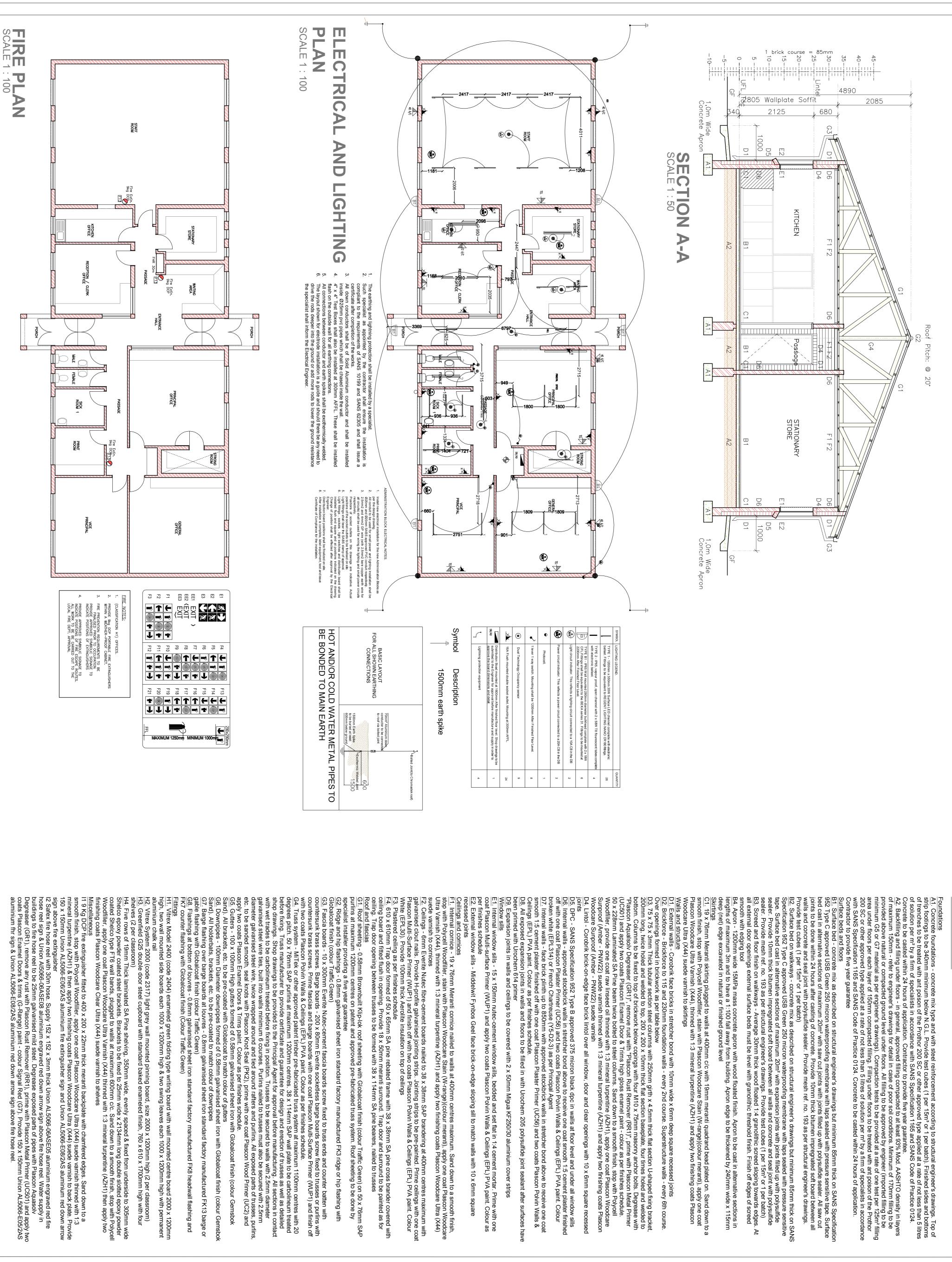
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PLAN EXAMINER
FIRE CONTROL
ENVIRONMENTAL OFFICER
ROADS / STORMWATER
WATER AND SANITATION
ENVIRONMENTAL OFFICER REV No NEW BUILDINGS & ALTERATIONS CONTRACT - SECTION

DOCUMENTATION & PROCUREMENT 925620480 INSTITUTION
MAKHWESE SECONDARY SCHOOL
INSTITUTION EMIS NUMBER DATE : SIZE ON ORIGINAL DRAWING 100 mm SIGNATURE TABLE ARCHITECTURAL LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA **Public Works** DESCRIPTION

NOTES



CONSTRUCTION NOTES

1) Workmanship to comply with Standard Specification, methods to be used - SABS 0400
2) Light Switch in Disabled toilet to be at 1200 mm above FFL
3) If Step over 900 mm Build in Balustrade
4) Gulley positions to be determined as per site prescribed overall of the stop of the standard of the stop of the standard of t

NOTES

5) 2 x coats sealant on all exposed trusses (sand off all SABS & other markings)
6) 50 mm mineral wool insulation to be installed where there are ceilings. Bubble plastic insulation with foil backing to be installed with wire supports in all areas that do not have ceilings
7) West Facing Facades to have standardised aluminium louvres from below eaves to drop of 1,200 mm
8) Trusses to be designed in accordance with SABS 0400 & approved by Project Engineers

A1. Concrete foundations - concrete mix type and with steel reinforcement according to structural engineer's drawings. Top of strip footings to be 340mm minimum below N.G.L. Provide test cubes (1 per 15m³ or 1 per batch). Finished sides and bottoms of trenches to be treated with ant poison of the Protinor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialists in accordance with SANS Specification 1165 and SANS Code of Practice 0124.

Concrete to be casted within 24 hours of application, Contractor to provide in a teas of and SANS Code of Practice 0124.

Concrete to be casted within 24 hours of application, Contractor to provide the easily solution of 170mm filling to be provided above natural or compacted ground level under floors. In Illing to be provided at a rate of one test per 125m² filling area under floors per each layer of 150mm compacted filling, Compaction tests to be provided at a rate of one test per 125m² filling area under floors per each layer of 150mm compacted filling, Filling under floors to be treated with ant poison of the Protinor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialists in accordance with SANS Specification 1165 and SANS Code of Practice 0124. Concrete to be casted within 24 hours of application. Contractor to provide five year guarantee

Surface beds and floors

E1. Surface bed - concrete mix as described on structural engineer's drawings but minimum 85mm thick on SANS Specification 125 and SANS Code of Practice 0124. Concrete to be casted within 24 hours of application. Specification 250 micron waterproofing membrane with laps sealed with pressure sensitive tape. Surface bed as in alternative sections of maximum 20m² with saw cut joints with joints filled up with polysulfide sealer. Provide to make provide mesh ref. no. 193 as per structural engineer's drawings. But minimum 85mm thick on SANS Specification 952. Type C approved USB Green 250 micron wa

Skirlings

C1. 19 x 76mm Meranti skirting plugged to walls at 400mm c/c with 19mm meranti quadrand bead plated on. Sand down to a smooth finish, stop with Polycell Woodfiller, stain with Plascon Woodcare Stain (W-range)(colour meranti), apply one coat Plascon Woodcare Ultra Varnish (X44), thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Ultra (X44) suede varnish to skirtings

Walls and structure

D1. External walls - Corobrik face bricks in stretcher bond with 10mm wide x 6mm deep square recessed joints

D2. Brickforce - Brickforce to 115 and 230mm foundation walls - every 2nd course. Superstructure walls - every 6th course.

Over openings formed in brickwork as per table below

D3. 75 x 75 x 3mm Thick tubular section steel columns with 250mm girth x 4.5mm thick flat section U-shaped fixing bracket, 200mm long, twice holed and welded to top, 200 x 200 x 10mm thick flat section baseplate, four times holed and welded to bottom. Columns to be fixed to top of brickwork below copings with four M10 x 75mm masonry anchor bolts. Degrease with "Plascon Aqualsolv Degreaser (GR1)", remove rust with "Plascon Rust Remover (RR1)", prime with Plascon Metal Primer (UC501) and apply two coats Plascon Enamel Door & Trims high gloss enamel paint - colour as per finishes schedule.

50 x 228mm Laminated SA Pine beam twice bolted to steel columns. Sand down to a smooth finish, stop with Polycell Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1), apply one coat Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two f

5. DPC - SANS Specification 952 Type B approved 375 micron black dpc in walls at floor level and under all window sills 6. Internal walls - approved stockbrick walls in stretcher bond above to receive one coat smooth 1:5 cement plaster finished ff with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour oken white (EPL314) or French Chartreuse (Y5-D2-3) as per Principal Agent 7. Internal walls - face brick plinth up to 850mm with approved stockbrick walls in stretcher bond above to receive one coat mooth 1:5 cement plaster finished off with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & eilings (EPL) PVA paint. Colour as per finishes schedule.

8. All exposed expansion joints in walls and floors to be filled in with Urochem 205 polysulfide joint sealant after surfaces have sen primed with Urochem 614 primer

9. Expansion joints in walls and ceilings to be covered with 2 x 50mm Migua KF250/30 aluminium cover strips

Internal window sills - 15 x 150mm nutec-cement window sills, bedded and set flat in 1:4 cement mortar. Prime with one at Plascon Multi-surface Primer (WUP1) and apply two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour as External window sills - Middelwit Fynbos Geel face brick-on-edge sloping sill to match window sills - Middelwit Fynbos Geel face brick-on-edge sloping sill to match window.

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n, two wall mounted side boards each 1000 x 1200mm high & two swing leaves each 1000 x 1200mm high with permarminium chalk rail

Vitrex System 2000 (code 2317) light grey wall mounted pinning board, size 2000 x 1200mm high (2 per classroom)

Greenfield G25 double door steel cupboard with standard baked enameled finish, 760 x 610 x 1700mm high with four lives (2 per classroom)

Five rows of 19mm Thick laminated SA Pine shelving, 350mm wide, evenly spaced & fixed from underside to 305mm velco epoxy powder coated steel brackets. Brackets to be fixed to 25mm wide x 2134mm long double slotted epoxy powdeted Shelco type FT6 wall bands, plugged to walls at maximum 600mm c/c. Sand down to a smooth finish, stop with Polodfiller, apply one coat Plascon Woodcare Ultra Varnish (X44) thinned with 1:3 mineral turpentine (AZH1) then apply two shing coats Plascon Woodcare Clear Ultra (X44) suede varnish to shelves evenly spaced & fixed from underside to 305mm wide n wide x 2134mm long double slotted epoxy powder n c/c. Sand down to a smooth finish, stop with Polycell with 1:3 mineral turpentine (AZH1) then apply two /es

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on AL5066-06ASE05 aluminium engraved red fire rrow sign above fire hose reel. Water supply in posed parts of pipes with Plascon Aquasolv ime with Plascon Metal Primer (UC501) and apply two I (G7). Provide 150 x 150mm Union AL5066-E05/2AS sign above fire hose reel.

SYSTEM

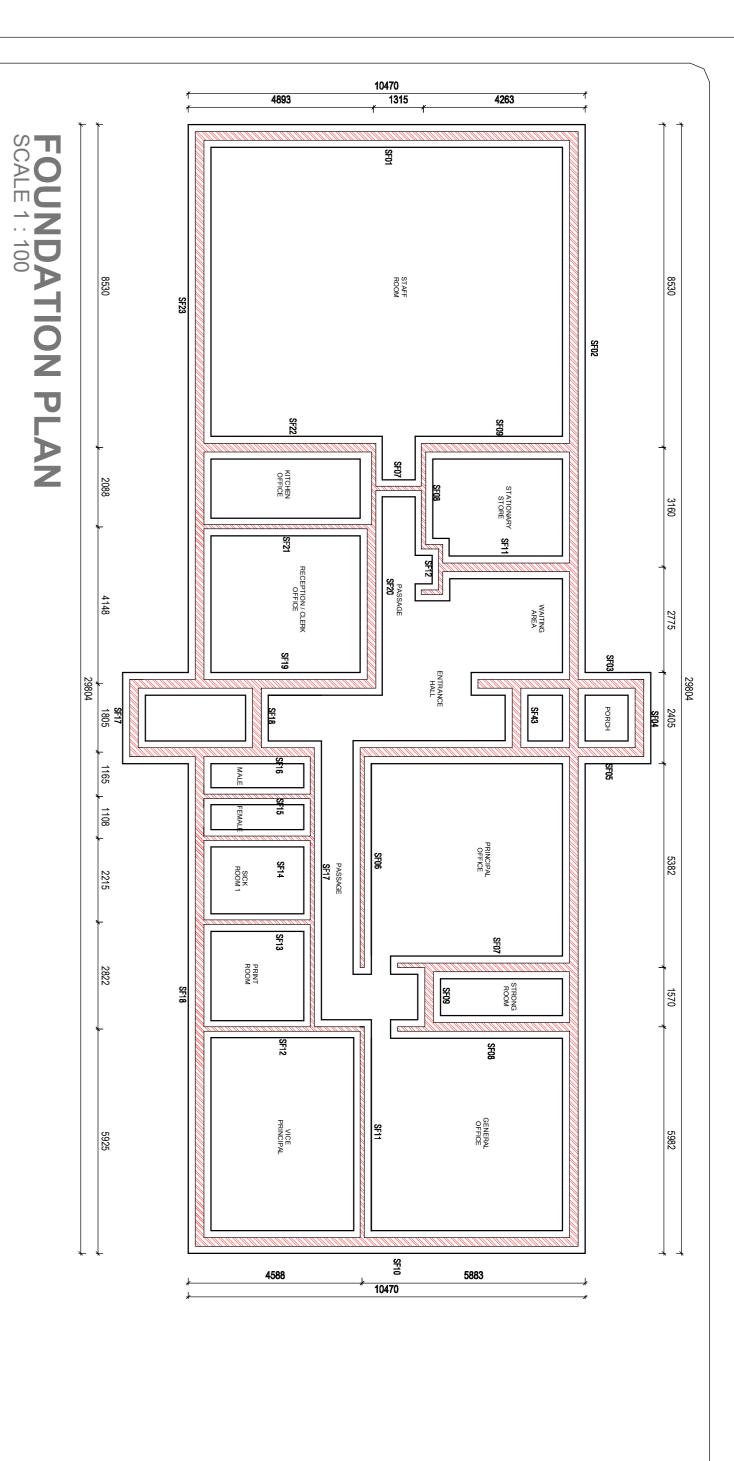
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FIRE CONTROL
ENVIRONMENTAL OFFICER
ROADS / STORMWATER
WATER AND SANITATION
ENVIRONMENTAL OFFICER REV No DATE CONTRACT - SECTION

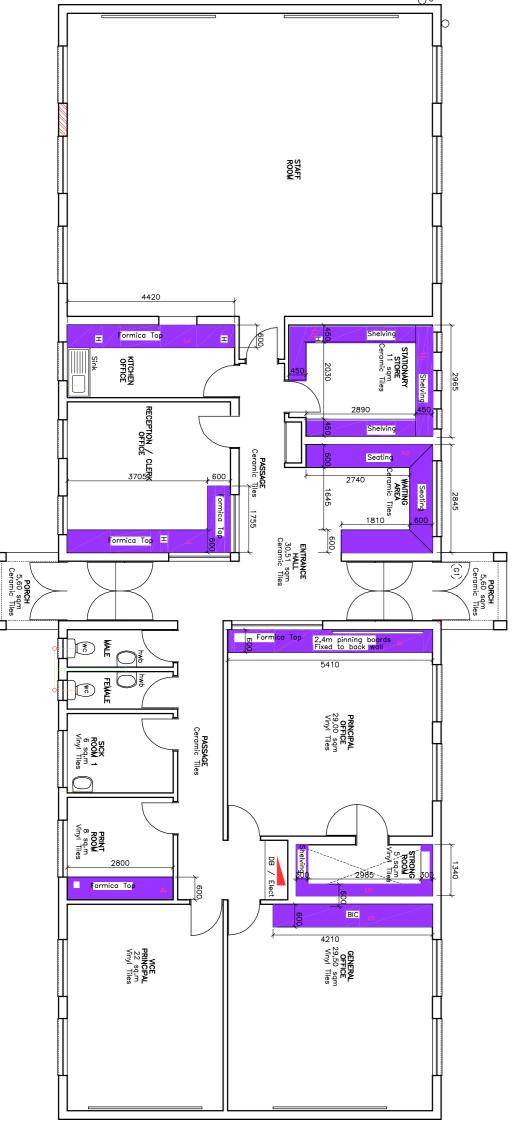
DOCUMENTATION & PROCUREMENT NEW BUILDINGS & ALTERATIONS 925620480 INSTITUTION
MAKHWESE SECONDARY SCHOOL
INSTITUTION EMIS NUMBER DATE : MEDIUM ADMINISTRATION BLOCK SIZE ON ORIGINAL DRAWING 100 mm SIGNATURE TABLE ARCHITECTURAL RESPONSIBLE PROFESSIONAL SIGNATURE DRAWING CO-ORDINATED **Public Works** DESCRIPTION

SECTION, ELECTRICAL AND FIRE PLAN ruben reddy architects Suite 4 No 6 Ismini Street, I Tel: +27 15 065 LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA Office Building, p. D699 South Africa x: +27 11 475 8364, eddyarch.co.za PR NUMBER



3200 3200 STAFF S.C.J ALCONOMIC PROPERTY. S.C.J S.C.J S.C.J S.C.J S.C.J 2058 2763

FLOOR JOINT LAYOUT PLAN



PLAN

NOTES: FURNITURE

CUPBOARDS - FORMICA TOPS AS PER CUPBOARD SPECIALIST DESIGN & SPECIFICATIONS

FLOOR MOUNTED BENCHES:
- FREE-STANDING FLOOR MOUNTED BENCHES WITH BACK RESTS - CODE SBFM. SHELVING: CODE SM2100/300 16mm WHITE MELAMINE SHELVING COMPLETE WITH WALL BANDS & BRACKETS

AS PER CUPBOARD SPECIALIST DETAILS
MADE UP OF 32x32mm M/S SQUARE TUBING WITH
FLOOR LEVELER including:
- 32mm THICK FORMICA WORKTOPS,
- SERVICE CABINET & PREP BOWL.

CONSTRUCTION NOTES

design
5) 2 x coats sealant on all exposed trusses (Salar Co. 2.2.

markings)
6) 50 mm mineral wool insulation to be installed where there are ceilings .
Bubble plastic insulation with foil backing to be installed with wire supports in all areas that do not have ceilings
7) West Facing Facades to have standardised aluminium louvres from below eaves to drop of 1200 mm
8) Trusses to be designed in accordance with SABS 0400 & approved by Project Engineers

Workmanship to comply with Standard Specification of methods to be used - SABS 0400
 Light Switch in Disabled toilet to be at 1200 mm above F 3 If Step over 900 mm Build in Balustrade
 Gulley positions to be determined as per site prescribed design.

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NOTES

nent according to structural engineer's drawings. Top of (1 per 15m³ or 1 per batch). Finished sides and bottoms is approved type applied at a rate of not less than 5 litres ecification 1165 and SANS Code of Practice 0124. vide five year guarantee. pacted to at least 93% Mod. AASHTO density in layers poor soil conditions. Minimum of 170mm filling to be ng to be approved by engineer (imported filling to be tests to be provided at a rate of one test per 125m² filling der floors to be treated with ant poison of the Prothor s of solution per m² by a firm of specialists in accordance rete to be casted within 24 hours of application.

A1. Concrete boundations - concrete mix type and with steel reinfocement according to structural engineer's drawings. Top of strip foolings to be 34mm minimum below NGL. Provide test cubes (1 per 15m² or 1 per batch). Finished sides and bottoms of trenches to be treated with ant poison of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialists in accordance with SANS Specification 1165 and SANS Code of Practice 0124. Concrete to be casted within 24 hours of application. Confractor to provide five year guarantee.

A2. Backfilling and filling under floors - in general, approved filling compacted to at least 93% Mod. AASHTO density in layers of maximum 150mm - refer to engineer's drawings for detail in case of poor soil conditions. Minimum of 170mm filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer (imported filling to be minimum C5 or G7 material as per engineer's drawings). Compaction tests to be provided at a rate of one test per 125m² filling are all the provided at a rate of one test per 125m² filling are all the provided at a rate of one test per 125m² filling to be approved by engineer (imported filling to be provided at a rate of one test per 125m² filling to be contracted to provide five year guarantee.

Surface beds and floors

B1. Surface bed cast in alternative sections of maximum 20m² with saw cut joints with joints filled up with polysulfide sealer. Provide mesh ref. no. 153 as per structural engineer's drawings. Provide mesh ref. no. 153 as per structural engineer's

Skirtings

C1. 19 x 76mm Meranti skirting plugged to walls at 400mm c/c with 19mm meranti quadrand bead plated on. Sand down to a smooth finish, stop with Polycell Woodfiller, stain with Plascon Woodcare Stain (W-range)(colour meranti), apply one coat Plascon Woodcare Ultra (X44) thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Ultra (X44) suede varnish to skirtings

Walls and structure

D1. External walls - Corobrik face bricks in stretcher bond with 10mm wide x 6mm deep square recessed joints

D2. Brickforce - Brickforce to 115 and 230mm foundation walls - every 2nd course. Superstructure walls - every 6th course.

Over openings formed in brickwork as per table below

D3. 75 x 75 x 3mm Thick tubular section steel columns with 250mm girth x 4.5mm thick flat section U-shaped fixing bracket, 200mm long, twice holed and welded to top, 200 x 200 x 10mm thick flat section baseplate, four times holed and welded to bottom. Columns to be fixed to top of brickwork below copings with four M10 x 75mm masonry anchor botts. Degrease with "Plascon Aqualsor Degreaser (GR1)", remove rust with "Plascon Rust Remover (RR1)", prime with Plascon Metal Primer (UC501) and apply two coats Plascon Enamel Door & Trims high gloss enamel paint - colour as per finishes schedule. 50 x 228mm Laminated SA Pine beam twice bolted to steel columns. Sand down to a smooth finish, stop with Polycell Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1), apply one coat Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon boints. Interest turpentine (AZH1) and apply two finishing coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Sunproof (Amber - PNW22) suede varnish to very all wi

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9. Expansion joints in walls and ceilings to be covered with 2 x 50mm Migua KF250/30 aluminium cover strips

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Greenfield G25 double door steel cupboard with standard baked enameled finish, 760 x 610 x 1700mm high with four lives (2 per classroom)

Five rows of 19mm Thick laminated SA Pine shelving, 350mm wide, evenly spaced & fixed from underside to 305mm velco epoxy powder coated steel brackets. Brackets to be fixed to 25mm wide x 2134mm long double slotted epoxy powd ted Shelco type FT6 wall bands, plugged to walls at maximum 600mm c/c. Sand down to a smooth finish, stop with Poloodfiller, apply one coat Plascon Woodcare Ultra Varnish (X44) thinned with 1:3 mineral turpentine (AZH1) then apply two shing coats Plascon Woodcare Clear Ultra (X44) suede varnish to shelves evenly spaced & fixed from underside to 305mm wide n wide x 2134mm long double slotted epoxy powder n c/c. Sand down to a smooth finish, stop with Polycell with 1:3 mineral turpentine (AZH1) then apply two /es

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in AL5066-06ASE05 aluminium engraved red fire row sign above fire hose reel. Water supply in posed parts of pipes with Plascon Aquasolv me with Plascon Metal Primer (UC501) and apply two (G7). Provide 150 x 150mm Union AL5066-E05/2AS ign above fire hose reel.

SYSTEM

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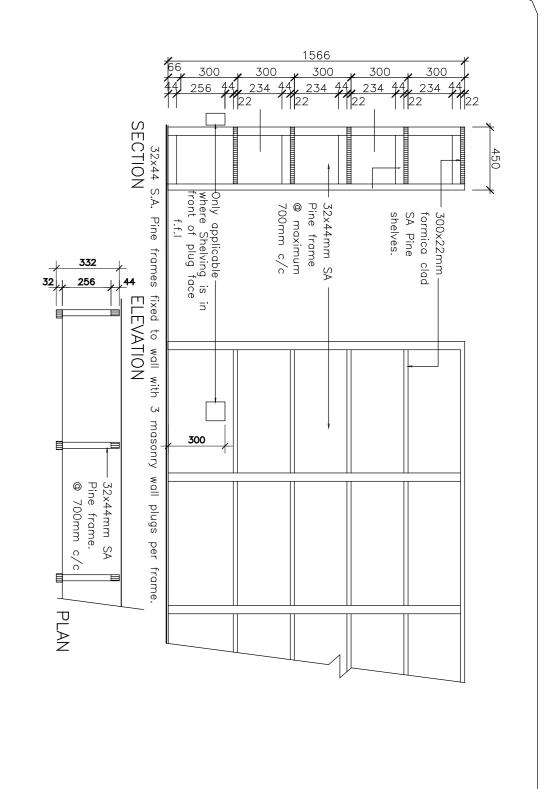
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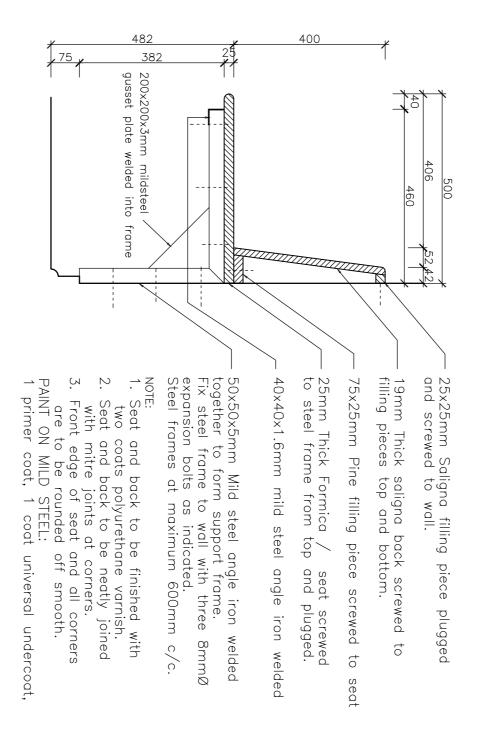
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DETAIL 1 Section Scale -i Ω :>0 0 STORE ROOM SHELVES



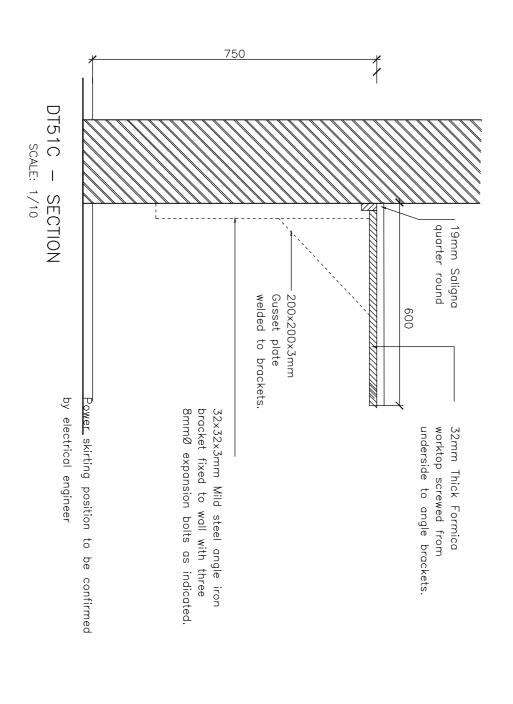
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AREA

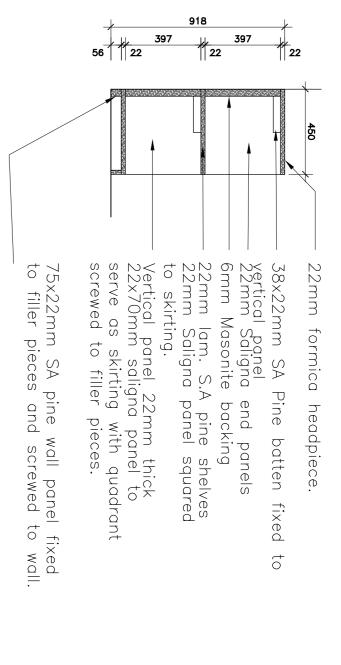
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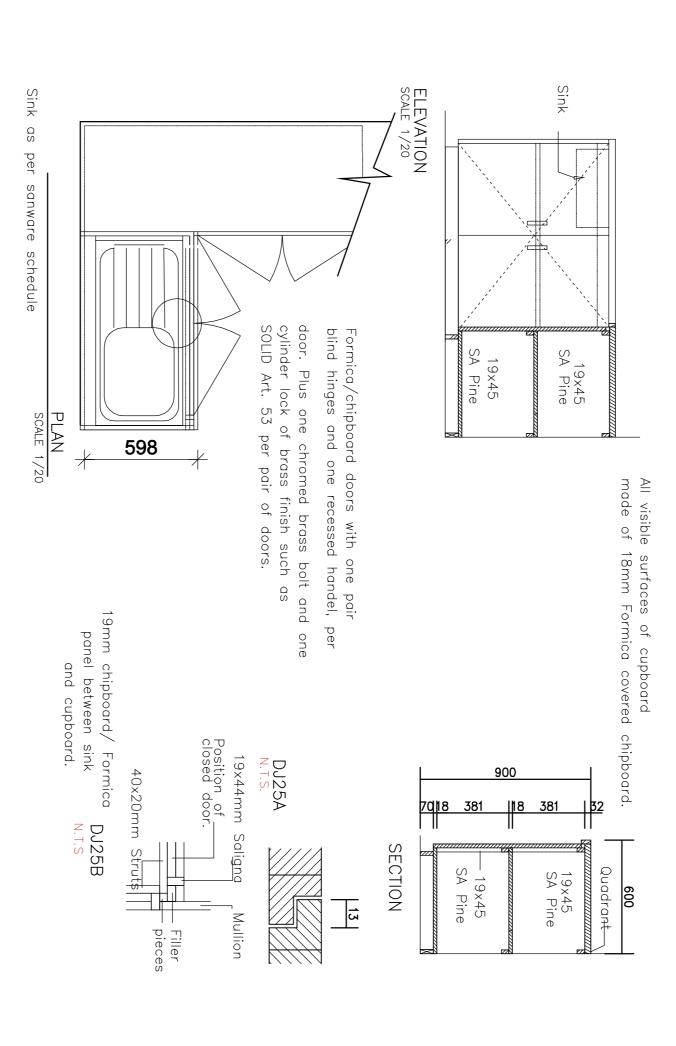
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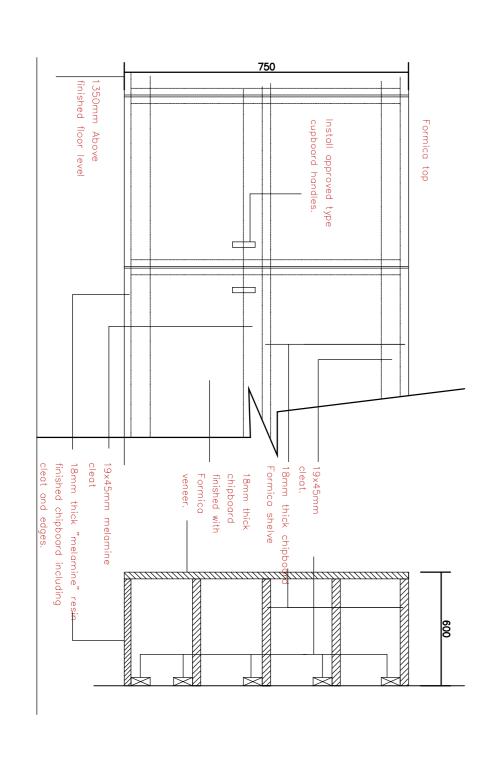
DETAIL 4
Section Scale 1:20 ormica $\frac{1}{0}$ counters



DETAIL Section S C Q _____ → O SHELVES



DETAIL Section Sc Scale 3 3 Kitchen 1:20 Cupboards



DETAIL 6 Section Scale 1:20 Office

CONSTRUCTION NOTES

nent according to structural engineer's drawings. Top of (1 per 15m³ or 1 per batch). Finished sides and bottoms is approved type applied at a rate of not less than 5 litres ecification 1165 and SANS Code of Practice 0124. vide five year guarantee. pacted to at least 93% Mod. AASHTO density in layers poor soil conditions. Minimum of 170mm filling to be ng to be approved by engineer (imported filling to be tests to be provided at a rate of one test per 125m² filling der floors to be treated with ant poison of the Prothor s of solution per m² by a firm of specialists in accordance rete to be casted within 24 hours of application.

strip footings to be 340mm minimum below N.G.L. Provide test cubses (1 per 15hh or 1 per batch). Enished sides and bottoms of trenches to be treated with ant poison of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialists in accordance with SANS Specification 1165 and SANS Code of Practice 0124.

Concrete to be casted within 24 hours of application. Contraction to provide five year guarantee.

A2. Backfilling and filling under floors - in general, approved filling compacted to at least 93% Mod. AASHTO density in layers of maximum 150mm, refer to engineer's drawings for detail in case of poor soil conditions. Minimum of 170mm filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer (imported filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer (imported filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer (imported filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer (imported filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer (imported filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer (imported filling to be provided above natural or compacted ground level under floors. All filling to be approved by engineer floors per each layer of 150mm compacted filling. Filling under floors to be treated with an topison of the Prothor or the floor provide floor specification floors per each layer of 150mm compacted fliling. Filling under floors to be treated with notion of specialists in accordance with SANS Specification floors and floor floors as described on structural engineer's drawings but minimum 85mm thick on SANS Specification ground floors. The floor of per statch is

Skirlings

C1. 19 x 76mm Meranti skirting plugged to walls at 400mm c/c with 19mm meranti quadrand bead plated on. Sand down to a smooth finish, stop with Polycell Woodfiller, stain with Plascon Woodcare Stain (W-range)(colour meranti), apply one coat Plascon Woodcare Ultra (X44) thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Ultra (X44) suede varnish (X44), thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Ultra (X44) suede varnish to skirtings

Walls and structure

D1. External walls - Corobrik face bricks in stretcher bond with 10mm wide x 6mm deep square recessed joints

Woodcare Ultra (X44) suede varnish to skirtings

Walls and structure walls - every 6th course.

Over openings formed in brickwork as per table below

D2. Brickforce - Brickforce to 115 and 230mm foundation walls - every 2nd course. Superstructure walls - every 6th course.

Over openings formed in brickwork as per table below

D3. 75 x 75 x 3mm Thick tubular section steel columns with 250mm girth x 4.5mm thick flat section U-shaped fixing bracket, 200mm long, twice holed and welded to top, 200 x 200 x 10mm thick flat section baseplate, four times holed and welded to bottom. Columns to be fixed to top of brickwork below copings with four M10 x 75mm masonry anchor bolts. Degrease with "Plascon Aqualsolv Degreaser (GR1)", remove rust with "Plascon Rust Remover (RR1)", prime with Plascon Metal Primer (UC501) and apply two coats Plascon Enamel Door & Trims high gloss enamel paint - colour as per finishes schedule. 50 x 228mm Laminated SA Pine beam twice bolted to steel columns. Sand down to a smooth finish, stop with Polycell Woodfiller, provide one coat raw linseed oil thinned with 1:3 mineral turpentine (AZH1), and apply two finishing coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1

Internal walls - approved stockbrick walls in stretcher bond above to receive one coat smooth 1:5 cement plaster finished with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour ken white (EPL314) or French Chartreuse (Y5-D2-3) as per Principal Agent Internal walls - face brick plinth up to 850mm with approved stockbrick walls in stretcher bond above to receive one coat lings (EPL) PVA paint. Colour as per finished off with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & illings (EPL) PVA paint. Colour as per finishes schedule.

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Internal window sills - 15 x 150mm nutec-cement window sills, bedded and set flat in 1:4 cement mortar. Prime with one strips to Plascon Multi-surface Primer (WUP1) and apply two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour as External window sills - Middelwit Fynbos Geel face brick-on-edge sloping sill to match with a match

Ceilings and comices
Ef. Internal comices
19 x 76mm Meranti comice nalled to walls at 400mm centres maximum. Sand down to a smooth finish, stop with Polycell Woodflier, stain with Plascon Woodcare Stain (W-range)(colour merant), apply one coal Plascon Woodcare Ultra (X44) strong with Polycell Woodflier, stain with Plascon Woodcare Stain (W-range)(colour merant), apply one coal Plascon Woodcare Ultra (X44) suced variation to comices
10 years and the profile galvanised colour halfs. For worker Hypothe galvanised pointing strips. Johning strips to be pre-painted. Prime ceilings with one coal Plascon Multi-Strate Primer (WUP1) and drinish of with two coals Plascon Polyn Walls & Ceilings (EPL) PVA paint. Colour White (EPL30), Provide 100mm thick Acroitic insulation on top of ceilings
12 Plastered ceiling as per finishes schedule
13 Plascon Multi-Strates Primer (WUP1) and finish of with two coals Plascon Polyn Walls & Ceilings (EPL) PVA paint. Colour White (EPL30), Provide 100mm thick Acroitic insulation on top of ceilings
14 in 10 x 610mm Trap door formed of 50 x 65mm SA pine rebated frame with 38 x 38mm SA pine cross brander covered with 27 plasconed ceiling as per finishes schedule
14 in 19 year of the provider 18 x 50mm merants surround. Trap door and surround to be painted as for ceiling to be controlled to provide 18 x 50mm merants surround. Trap door and surround to be painted as for ceiling to be controlled to provide 18 x 50mm merants surround. Trap door and surround to be painted as for ceiling to be controlled to provide 18 x 50mm merants surround. Trap door and surround to be painted as for ceiling the provider 18 x 50mm merants surround. Trap door and surround to be painted as for ceiling trap door opening between trusses to be formed with 38 x 114mm SA pine bearers, nalled to trusses brander covered with counters to be carbon trap to part to provide per finishes schedule.

15 Trap strip trap door opening between trusses to be formed with 38 x 114mm SA pine bearers, nalled to trusses or which the counter

ttings 1. Vitrex Model 2400 (code 2404) enameled green folding type writing board with wall mounted centre board 2000 x 1200mm gh, two wall mounted side boards each 1000 x 1200mm high & two swing leaves each 1000 x 1200mm high with permanent

n, two wall mounted side boards each 1000 x 1200mm high (2 per classroom)

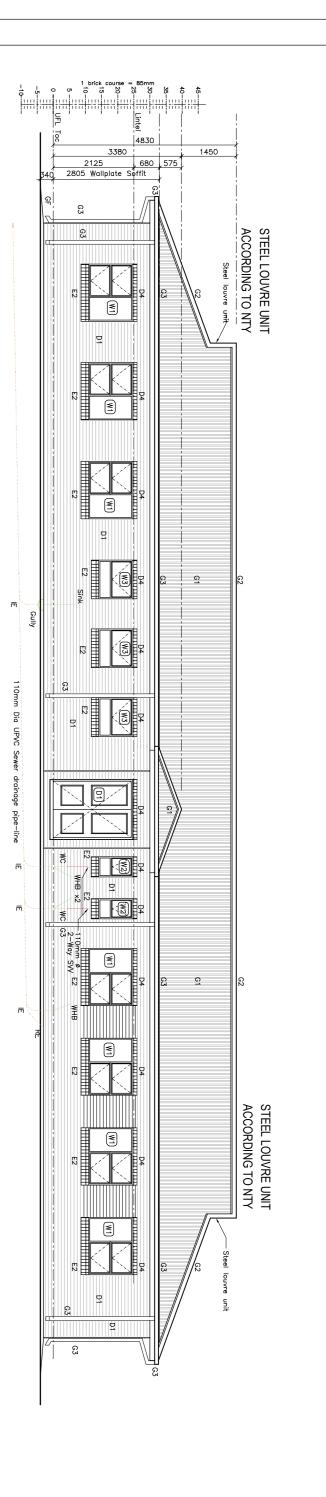
Vitrex System 2000 (code 2317) light grey wall mounted pinning board, size 2000 x 1200mm high (2 per classroom)

Greenfield G25 double door steel cupboard with standard baked enameled finish, 760 x 610 x 1700mm high with four lives (2 per classroom)

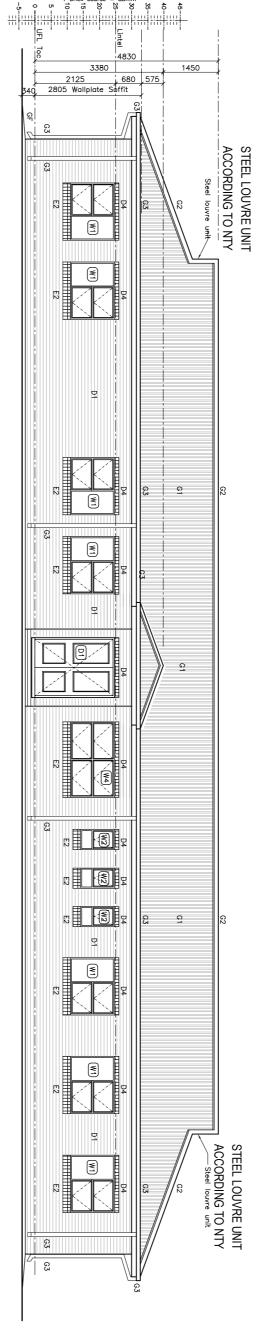
Five rows of 19mm Thick laminated SA Pine shelving, 350mm wide, evenly spaced & fixed from underside to 305mm verous powder coated steel brackets. Brackets to be fixed to 25mm wide x 2134mm long double slotted epoxy powered Shelco type FT6 wall bands, plugged to walls at maximum 600mm c/c. Sand down to a smooth finish, stop with Polyodfiller, apply one coat Plascon Woodcare Ultra Varnish (X44) thinned with 1:3 mineral turpentine (AZH1) then apply two shing coats Plascon Woodcare Clear Ultra (X44) suede varnish to shelves evenly spaced & fixed from underside to 305mm wide n wide x 2134mm long double slotted epoxy powder n c/c. Sand down to a smooth finish, stop with Polycell with 1:3 mineral turpentine (AZH1) then apply two /es

ckplate with chamfered edges. Sand down to a dcare Ultra (X44) suede varnish thinned with 1:3 lcare Ultra (X44) suede varnish to back plate. Provide lcare Union AL5066-E08/2AS aluminium red down arrow

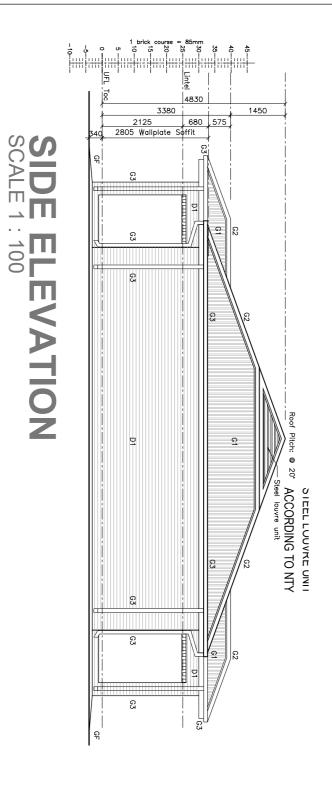
on AL5066-06ASE05 aluminium engraved red fire rrow sign above fire hose reel. Water supply in posed parts of pipes with Plascon Aquasolv ime with Plascon Metal Primer (UC501) and apply two I (G7). Provide 150 x 150mm Union AL5066-E05/2AS sign above fire hose reel. SYSTEM DATE ruben reddy architects Suite 4 No 6 Ismini Street, I Tel: +27 15 065 2020_63- MAD- 103 RESPONSIBLE PROFESSIONAL SIGNATURE DRAWING CO-ORDINATED Office Building, p. D699 South Africa rx: +27 11 475 8364, pddyarch.co.za PR NUMBER \triangleright

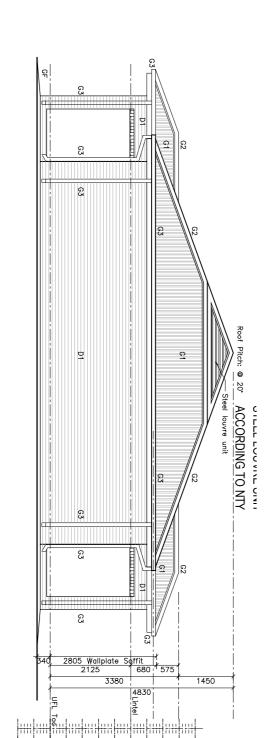


П П VATION



SCALE 1: 100 Щ VATION





CONSTRUCTION NOTES

design
5) 2 x coats sealant on all exposed trusses (sand off all SABS & other markings)
6) 50 mm mineral wool insulation to be installed where there are ceilings.
Bubble plastic insulation with foil backing to be installed with wire supports in all areas that do not have ceilings
7) West Facing Facades to have standardised aluminium louvres from below eaves to drop of 1200 mm
8) Trusses to be designed in accordance with SABS 0400 & approved by Project Engineers

1) Workmanship to comply with Standard Specification, methods to be used - SABS 0400
2) Light Switch in Disabled toilet to be at 1200 mm above FFL
3) If Step over 900 mm Build in Balustrade
4) Gulley positions to be determined as per site prescribed overall of the standard of the stand

NOTES

189

ment according to structural engineer's drawings. Top of (1 per 15m³ or 1 per batch). Finished sides and bottoms ar approved type applied at a rate of not less than 5 litres pecification 1165 and SANS Code of Practice 0124. Wide five year guarantee.

Note five year guarantee.

Note five year guarantee of 170mm filling to be provided by engineer (imported filling to be less to be approved by engineer (imported filling to be tests to be provided at a rate of one test per 125m² filling order floors to be treated with ant poison of the Prothor is of solution per m² by a firm of specialists in accordance crete to be casted within 24 hours of application.

Surface beds and floors

B1. Surface beds and floors

B1. Surface beds and floors

B1. Surface bed - concrete mix as described on structural engineer's drawings but minimum 85mm thick on SANS Specification 952 Type C approved USB Green 250 micron waterproofing membrane with laps sealed with pressure sensitive tape. Surface bed cast in alternative sections of maximum 20m² with saw cut joints with joints filled up with polysulfide sealer. All saw cut joints to be done within 24 hours after casting of concrete. Provide 10mm thick bitumen impregnated soft board between all walls and concrete and seal joint with polysulfide sealer. Provide mesh ref. no. 193 as per structural engineer's drawings. Provide test cubes (1 per 15m³ or 1 per batch)

B2. Surface bed on walkways - concrete mix as described on structural engineer's drawings but minimum 85mm thick on SANS Specification 952 Type C approved USB Green 250 micron waterproofing membrane with laps sealed with pressure sensitive tape. Surface bed cast in alternative sections of maximum 20m² with expansion joints with joints filled up with polysulfide sealer. Provide 10mm thick bitumen impregnated soft board between all walls and concrete and seal joint with polysulfide sealer. Provide mesh ref. no. 193 as per structural engineer's drawings. Provide test cubes (1 per 15m³ or 1 per batch)

B3. Screed and floor finish on walkways - Average 30mm thick wood floated 1.4 granolithic screed sloping towards edges. At all external door openings external surface beds must be level with granolithic threshold finish. Finish off edges of screed smooth with edging tool

B4. Apron - 1200mm wide 15MPa mass concrete apron with wood floated finish. Apron to be cast in alternative sections in lengths of maximum 3m and to have a 1:100 fall away from building. Apron edge to be thickened by 240mm wide x 115mm deep (net) edge excavated in natural or finished ground level

19 x 76mm Meranti skirting plugged to walls at 400mm c/c with 19mm both finish, stop with Polycell Woodfiller, stain with Plascon Woodcare scon Woodcare Ultra Varnish (X44), thinned with 1:3 mineral turpentine odcare Ultra (X44) suede varnish to skirtings lls and structure External walls - Corobrik face bricks in stretcher bond with 10mm wide Brickforce - Brickforce to 115 and 220mm formation. n meranti quadrand bead plated on. Sand down to a Stain (W-range)(colour meranti), apply one coat e (AZH1) and apply two finishing coats Plascon

dernal walls - Corobrik face bricks in stretcher bond with 10mm wide x 6mm deep square recessed joints (ckforce - Brickforce to 115 and 230mm foundation walls - every 2nd course. Superstructure walls - every 6th coursenings formed in brickwork as per table below penings formed in brickwork as per table below x 75 x 3mm Thick tubular section steel columns with 250mm girth x 4.5mm thick flat section U-shaped fixing brack in long, twice holed and welded to top, 200 x 200 x 10mm thick flat section baseplate, four times holed and welded in long, twice below copings with four M10 x 75mm masonry anchor bolts. Degrease von Aqualsolv Degreaser (GR1)", remove rust with "Plascon Rust Remover (RR1)", prime with Plascon Metal Prim 1) and apply two coats Plascon Enamel Door & Trims high gloss enamel paint - colour as per finishes schedule. 28mm Laminated SA Pine beam twice bolted to steel columns. Sand down to a smooth finish, stop with Polycell filler, provide one coat raw linseed oil thinned with 1:3 mineral turpentine (AZH1), apply one coat Plascon Woodca oof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Placare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Placare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Placare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Placare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Placare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Placare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Placare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing to the finish to the fixed part of the fixed girth x 4.5mm thick flat section U-shaped fixing bracket, of flat section baseplate, four times holed and welded to our M10 x 75mm masonry anchor bolts. Degrease with ust Remover (RR1)", prime with Plascon Metal Primer as enamel paint - colour as per finishes schedule.

Sand down to a smooth finish, stop with Polycell turpentine (AZH1), apply one coat Plascon Woodcare urpentine (AZH1) and apply two finishing coats Plascon

Internal walls - approved stockbrick walls in stretcher bond above to receive one coat smooth 1:5 cement plaster finished with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour ken white (EPL314) or French Chartreuse (Y5-D2-3) as per Principal Agent Internal walls - face brick plinth up to 850mm with approved stockbrick walls in stretcher bond above to receive one coat lings (EPL) PVA paint. Colour as per finished off with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & illings (EPL) PVA paint. Colour as per finishes schedule.

[All exposed expansion joints in walls and floors to be filled in with Urochem 205 polysulfide joint sealant after surfaces have a primed with Urochem 614 primer.

[Expansion joints in walls and ceilings to be covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the content of the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in the covered with 2 x 50mm Migua KF250/30 aluminium cover strips in x 50mm Migua Migua Migua Migua Migua Migua Migua Migua Migua Migu and clear openings with 10 x 6mm square recessed

ernal window sills - 15 x 150mm nutec-cement window sills, bedded and set flat in 1:4 cement mortar. Prime with one lascon Multi-surface Primer (WUP1) and apply two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour as ishes schedule ternal window sills - Middelwit Fynbos Geel face brick-on-edge sloping sill to match walls walls will a match walls will be match with the colour as the properties of the colour as the colour

Is and cornices and cornices by a 76mm Meranti cornice nailed to walls at 400mm centres maximum. Sand down to a smooth finish, the Polycell Woodfiller, stain with Plascon Woodcare Stain (W-range)(colour meranti), apply one coat Plascon Woodcare arnish (X44), thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Ultra (X44) varnish to cornices lilings - 6mm Everite Nutec fibre-cement boards nailed to 38 x 38mm SAP brandering at 400mm centres maximum with ised clout nails. Provide H-profile galvanised jointing strips. Jointing strips to be pre-painted. Prime ceilings with one coat in Multi-Surface Primer (WUP1) and finish off with two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour (EPL30). Provide 100mm thick Aerolite insulation on top of ceilings

3xtered ceiling as per finishes schedule

3xtered ceiling as per finishes schedule

3xtered flush in opening. Provide 18 x 50mm meranti surround. Trap door and surround to be painted as for . Trap door opening between trusses to be formed with 38 x 114mm SA pine bearers, nailed to trusses and finish for trusses.

3xtered flush in opening between trusses to be formed with 38 x 114mm SA pine bearers, nailed to trusses.

Piascon Multi-Surface Primer (WÜP1) and finish off with two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour White (EPL30), Provide 100mm thick Aerolite insulation on top of ceilings:

F3. Plastered ceiling as per finishes schedule

F4. 610 x 610mm Trap door formed of 50 x 65mm SA pine rebated frame with 38 x 38mm SA pine gross brander covered with ceiling board and fitted tiush in opening. Provide 18 x 58mm merant surround. Trap door and surround to be painted as for ceiling. Trap door opening between trusses to be formed with 38 x 114mm SA pine bearers, nalled to trusses for and fascials.

G1. Roof sheeting - 0.58mm Brownbult Klip-lok roof sheeting with Globalcoat finish (colour Traffic Green) on 50 x 76mm SAP purlins at maximum 1200mm centres on patent and approved pre-fabricated truss system. Roof sheeting to be done by specialist installer providing a five year guarantee

G2. Rodge and hip flashings - 0.5mm galvanised sheet iron standard factory manufactured FK3 ridge or hip flashing with Globalcoat finish (colour Traffic Green)

G3. Fascia boards - 10 x 30mm Everite Nutec-cement fascia boards screw fixed to truss ends and counter batten with Countersunk brass screws. Barge boards - 200 x 80mm Everite sockelless barge boards screw fixed to trusses or purlins with countersunk brass screws. Barge boards - 200 x 80mm Everite sockelless barge boards screw fixed to trusses or purlins with countersunk brass screws. Barge boards - 200 x 80mm Everite sockelless barge boards screw fixed to trusses or purlins with countersunk brass screws. Barge boards - 200 x 80mm Everite sockelless barge boards screw fixed to trusses or purlins with countersunk brass screws. Barge boards - 200 x 80mm Everite sockelless beards with C10 and the certificate and barge boards with one coat Plascon Multi-Surface Primer (WUP1) and finish off with two coats Plascon SAP purlins at maximum 1200mm centres. 38 x 114mm SAP purl plast to be carbolineum treated before fixing in position. Trusses to be secured to walls with 25mm dama

ttings 1. Vitrex Model 2400 (code 2404) enameled green folding type writing board with wall mounted centre board 2000 x 1200mm gh, two wall mounted side boards each 1000 x 1200mm high & two swing leaves each 1000 x 1200mm high with permanent

n, two wall mounted side boards each 1000 x 1200mm high & two swing leaves each 1000 x 1200mm high with permanent minium chalk rail

Vitrex System 2000 (code 2317) light grey wall mounted pinning board, size 2000 x 1200mm high (2 per classroom)

Greenfield G25 double door steel cupboard with standard baked enameled finish, 760 x 610 x 1700mm high with four lives (2 per classroom)

Five rows of 19mm Thick laminated SA Pine shelving, 350mm wide, evenly spaced & fixed from underside to 305mm wide epoxy powder coated steel brackets. Brackets to be fixed to 25mm wide x 2134mm long double slotted epoxy powder odfiller, apply one coat Plascon Woodcare Ultra Varnish (X44) thinned with 1:3 mineral turpentine (AZH1) then apply two shing coats Plascon Woodcare Clear Ultra (X44) suede varnish to shelves

ckplate with chamfered edges. Sand down to a dcare Ultra (X44) suede varnish thinned with 1:3 lcare Ultra (X44) suede varnish to back plate. Provide lcare Union AL5066-E08/2AS aluminium red down arrow

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on AL5066-06ASE05 aluminium engraved red fire rrow sign above fire hose reel. Water supply in posed parts of pipes with Plascon Aquasolv ime with Plascon Metal Primer (UC501) and apply two I (G7). Provide 150 x 150mm Union AL5066-E05/2AS sign above fire hose reel.

SYSTEM

2020_63- MAD- 104

 \triangleright

PLAN EXAMINER
FIRE CONTROL
ENVIRONMENTAL OFFICER
ROADS / STORMWATER
WATER AND SANITATION
ENVIRONMENTAL OFFICER FILE No.
DESIGN
SCALE REV No DATE NEW BUILDINGS & ALTERATIONS CONTRACT - SECTION

DOCUMENTATION & PROCUREMENT 925620480 INSTITUTION
MAKHWESE SECONDARY SCHOOL
INSTITUTION EMIS NUMBER DATE : MEDIUM ADMINISTRATION BLOCK SIZE ON ORIGINAL DRAWING 100 mm SIGNATURE TABLE ARCHITECTURAL WORK DESCRIPTION - SUB DIVISION RESPONSIBLE PROFESSIONAL SIGNATURE LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA **ELEVATIONS** DRAWING CO-ORDINATED **Public Works** DESCRIPTION PR NUMBER ယ DRAWN

NOTES	FINISH Spo Met Doc Carr	BURGLAR 12) BARS with	FITTINGS	GLASS saf	WINDOW Sta	AREA	TYPE	NUMBER W		TOC (Top of Concrete)			
HEAVY STEEL SECTION	Spot prime defects in pre-primed surfaces with Plascon Metal Primer (UC501) and two coats Plascon Enamel Doors & Trims high gloss enamel paint - colour Bryce Canyon (RC4-C1-2)	12 x 12mm solid burglar bars to all sashes to line up with vertical and horizontal section of window	STANDARD BRASS FITTINGS	6.38mm Laminated clear safety glass	Standard horizontal pivot type steel school window type 5/8, 1511mm x 1168mm high			WO1	*		932	2100	
NOTES	FINISH	BURGLAR BARS	FITTINGS	GLASS	WINDOW	AREA	TYPE	NUMBER					
HEAVY STEEL SECTION	Spot prime defects in pre-primed surfaces with Plascon Metal Primer (UC501) and two coats Plascon Enamel Doors & Trims high gloss enamel paint - colour Bryce Canyon (RC4-C1-2)	12 x 12mm solid burglar bars to all sashes to line up with vertical and horizontal section of window	STANDARD BRASS FITTINGS	6.38mm Laminated clear safety glass	Standard horizontal pivot type steel school window type 5/8, 533mm x 900mm high			W02			1200	2100	
NOTES	FINISH	BURGLAR BARS	FITTINGS	GLASS	WINDOW	AREA	TYPE	NUMBER					
HEAVY STEEL SECTION	Spot prime defects in pre-primed surfaces with Plascon Metal Primer (UC501) and two coats Plascon Enamel Doors & Trims high gloss enamel paint - colour Bryce Canyon (RC4-C1-2)	12 x 12mm solid burglar bars to all sashes to line up with vertical and horizontal section of window	STANDARD BRASS FITTINGS	6.38mm Laminated clear safety glass	Standard horizontal pivot type steel school window type 5/8, 1022mm x 900mm high			W03			1200	900	
NOTES	TING.	BARS	FITTINGS	GLASS	WINDOW	AREA	TYPE	NUMBER	+		932	2100	
HEAVY STEEL SECTION	Spot prime defects in pre-primed surfaces with Plascon Metal Primer (UC501) and two coats Plascon Enamel Doors & Trims high gloss enamel paint - colour Bryce Canyon (RC4-C1-2)	12 x 12mm solid burglar bars to all sashes to line up with vertical and horizontal section of window	STANDARD BRASS FITTINGS	6.38mm Laminated clear safety glass	Standard horizontal pivot type steel school window type 5/8, 2000mm x 1168mm high			W04				2000	
NOTES	FINISH	BURGLAR BARS	FITTINGS	GLASS	WINDOW	AREA	TYPE	NUMBER					
	NATURAL ANODIZED	N/A	SLIDING BOLT TO LOCK FROM INSIDE	6mm CLEAR SAFETY GLASS	PURPOSE MADE ALUMINIUM TO SUIT SLIDING SASH	ADMINISTRATION RECEPTION	NA	W05			900	1526 PANE PANE PANE	
NOTES	FINISH	BURGLAR BARS	FITTINGS	GLASS	WINDOW	AREA	TYPE	NUMBER				1900	
	NATURAL ANODIZED	N/A	SLIDING BOLT TO LOCK FROM INSIDE	6mm CLEAR SAFETY GLASS	PURPOSE MADE ALUMINIUM TO SUIT SLIDING SASH	ADMINISTRATION RECEPTION	N/A	W06			900	1800 900 FIXED PANE SLIDING PANE	

CONSTRUCTION NOTES

A1. Concrete foundations - concrete mix type and with steel reinforcement according to structural engineer's drawings. Top of strip footings to be 340mm minimum below N.G.L. Provide test cubes (1 per 15m² or 1 per batch). Finished sides and bottoms of trenches to be treated with ant polson of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialists in accordance with SANS Specification 1165 and SANS Code of Practice 0124. Concrete to be casted within 24 hours of application. Contractor to provide five year guarantee.

A2. Backfilling and effling under floors - in general, approved filling compacted to at least 93% Mod. AASHTO density in layers of maximum 150mm - refer to engineer's drawings for cletal in cases of poor soil conditions. Minimum of 170mm filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted flimage. Filling under floors to be treated with ant poison of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialistis in accordance with SANS Specification 1155 and SANS Code of Practice 0124. Concrete to be casted with ant poison of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialistis in accordance with SANS specification 1155 and SANS Code of Practice 0124. Concrete to be casted with ant poison of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialistis in accordance with SANS Specification 1155 and SANS Specification 1156 and SANS Specification 1156 and SANS Specification 1156 and SANS Specification 1156 and SANS Specification 1156 and SANS Specification 1156 and SANS Specification 1156 and SANS Specification 1156 and SANS Specification 1156 and SANS Specifi

Skirings
C1. 19 x 76mm Meranti skirting plugged to walls at 400mm c/c with 19mm meranti quadrand bead plated on. Sand down to a smooth finish, stop with Polycell Woodfiller, stain with Plascon Woodcare Stain (W-range)(colour meranti), apply one coat Plascon Woodcare Ultra Varnish (X44), thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Ultra (X44) suede vamish to skirtings
Walls and structure
D1. External walls - Corobrik face bricks in stretcher bond with 10mm wide x 6mm deep square recessed joints
D2. Brickforce - Brickforce to 115 and 230mm foundation walls - every 2nd course. Superstructure walls - every 6th course. Over openings formed in brickwork as per table below
D3. 75 x 75 x 3mm Thick tubular section steel columns with 250mm girth x 4.5mm thick flat section U-shaped fixing bracket, 200mm long, twice holed and welded to top, 200 x 200 x 10mm thick flat section baseplate, four times holed and welded to bottom. Columns to be fixed to top of brickwork below copings with four M10 x 75mm masonry anchor bolts. Degrease with "Plascon Aqualsolv Degreaser (GR1)", remove rust with "Plascon Rust Remover (RR1)", prime with Plascon Metal Primer (UC501) and apply two coats Plascon Enamel Door & Trims high gloss enamel paint - colour as per finishes schedule.

50 x 228mm Laminated SA Pine beam twice bolted to steel columns. Sand down to a smooth finish, stop with Polycell Woodfiller, provide one coat raw linseed oil thinned with 1:3 mineral turpentine (AZH1), apply one coat Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon both in the provide one coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpen

5. DPC - SANS Specification 952 Type B approved 375 micron black dpc in walls at floor level and under all window sills of the same specification 952 Type B approved 375 micron black dpc in walls at floor level and under all window sills of the with one coat sport of the same specification 952 Type B approved 375 micron black dpc in walls at floor level and under all window sills of the window sills of the same specification 952 Type B approved should be coat point one coat smooth 1:5 cement plaster finished of the same specification of the same specification with approved stockbrick walls in stretcher bond above to receive one coat mooth 1:5 cement plaster finished off with one coat plascon plaster primer (UC56) and two coats plascon polvin Walls & willings (EPL) PVA paint. Colour as per finishes schedule.

Note: The same should be same specification of the same specification with Urochem 205 polysulfide joint sealant after surfaces have een primed with Urochem 614 primer surfaces have seen primed with Urochem 614 primer.

900 900

SLIDING

SLIDING BOLT TO LOCK FROM INSIDE

PURPOSE MADE ALUMINIUM SLIDING SASH

Ell internal windows ills - 14 x 150mm nutec-cement window sils, bedded and set flat in 14 cement nortar. Prime with one call Plascon Multi-surface Primer (WUP*) and apply two coals Plascon Pavin Visils & Ceilings (EPL) PVA paint. Colour as per finishes schedule.

El internal window sils - Middewit Fyribos Geel face brick-on-edge sloping sill to match walls with 10 x 6mm square reseased joins.

Ecilings and comices - 19 x 75mm Meranti comice natiled to walls at 400mm centres maximum. Sand down to a smooth finish, stop with Payoel Woodflers, sain with Plascon Woodcare Stain (Wi-range) (colour meant), apply one coal Plascon Woodcare Utra Vannish (2A4), thinned with 13 mineral furpentine (A2H1) and apply two finishing coals Plascon Woodcare Utra (2A4) sede variants to comices.

Ellings and countries.

Ellings and countries of the cement boards natiled to 38 x 36mm SA.P brandering at 400mm centres maximum with galvanised poliming strips. Jointing strips to be pre-pariabled. Prime cellings with one coal Plascon Multi-Surface Primer (WUP*) and finish off with two coals Plascon Polini Walls & Ceilings (EPL) PVA paint. Colour Within ECR12A). Provides 10mm mitch kapertile insulation on top of ceilings.

Ellings trap door and strapped the strip of the strip of the strip of ceilings the strip of

DESIGN SCALE

DATE

RESPONSIBLE PROFESSIONAL SIGNATURE

PR NUMBER

DRAWING CO-ORDINATED

Fittings

H1. Vitrex Model 2400 (code 2404) enameled green folding type writing board with wall mounted centre board 2000 x 1200mm high, two wall mounted side boards each 1000 x 1200mm high & two swing leaves each 1000 x 1200mm high with permanent aluminium chalk rail

H2. Vitrex System 2000 (code 2317) light grey wall mounted pinning board, size 2000 x 1200mm high (2 per classroom)

H3. Greenfield G25 double door steel cupboard with standard baked enameled finish, 760 x 610 x 1700mm high with four shelves (2 per classroom)

H4. Five rows of 19mm Thick laminated SA Pine shelving, 350mm wide, evenly spaced & fixed from underside to 305mm wide Shelco type FT6 wall bands, plugged to walls at maximum 600mm c/c. Sand down to a smooth finish, stop with Polycell Woodfiller, apply one coat Plascon Woodcare Ultra Varnish (X44) thinned with 1:3 mineral turpentine (AZH1) then apply two finishing coats Plascon Woodcare Clear Ultra (X44) suede varnish to shelves

Miscellaneous

I1 9 Kg DCP fire extinguisher fitted to 400 x 200 x 22mm thick meranti backplate with chamfered edges. Sand down to a smooth finish, stop with Polycell Woodfiller, apply one coat Plascon Woodcare Ultra (X44) suede varnish to shelves

Miscellaneous

I2 Safex fire hose reel with 30m hose. Supply 152 x 152 x 3mm thick Union AL5066-E08/2AS aluminium red down arrow sign above fire extinguisher sign & Union AL5066-E06ASE08 aluminium engraved red fire hose reel with Plascon Aussolv Degreaser (GR1), remove any rust with Plascon Rust Remover (RR1), prime with Plascon Metal Primer (UC501) and apply two coats Plascon Enamel Doors & trims (G-Range) paint - colour Signal Red (G7). Provide 150 x 150mm Union AL5066-E05/2AS aluminium red down arrow sign above fire hose reel. Water supply in buildings to fire hose reel. Water supply in paint - colour Signal Red (G7). Provide 150 x 150mm Union AL5066-E05/2AS aluminium red down arrow sign above fire hose reel. Water supply two coats Plascon fire hose reel. Water supply two coats Plascon fire hose reel. Water supply two on AL5066-06ASE05 aluminium engraved red fire rrow sign above fire hose reel. Water supply in posed parts of pipes with Plascon Aquasolv ime with Plascon Metal Primer (UC501) and apply two I (G7). Provide 150 x 150mm Union AL5066-E05/2AS sign above fire hose reel.

SYSTEM

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ruben reddy architects

Suite 4 No 6 Ismini Street, I Tel: +27 15 065 Email: info

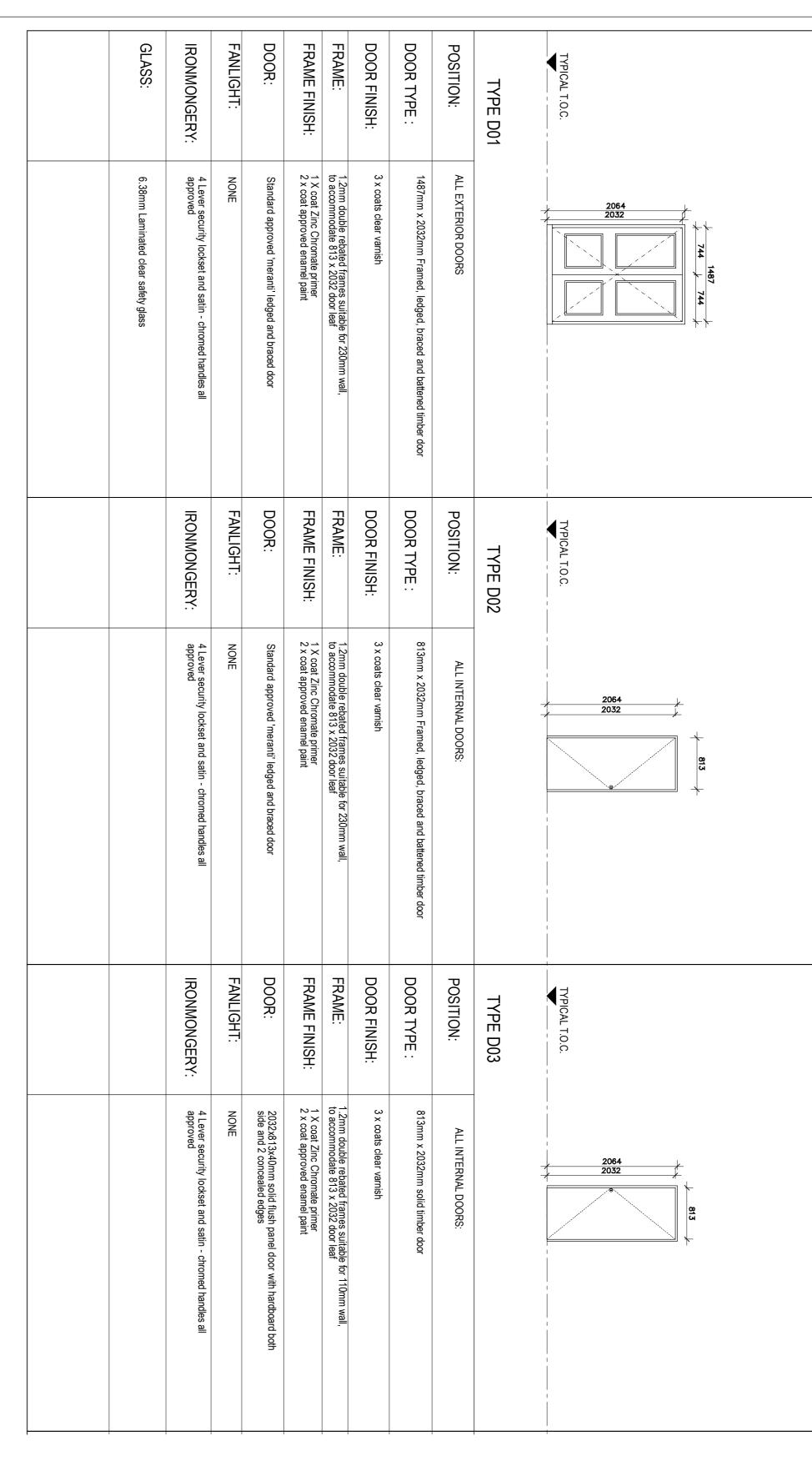
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NI N		MEDI		DOCUMEN	NEW BUILI	925620480	MAKHWESE			SIZE	REV No DATE :	ENVIRONMENTAL OFFICER	WATER AND SANITATION	ROADS / STORMWATER	ENVIRONMENTAL OFFICER	FIRE CONTROL	DI AN EYAMINER	CHENT	
WINDOW OCHEDOLE	DESCRIPTION	WORK DESCRIPTION - SUB DIVISION	ARCHITECTURAL 3	ROCUREN	NEW BUILDINGS & ALTERATIONS	SERVICE	SECONDARY SCHOOL	Public Works	LIMPOP(PROVINCIAL GOVERNMENT REPUBLIC OF SOUTH AFRICA	ZE ON ORIGINAL DRAWING 100 mm	DESCRIPTION:							CONTRACTOR	RE TABLE

1) Workmanship to comply with Standard Specification, methods to be used - SABS 0400
2) Light Switch in Disabled toilet to be at 1200 mm above FFL
3) If Step over 900 mm Build in Balustrade
4) Gulley positions to be determined as per site prescribed overall of design

NOTES

désign
5) 2 x coats sealant on all exposed trusses (sand off all SABS & other narkings)
6) 50 mm mineral wool insulation to be installed where there are ceilings.
Bubble plastic insulation with foil backing to be installed with wire supports in all areas that do not have ceilings
7) West Facing Facades to have standardised aluminium louvres from below eaves to drop of 1200 mm
8) Trusses to be designed in accordance with SABS 0400 & approved by Project Engineers



DOOR TYPE: DOOR FINISH: FRAME FINISH: DOOR: FANLIGHT: IRONMONGERY:	TYPE D04 POSITION:	TYPE D01 POSITION: DOOR TYPE: DOOR FINISH: FRAME FINISH: FRAME FINISH: GLASS:
150mm UNDERCUT 3 x coats clear varnish 1.2mm double rebated frames suitable for 110mm wall, to accommodate 813 x 2032 door leaf 1 X coat Zinc Chromate primer 2 x coat approved enamel paint 2032x813x40mm solid flush panel door with hardboard both side and 2 concealed edges NONE 4 Lever security lockset and satin - chromed handles all approved	TOILET CUBICLES 2064 50 1982	ALL EXTERIOR DOORS 1487mm x 2032mm Framed, ledged, braced and battened timber door 1.2mm double rebated frames suitable for 230mm wall, to accommodate 813 x 2032 door leaf 1.2 coat Zinc Chronate primer 2 x coat approved meranti ledged and braced door NONE 4 Lever security lookset and satin - chromed handles all approved 6.38mm Laminated clear safety glass
DOOR TYPE: DOOR FINISH: FRAME FINISH: DOOR: FANLIGHT: IRONMONGERY:	TYPICAL T.O.C. TYPE G01 POSITION:	TYPE DO2 POSITION: DOOR TYPE: FRAME FINISH: FRAME FINISH: FRONMONGERY:
1580mm x 2000mm 3 x coats clear varnish 1.2mm double rebated frames suitable for 230mm wall, to accommodate 936 x 2032 door leaf 1 X coat Zinc Chromate primer 2 x coat approved enamel paint painted mild steel gate consisting of 10x10mm mild steel bars placed at 100mm centres at a 45° angle, colour to architect's specification NONE 4 Lever security lockset and satin - chromed handles all approved	2000 788 ENTRANCE	ALL INTERNAL DOORS: ALL INTERNAL DOORS: 813mm x 2032mm Framed, ledged, braced and battened timber door 3 x coats clear vamish 1.2mm double rebatled frames suitable for 230mm wall, to accommodate 813 x 2032 door leaf 1 X coat Zinc Chromate primer 2 x coat approved enamel paint Standard approved "meranti" ledged and braced door NONE 4 Lever security lockset and satin - chromed handles all approved
		TYPE D03 TYPE D03 POSITION: DOOR TYPE: FRAME FINISH: FRAME FINISH: FANLIGHT: IRONMONGERY:
		ALL INTERNAL DOORS: ALL INTERNAL DOORS: 813mm × 2032mm solid timber door 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frames suitable for 11 to accommodate 813 × 2032 door leaf 1.2mm double rebated frame

CONSTRUCTION NOTES

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markings)
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 Gulley positions to be determined as per site prescribed design.

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NOTES

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nent according to structural engineer's drawings. Top of (1 per 15m³ or 1 per batch). Finished sides and bottoms is approved type applied at a rate of not less than 5 litres ecification 1165 and SANS Code of Practice 0124. vide five year guarantee. pacted to at least 93% Mod. AASHTO density in layers poor soil conditions. Minimum of 170mm filling to be ng to be approved by engineer (imported filling to be tests to be provided at a rate of one test per 125m² filling der floors to be treated with ant poison of the Prothor s of solution per m² by a firm of specialists in accordance rete to be casted within 24 hours of application.

A1. Concrete foundations - concrete mix type and with steel reinforcement according to structural engineer's drawings. Top of strip footings to be 340mm minimum below N.G.L. Provide test cubes (1 per 15m² or 1 per batch). Finished sides and bottoms of trenches to be treated with ant poison of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialists in accordance with SANS Specification 165 and SANS Code of Practice 0124. Concrete to be casted within 24 hours of application. Contractor to provide five year guarantee.

A2. Backfilling and filling under floors - in general, approved filling compacted to at least 93% Mod. AASHTO density in layers of maximum 150mm - refer to engineer's drawings for detail in case of poor soil conditions. Minimum of 170mm filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted ground level under floors. All filling to be provided above natural or compacted ground level under floors. All filling under floors by engineer (imported tilling to be provided above natural or compacted ground level under floors. All filling under floors to be treated with ant poison of the Prothor 200 SC or other approved type applied at a rate of not less than 5 litres of solution per m² by a firm of specialistis in accordance with SANS specification 1165 and SANS Code of Practice 0124. Concrete to be casted within 24 hours of application.

B1. Surface bed - concrete mix as described on structural engineer's drawings but minimum 85mm thick on SANS Specification 952 Type C approved USB Green 250 micron waterproofing membrane with laps sealed with pressure sensitive tape. Surface bed cast in atternative sections of maximum 20m² with saw cut joints with joints filled up with polysulfide sealer. Provide mesh ref. no. 193 as per structural engineer's drawings. Provide thest cubes of the propried to surface bed cast in atternative sections of maximum inpregnated soft

n meranti quadrand bead plated on. Sand down to a Stain (W-range)(colour meranti), apply one coat e (AZH1) and apply two finishing coats Plascon

Skirtings

C1. 19 x 76mm Meranti skirting plugged to walls at 400mm c/c with 19mm meranti quadrand bead plated on. Sand down to a smooth finish, stop with Polycell Woodfiller, stain with Plascon Woodcare Stain (W-range)(colour meranti), apply one coat Plascon Woodcare Ultra Varnish (X44), thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Woodcare Ultra (X44) suede varnish to skirtings

Walls and structure

D1. External walls - Corobrik face bricks in stretcher bond with 10mm wide x 6mm deep square recessed joints

D2. Brickforce - Brickforce to 115 and 230mm foundation walls - every 2nd course. Superstructure walls - every 6th course.

Over openings formed in brickwork as per table below

D3. 75 x 75 x 3mm Thick tubular section steel columns with 250mm girth x 4.5mm thick flat section U-shaped fixing bracket, 200mm long, twice holed and welded to top, 200 x 200 x 10mm thick flat section baseplate, four times holed and welded to bottom. Columns to be fixed to top of brickwork below copings with four M10 x 75mm masonry anchor botts. Degrease with "Plascon Aqualsolv Degreaser (GR1)", remove rust with "Plascon Rust Remover (RR1)", prime with Plascon Metal Primer (UC501) and apply two coats Plascon Enamel Door & Trims high gloss enamel paint - colour as per finishes schedule. 50 x 228mm Laminated SA Pine beam twice bolted to steel columns. Sand down to a smooth finish, stop with Polycell Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1), apply one coat Plascon Woodcare Sunproof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Sundroof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Sundroof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Sundroof (Amber - PNW22) suede varnish thinned with 1:3 mineral turpentine (AZH1) and apply two finishing coats Plascon Sundr

5. DPC - SANS Specification 952 Type B approved 375 micron black dpc in walls at floor level and under all window sills 6. Internal walls - approved stockbrick walls in stretcher bond above to receive one coat smooth 1:5 cement plaster finished ff with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & Ceilings (EPL) PVA paint. Colour roken white (EPL314) or French Chartreuse (Y5-D2-3) as per Principal Agent 7. Internal walls - face brick plinth up to 850mm with approved stockbrick walls in stretcher bond above to receive one coat mooth 1:5 cement plaster finished off with one coat Plascon Plaster Primer (UC56) and two coats Plascon Polvin Walls & eilings (EPL) PVA paint. Colour as per finishes schedule.

8. All exposed expansion joints in walls and floors to be filled in with Urochem 205 polysulfide joint sealant after surfaces haven primed with Urochem 614 primer

9. Expansion joints in walls and ceilings to be covered with 2 x 50mm Migua KF250/30 aluminium cover strips vindow sills

1. Internal window sills - 15 x 150mm nutec-cement window sills, bedded and set flat in 1:4 cement mortar. Prime with one

El_Iniernal window sills - 15 x 150mm nutec-cement window sills, bedded and set fail in 14 cement mortar Prime with one coal Plascon Multi-surface Primer (WUP1) and apply two coals Plascon Polvin Walls & Ceilings (EPL) PVA paint Colour as per finishes schodule.

El_Iniernal window sills - Middelwit Fynbos Geel face brick-on-edge sloping sill to match walls with 10 x 6mm square recessed joints.

El_External window sills - Middelwit Fynbos Geel face brick-on-edge sloping sill to match walls with 10 x 6mm square recessed joints of the provided part of

Fittings
H1. Vitrex Model 2400 (code 2404) enameled green folding type writing board with wall mounted centre board 2000 x 1200mm high, two wall mounted side boards each 1000 x 1200mm high & two swing leaves each 1000 x 1200mm high with permanent aluminium chalk rail
H2. Vitrex System 2000 (code 2317) light grey wall mounted pinning board, size 2000 x 1200mm high (2 per classroom)
H3. Greenfield G25 double door steel cupboard with standard baked enameled finish, 760 x 610 x 1700mm high with four shelves (2 per classroom)
H4. Five rows of 19mm Thick laminated SA Pine shelving, 350mm wide, evenly spaced & fixed from underside to 305mm wide Shelco epoxy powder coated steel brackets. Brackets to be fixed to 25mm wide x 2134mm long double slotted epoxy powder coated Shelco type FT6 wall bands, plugged to walls at maximum 600mm c/c. Sand down to a smooth finish, stop with Polycell Woodfiller, apply one coat Plascon Woodcare Ultra Varnish (X44) thinned with 1:3 mineral turpentine (AZH1) then apply two finishing coats Plascon Woodcare Clear Ultra (X44) suede varnish to shelves
Miscellaneous
11 9 Kg DCP fire extinguisher fitted to 400 x 200 x 22mm thick meranti backplate with chamfered edges. Sand down to a smooth finish, stop with Polycell Woodfiller, apply one coat Plascon Woodcare Ultra (X44) suede varnish to back plate. Provide 150 x 150mm Union AL5066-E06/2AS aluminium engraved red fire hose reel with 30m hose. Supply 152 x 152 x 3mm thick Union AL5066-B08/2AS aluminium red down arrow sign above fire hose reel. Water supply in buildings to fire hose reel with 13 months devented fire hose reel with Plascon Aquasolv Degreaser (GR1), remove any rust with Plascon Rust Remover (RR1), prime with Plascon Metal Primer (UC501) and apply two coats Plascon Metal Primer (UC501) and apply two coats Plascon Metal Primer (UC501) and apply two coats Plascon Metal Primer (UC501) and apply two coats Plascon Metal Primer (UC501) and apply two coats Plascon Metal Primer (UC501) and apply two coats Plascon Metal Primer (UC501) and coat

in AL5066-06ASE05 aluminium engraved red fire row sign above fire hose reel. Water supply in posed parts of pipes with Plascon Aquasolv me with Plascon Metal Primer (UC501) and apply two (G7). Provide 150 x 150mm Union AL5066-E05/2AS ign above fire hose reel.

SYSTEM

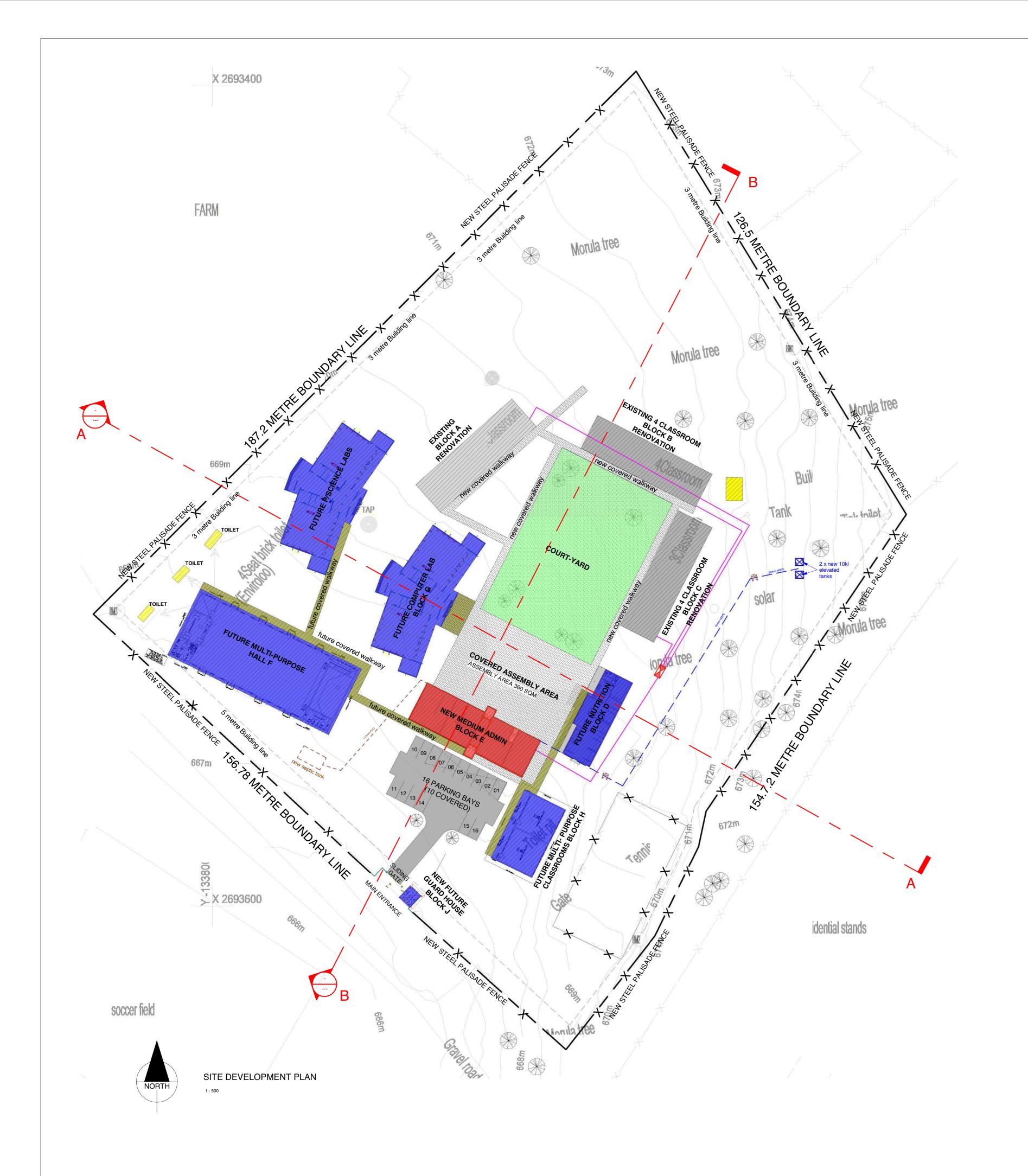
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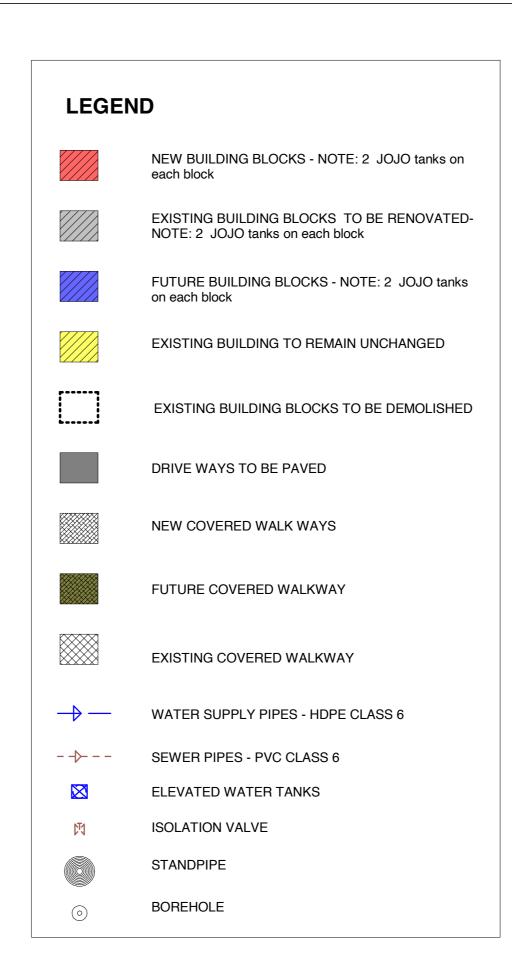
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ELECTRICAL NOTES

- 1. 2 core XLPE copper cable to be used for site reticulation buried at 1200mm below surface
- ground level
 Cables installation to be 800mm away from road edge and at least 3000mm away from nearest building wall.
- manholes to be used at road crossing and at cable
- bends of 90 degrees.

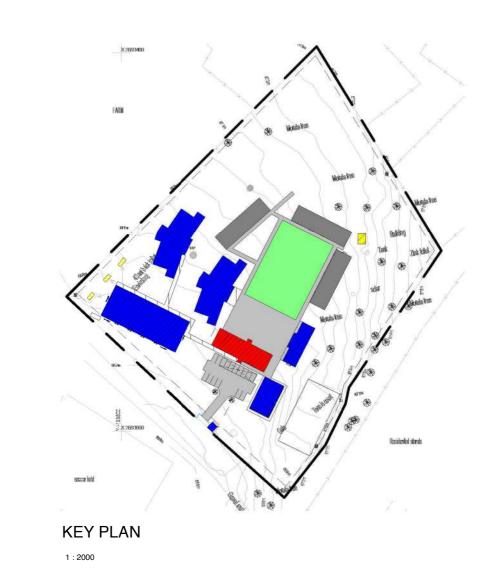
 4. PVC sleeves to be used to connect manholes
 5. Switching station to be finalised once ESKOM has defined the bulk power supply philosophy.

ELECTRICAL LEGEND

SYMBOL	DESCRIPTION
8	16kVA Dedicated transformer with an associated Meter Box
	25mm² PVC Cu Cable
	16mm² PVC Cu Cable
	10mm² PVC Cu Cable
	Kiosk







NO.	Building Usage	(sqm)	QU
01			
02			
03			
04			
05			
06			
07			
			+
NO.	Building Usage	(sqm)	QL
01	BLOCK A 4 CLASSROOM	280	
02	BLOCK B 4 CLASSROOM	280	
03	BLOCK C 4 CLASSROOM	28	
03			
03	WATER-BORNE TOILETS	22	4
		22	4
04		22	4
04 05		22	4
04 05 06 07		22	4
04 05 06 07	WATER-BORNE TOILETS	22 (sqm)	
04 05 06 07	WATER-BORNE TOILETS ABLE 2C: NEW WORKS		
04 05 06 07 TA	WATER-BORNE TOILETS ABLE 2C: NEW WORKS Building Usage	(sqm)	QU
04 05 06 07 TA NO.	WATER-BORNE TOILETS ABLE 2C: NEW WORKS Building Usage MEDIUM ADMIN BLOCK E	(sqm) 325	
04 05 06 07 TA NO. 01 02	WATER-BORNE TOILETS ABLE 2C: NEW WORKS Building Usage MEDIUM ADMIN BLOCK E ASSEMBLY AREA	(sqm) 325 200	
04 05 06 07 TA NO. 01 02	WATER-BORNE TOILETS ABLE 2C: NEW WORKS Building Usage MEDIUM ADMIN BLOCK E ASSEMBLY AREA	(sqm) 325 200	

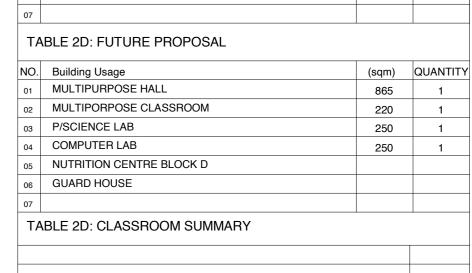


TABLE	E 01: SAMMAR	Y FOR HUMAN	CAPITAL
	TABLE 1A: Grade	Enrolment Figures I	For:
	Numbe	r Of Pupils:	
GRADES	BOYS	GIRLS	TOTAL
RADE 8	26	31	57
RADE 9	27	31	58
RADE 10	42	45	87
RADE 11	34	26	60
RADE 12	33	62	95
	0	0	0
	0	0	0
	0	0	0
OTAL	162	195	357
EACHERS			14

	SIGNA	NTURE TABL	.E:
DISCIPL	INE:	SIGNATURE:	DATE
CLIENT:			
PLAN EXAMI	NER		
FIRE CONTR	OL		
ENVIROMEN	TAL OFFICER		
ROADS/STO	RMWATER		
WATER AND	SANITATION		
ENVIRONME	NTAL OFFICER		
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GENERAL DRAWING NOTES

USED - sabs 0400

1) RKMANSHIP TO COMPLY WITH STANDARD

3) IF STEP OVER 900MM BUILD IN BALUSTRADE 4) GULLEY POSITIONS TO BE DETRMINED AS PER SITE

PRESCRIBED OVERALL DRAINAGE DESIGN

OFF ALL sabs & OTHER MARKINGS)

SPECIFICATION OF MATERIALS AND METHODS TO BE

2) IIGHT SWITCH IN DISABLED TOILET TO BE AT 1200MM

5) 2 X COATS SEALANT O ALL EXPOSED TRUSSES (SAND

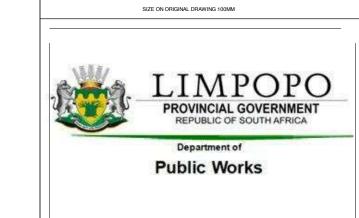
6) 50MM MINERAL WOOL INSULATION TO BE INSTALLED WHERE THERE ARE CEILINGS. BUBBLE PLASTIC

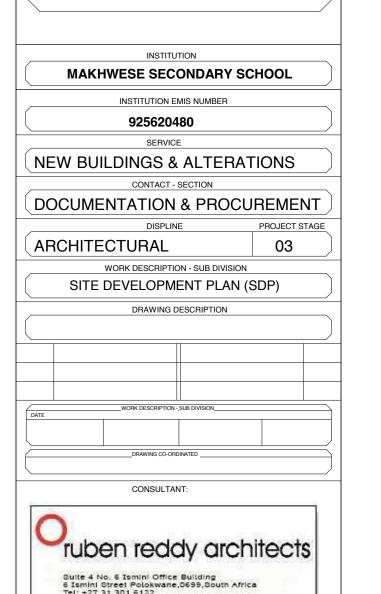
INSULATION WITH FALL BACKING TO BE INSTALLED WITH WIRE SUPPORTS IN ALL AREAS THAT DO NOT HAVE

7) WEST FACING FACADES TO HAVE STANDARDISED ALUMINIUM LOUVRES FROM BELOW EAVES TO DROP OF

8) TRUSSES TO BE DESIGNED IN ACCORDANCE WITH

SABS 0400 & APPROVED BY PROJECT ENGINEER





CONTACTOR: DRAWING NUMBER:

2020_63-SDP-001