



**BID NUMBER: LDPWRI-B/20305**

**APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF 12 PIT TOILETS,  
RENOVATIONS TO 20 ENVIROLOO TOILETS, 9 CLASSROOMS AND THE CONSTRUCTION  
OF MEDIUM ADMIN, 4 CLASSROOMS, 1 X 4 SEATER WATERBORNE TOILETS AND  
EXTERNAL WORKS AT MAKGOPELE PRIMARY SCHOOL IN MOPANI DISTRICT**

**for**

**LIMPOPO DEPARTMENT OF EDUCATION (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

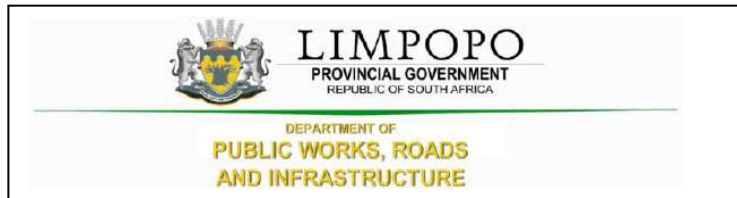
**Contact Person: General Queries**

Name : Mr NJ Motsopye,  
Tel No. : 015 284 7126  
Email : [motsopyen@dpw.limpopo.gov.za](mailto:motsopyen@dpw.limpopo.gov.za)

**Technical: Technical Queries**

Name : Mr K Modjadji  
Tel No. : 083 673 5436  
Email : [ModjadjiM@dpw.limpopo.gov.za](mailto:ModjadjiM@dpw.limpopo.gov.za)

**Name of the Bidder : .....**



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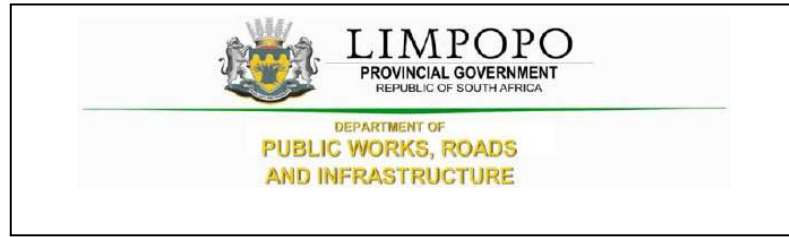
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## **PART T1: TENDERING PROCEDURE**

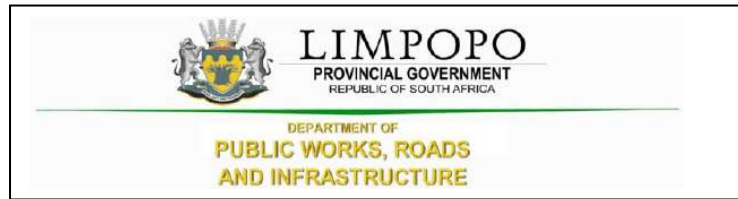
CONTRACT No. LDPWRI-B/20305

## 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 DEMOLITIONS OF 12 PIT TOILETS, RENOVATIONS TO 20 ENVIROLOO TOILETS, 9 CLASSROOMS AND THE CONSTRUCTION OF MEDIUM ADMIN, 4 CLASSROOMS, 1 x 4 SEATER WATERBORNE TOILETS AND EXTERNAL WORKS AT MAKGOPELE PRIMARY SCHOOL IN MOPANI DISTRICT FOR 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 Indirect Targeting for Enterprise Development through Construction Works Contracts **Gazette Notice No. 36190 of 25 February 2013** will be applicable on this project

<b>Project Name</b>	APPOINTMENT OF A CONTRACTOR FOR THE DEMOLITIONS OF 12 PIT TOILETS, RENOVATIONS TO 20 ENVIROLOO TOILETS, 9 CLASSROOMS AND THE CONSTRUCTION OF MEDIUM ADMIN, 4 CLASSROOMS, 1 x 4 SEATER WATERBORNE TOILETS AND EXTERNAL WORKS AT MAKGOPELE PRIMARY SCHOOL IN MOPANI DISTRICT FOR LIMPOPO DEPARTMENT OF EDUCATION (LDOE) FOR A PERIOD OF 12 MONTHS.	
<b>Tender Number</b>	LDPWRI- B/20305	
<b>Tender documents availability</b>	Limpopo Department of Public Works, Roads and Infrastructure website	
<b>Address for submission of tenders</b>	DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE.  Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699.	
<b>Closing date of the tender</b>	<b>As per Tender invite</b>	
<b>Closing time of the tender</b>	<b>As per Tender invite</b>	
<b>Compulsory briefing meeting</b> ( <i>Tenderers must sign the attendance register in the name of the tendering entity. Addenda (if any) will be issued only to those tendering entities appearing on the attendance register</i> )	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
	Meeting venue	<b>As per Tender invite</b>
	Date	<b>As per Tender invite</b>
	Time:	<b>As per Tender invite</b>
<b>Evaluation criteria</b>	<ol style="list-style-type: none"> <li>1. Compliance with mandatory or compulsory requirements</li> <li>2. Risk assessment on current projects</li> <li>3. Price</li> <li>4. Preference</li> </ol>	
<b>Mandatory or Compulsory Requirements</b> ( <i>failure to submit or comply with these requirements will lead to automatic disqualification</i> )	Only tenderers who are appointed on category B 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	
	Priced Bills of Quantities	
	SBD 1.	
	Declaration on the status of Administration compliance.	
	Completed and signed Form of Offer	



## T1.2 Tender Data

Clause number	Tender Data
	<p>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 <a href="http://www.cidb.org.za">www.cidb.org.za</a>) which are reproduced without amendment or alteration for the convenience of tenderers as an Annexure to this Tender Data.</p> <p>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.</p> <p>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 <b>No. 36190 of 25 February 2013</b>. In this case, contractor shall provide a <b>minimum Contract Participation Goal (CPG) of 5%</b> of the total project value and develop targeted enterprises stated under C3 of this document.</p> <p>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:</p>
C.1.1	The Employer is the Department of Public Works, Roads and Infrastructure

CONTRACT No. LDPWRI-B/20305

C.1.2	<p><b>The Tender</b></p> <p><b>Part T1: Tendering procedures</b></p> <p>T1.1 Tender notice and invitation to tender</p> <p>T1.2 Tender data</p> <p><b>Part T2: Returnable documents</b></p> <p>T2.1 List of returnable documents</p> <p>T2.2 Returnable schedules</p> <p><b>The Contract Part C1: Agreements and contract data</b></p> <p>C1.1 Form of offer and acceptance</p> <p>C1.2 Contract data</p> <p>C1.3 Joint Venture Agreement (If Applicable)</p> <p><b>The Contract Part C2: Pricing data</b></p> <p>C2.1 Pricing instructions</p> <p>C2.2 Bills of Quantities</p> <p><b>Part 3: Scope of work</b></p> <p>C3.1 Special Notes to Bidders</p> <p>C3.2 OHS Specifications</p> <p><b>Part 4: Site information</b></p> <p>C4 Drawings</p>
C.1.4	<p>The employer's representative is:</p> <p>Name : Mr K Modjadji</p> <p>Tel No. : 083 673 5436</p> <p>Email : <a href="mailto:ModjadjiM@dpw.limpopo.gov.za">ModjadjiM@dpw.limpopo.gov.za</a></p> <p>However, all communications related to this bid should be directed to the persons indicated under Enquires on this tender document.</p> <p>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.</p>
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	<p><b>Eligibility in respect of CIDB grading</b></p> <p>Only tenderers who are appointed on framework agreement category B 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.</p>
C2.2	<p><b>Cost of tendering</b></p> <p>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.</p>

C.2.7	<p><b>Compulsory site briefing</b></p> <p>A compulsory briefing meeting will be held <b>as per Tender invite</b></p> <p>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.</p>
C.2.11	<p><b>Alterations to the documents</b></p> <p>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</p>
C.2.12	<p><b>Alternative tender offer</b></p> <p>No alternative tender offer is permitted in this tender.</p>
C.2.13.2	<p><b>Replace sub-clause C.2.13.2 with the following;</b> Return all returnable documents to the employer after completing them in their entirety by writing in <b>non-erasable black ink (Black pen)</b></p>
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	<p>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:</p> <p><b>Location of tender box: DEPARTMENT OF PUBLIC WORKS, ROADS &amp; INFRASTRUCTURE.</b>  <b>Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699</b>  <b>Identification details:</b> Sealed Tender with Tender reference number, Title of Tender and the closing date and time of the tender.</p>
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 <b>12 weeks or 90 days.</b>
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	<p>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:</p> <ul style="list-style-type: none"> <li>- Persons who had no franchise in national elections prior to 1983 and 1993</li> <li>- Women</li> <li>- Disabled persons</li> <li>- Promotion of SMMEs</li> <li>- Enterprises located in Limpopo Province</li> <li>- Promotion of youth</li> <li>- South African owned enterprises</li> </ul>

	<p><b>CIDB Grading Certificate</b></p> <p>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.</p> <p><b>Letter of Good Standing</b></p> <p>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.</p>
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 <b>not</b> be opened immediately after the closing time for tenders.
C.3.11	<p>The tenderers will be evaluated in four stages</p> <ul style="list-style-type: none"> <li>(i) Stage 1: Compliance with mandatory requirements as stated in Part T1.1</li> <li>(ii) Stage 2: Risk assessment on current projects</li> <li>(iii) Stage 3: Price</li> <li>(iv) Stage 4: Preference</li> </ul> <p>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&amp;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.</p> <p>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.</p> <p>The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade.<sup>1</sup></p> <ul style="list-style-type: none"> <li>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.</li> <li>b) Stage 2: Risk assessment on current projects</li> </ul> <p>The total value of current projects for a contractor under consideration cannot exceed twice the maximum value of their relevant CIDB grade.</p>



**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:

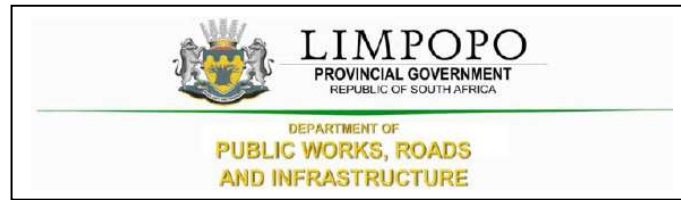
A is 80 since the estimated financial value of works inclusive of VAT is equals or is less than R 50,000,000.00.

P is the points awarded to the bid under consideration

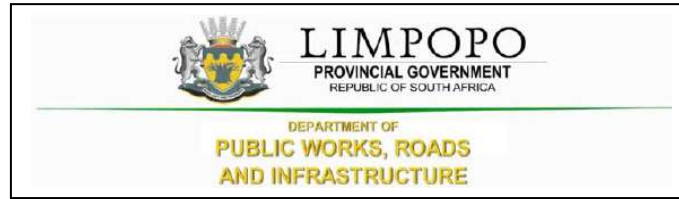
$P_m$  is the lowest Comparative bid price

$P_o$  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



## **PART T2: RETURNABLE DOCUMENTS**



## T2.1 : LIST OF RETURNABLE DOCUMENTS

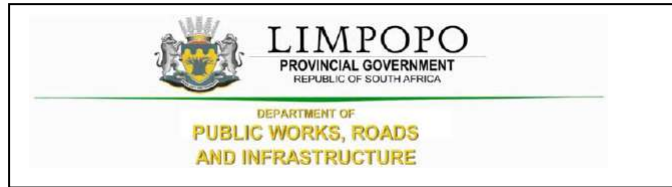
The following documents will form part of the documents submitted to the Contractors as part of the Request for Proposals:

- 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.

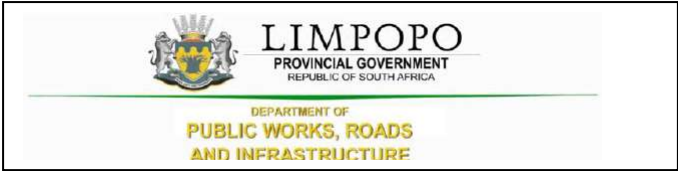
*Failure by the service provider to fully complete SBD 6.1 item 4.3 to 4.6 (Declaration with regard to company/firm) will render their proposal not responsive and will not be considered.*

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



## T 2.2: RETURNABLE SCHEDULE

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



**Declaration on the status of administrative compliance**

Please indicate, by circling either **Yes** or **No**, whether the administrative information submitted with the original framework tender documents have changed or not. If yes, kindly provide the particulars below with any supporting documents.

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.....

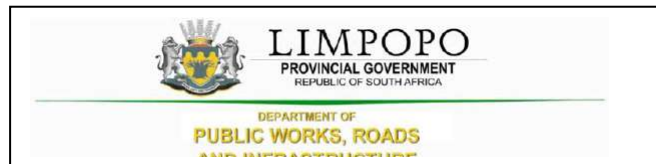
.....

.....

Signed ..... Date \_\_\_\_\_

Name ..... Position \_\_\_\_\_

*Enterprise* .....



## Record of Addenda to tender documents

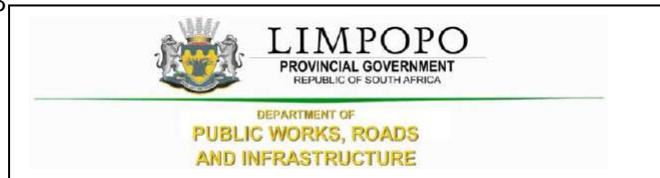
We confirm that the following communications received from the Employer before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:		
	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed ..... Date .....

Name ..... Position .....

Tenderer .....



## 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.

Page	Clause or item	Proposal

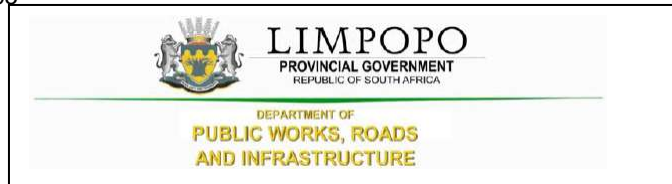
Signed

Date

Name

Position

*Tenderer*

**SBD 1****PART A: INVITATION TO BID**

<b>YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE LIMPOPO DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE</b>					
<b>BID NUMBER:</b>	<b>LDPWRI-B/20305</b>	<b>CLOSING DATE</b>	<b>As per Tender Advert</b>	<b>CLOSING TIME:</b>	<b>As per Tender Advert</b>
<b>DESCRIPTION</b>	<b>REFURBISHMENT AND ADDITIONS AT MAKGOPELE PRIMARY SCHOOL IN MOPANI DISTRICT.</b>				
BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)					
DEPARTMENT OF PUBLIC WORKS, ROADS & INFRASTRUCTURE.					
Physical address: Corner River and Blaauwberg Streets, Ladanna, 0699.					
<b>BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO</b>					
CONTACT PERSON	Mr. NJ Motsopye				
TELEPHONE NUMBER	0152847126	E-MAIL ADDRESS	motsopyen@dpw.limpopo.gov.za		
CONTACT PERSON (TECHNICAL)	Mr. K Modjadji				
TELEPHONE NUMBER	083 673 5436	E-MAIL ADDRESS	ModjadjiM@dpw.limpopo.gov.za		
<b>SUPPLIER INFORMATION</b>					
NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]		ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER THE QUESTIONNAIRE BELOW ]	
<b>QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS</b>					
IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?				<input type="checkbox"/> YES	<input type="checkbox"/> NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?				<input type="checkbox"/> YES	<input type="checkbox"/> NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?				<input type="checkbox"/> YES	<input type="checkbox"/> NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?				<input type="checkbox"/> YES	<input type="checkbox"/> NO
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?				<input type="checkbox"/> YES	<input type="checkbox"/> 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.					



## PART B: TERMS AND CONDITIONS FOR BIDDING

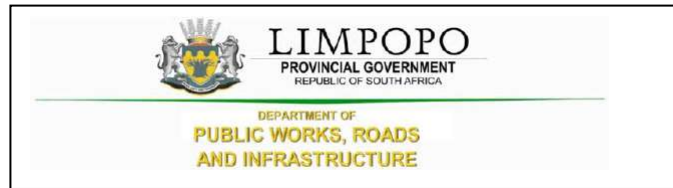
<b>1. BID SUBMISSION:</b>
<p>1.1. BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.</p> <p>1.2. <b>ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED-(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.</b></p> <p>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.</p> <p>1.4. <b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM.</b></p>
<b>2. TAX COMPLIANCE REQUIREMENTS</b>
<p>2.1 BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.</p> <p>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.</p> <p>2.3 APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE WWW.SARS.GOV.ZA.</p> <p>2.4 BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.</p> <p>2.5 IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.</p> <p>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.</p> <p>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."</p>

**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: .....



## 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**

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#### 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:

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender

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

##### 3.2.1. POINTS AWARDED FOR PRICE

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

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

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmax = Price of highest acceptable tender

### 4. POINTS AWARDED FOR SPECIFIC GOALS

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

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

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 determine the applicable preference point system; or

CONTRACT No. LDPWRI-B/20305

(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 <b>(Attach certified copy of South African ID as proof)</b>	2	6		
Women <b>(Attach Director's certified copy of South African ID as proof + company registration documents)</b>	1	3		
Disabled persons <b>(Attach letter from a Health Professional as proof)</b>	1	2		
Promotion of SMMEs <b>(Attach latest financial statement as proof)</b>	1	2		
Enterprises located in Limpopo Province <b>(Attach proof of address / Lease agreement as proof)</b>	2	4		
Promotion of youth <b>(Attach Director's certified copy of South African ID as proof)</b>	1	1		
South African owned enterprises <b>(Attach Director's certified copy of South African ID as proof + company registration documents)</b>	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)**

**SURNAME AND NAME:** .....

**DATE:** .....

**ADDRESS:** .....

.....

.....

.....



## 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

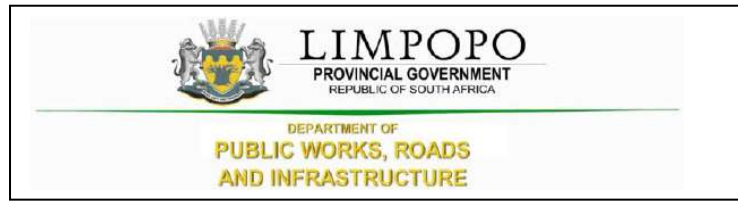
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Position

\_\_\_\_\_

Enterprise

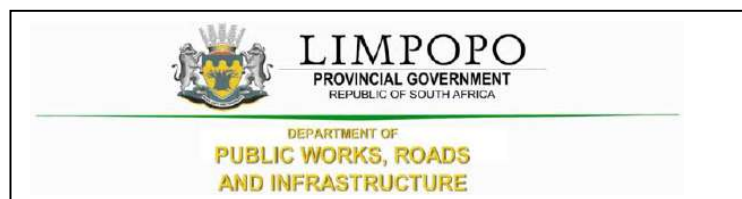
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## THE CONTRACT



## **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 MAKGOPELE PRIMARY SCHOOL IN MOPANI 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)**

Rand (in words); R.....

.....

(in figures) R.....

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

Signature(s) .....

Name(s) .....

Capacity .....

**For the tenderer:** .....

Name &  
signature of  
witness .....

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 Employer

Signature .....

Name .....

Capacity .....

### Name and address of organization

### Signature and Name of Witness

Signature .....

Name .....

Capacity .....

## Schedule of Deviations

1 Subject .....

Details .....

.....

.....

.....

2 Subject .....

Details .....

.....

.....

.....

3 Subject .....

Details .....

.....

.....

.....

4 Subject .....

Details .....

.....

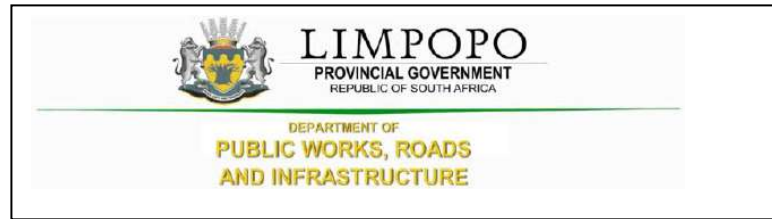
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.....

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

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

.....



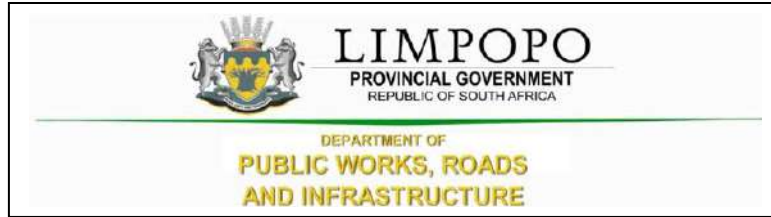
## C2.1 CONTRACT DATA

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**

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
LDPWRI-B20305

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO. 1</u></b>			
	<b><u>BILL NO. 1</u></b>			
	<b><u>PRELIMINARIES</u></b>			
	<b><u>NOTE</u></b>			
	i) The agreement is to be the JBCC Series 2000 Principal Building Agreement (Edition 4.1) prepared by the Joint Building Contracts Committee, March 2005			
	ii) The preliminaries are to be the JBCC Series 2000 Preliminaries prepared by the Joint Building Contracts Committee, March 2005 edition and shall be deemed to be incorporated herein			
	iv) Where standard clauses or alternatives are not entirely applicable to this contract such modifications, corrections or supplements as will apply are given under each relevant clause heading			
	iii) Tenderers are referred to the abovementioned documents for the full intent and meaning of each clause thereof (hereinafter referred to by heading and clause number only) for which such allowance must be made as may be considered necessary			
	v) Where any item is not relevant to this specific contract such item is marked N/A (signifying "not applicable")			
	vi) If Alternative A as set out in clause B10.3 hereinafter is to be used for the adjustment of the preliminaries each item priced is to be allocated to one or more of the three categories, where "F" denotes a fixed amount (amount not to be varied), "V" denotes an amount variable in proportion to value and "T" denotes an amount in proportion to time			
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b>			

	<b>Brought Forward</b>		R	
	<p>vii) 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"</p> <p><b><u>SECTION A: JBCC PRINCIPAL BUILDING AGREEMENT</u></b></p> <p><b><u>Definitions (A1)</u></b></p> <p>1 Definitions and interpretation (clause 1)</p> <p>Clause 1.1 Definition of "<b>Agreement</b>" is amended by replacing it with the following:</p> <p><b>Agreement</b> means the agreement arising from the signing of the Form of Offer and Acceptance by the parties.</p> <p>Clause 1.1 Definition of "<b>Bills of Quantities</b>" is amended by adding the following:</p> <p>"...and the Pricing Instructions contained in the Pricing Data" after the word measuring system.</p> <p>Clause 1.1 Definition of "<b>Contract Documents</b>" is amended by adding the following:</p> <p>".....this Agreement and all other documents referenced therein.." after the word this document</p> <p>Clause 1.1 Definition of "<b>Contract Drawings</b>" is amended by replacing it with the following:</p> <p><b>Contract Drawings</b> means the drawings upon which the tender was accepted and used in preparing the bills of quantities and are available for viewing at the offices of the Principal Agent at the time of tender</p> <p>Clause 1.1 Definition of "<b>Contract Sum</b>" is amended by replacing it with the following:</p> <p><b>Contract Sum</b> means the total of prices in the Form of Offer and Acceptance.</p>			
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b></p>			

<b>Brought Forward</b>	R	
<p>Clause 1.1 Definition of "<b>Schedule</b>" is amended by adding the following:</p> <p>".....and in the <b>Contract Data</b>". at the end on the sentence ending with <b>agreement</b></p> <p>Clause 1.1 Definition of "<b>Commencement Date</b>" is added:</p> <p><b>"Commencement date"</b> means the date that the <b>agreement</b>, made in terms of the Form of Offer and Acceptance, comes into effect</p> <p>Clause 1.1 Definition of "<b>Construction Guarantee</b>" is amended by replacing it with the following:</p> <p><b>"Construction guarantee"</b> means guarantee at call obtained by the <b>contractor</b> from an institution approved by the <b>employer</b> in terms of the <b>employer's</b> construction guarantee form as selected in the <b>schedule</b></p> <p>Clause 1.1 Definition of "<b>Construction Period</b>" is amended by replacing it with the following:</p> <p><b>"Construction period"</b> means the period commencing on the commencement date and ending on the date of practical completion</p> <p>Clause 1.1 Definition of "<b>Corrupt Practice</b>" is added:</p> <p><b>"Corrupt Practice"</b> means the offering , giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution</p> <p>Clause 1.1 Definition of "<b>Fraudulent Practice</b>" is added:</p> <p><b>"Fraudulent Practice"</b> means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any tenderer and includes collusive practice among tenderers (prior to or after the tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the tenderer of the benefits of free and open</p>		
<b>Carried Forward</b>	R	
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b></p>		

<b>Brought Forward</b>		R	
competition.			
Clause 1.1 Definition of <b>"Interest"</b> is amended by replacing it with the following:			
<p><b>"Interest"</b> means the interest rates applicable on this contract, whether specifically indicated in the relevant clauses or not, will be the 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).</p>			
Clause 1.1 Definition of <b>"Principal Agent"</b> is amended by replacing it with the following:			
<p><b>"Principal Agent"</b> means the person or entity appointed by the <b>employer</b> and named in the <b>schedule</b>. In the event of a <b>principal agent</b> not being appointed, then all the duties and obligations of a <b>principal agent</b> as detailed in the <b>agreement</b> shall be fulfilled by a representative of the <b>employer</b> as named in the <b>schedule</b>.</p>			
Clause 1.1 Definition of <b>"Security"</b> is amended by replacing it with the following:			
<p><b>Security"</b> means the form of security provided by the <b>employer</b> or <b>contractor</b>, as stated in the <b>schedule</b>, from which the <b>contractor</b> or <b>employer</b> may recover expense or loss</p>			
1.6 Any notice given may be delivered by hand, sent by prepaid registered post or telefax. Notice shall be presumed to have been duly given when:			
1.6.4 No clause			
Fixed	Item		
Value Related	Item		
<b>Carried Forward</b>		R	
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b></p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
LDPWRI-B20305

	<b>Brought Forward</b>		R	
	Time Related	Item		
	<b><u>Objective and Preparation (A2 - A14)</u></b>			
2	Offer, acceptance and performance (clause 2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
3	Documents (clause 3)			
	Clause 3.2.1 is amended by replacing "14.1" with "14.0"			
	Clause 3.7 is amended by the addition of the following:			
	<b>The contractor</b> shall supply and keep a copy of the JBCC Series 2000 Principal Building Agreement and Preliminaries applicable to this contract <b>on the site</b> , to which <b>the employer, principal agent and agents</b> shall have access at all times.			
	Clause 3.10 is amended by replacing the second reference to " <b>principal agent</b> " with the word " <b>employer</b> "			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
4	Design responsibility (clause 4)			
	Contractor is permitted to design the prefabricated building to the satisfaction or written approval from the client			
	Fixed	Item		
	Value Related	Item		
	<b>Carried Forward</b>		R	
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b>			

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

Section No. 1  
PRELIMINARIES  
Bill No. 1  
PRELIMINARIES  
**CLUSTER G**

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
LDPWRI-B20305

	<b>Brought Forward</b>			R
9	Indemnities (clause 9)			
	Clause 9.0 is amended by adding Clause 9.1.4:			
	The <b>contractor</b> indemnifies and holds harmless the <b>employer</b> against all liability, losses, claims, damages, penalties, actions, proceedings or judgments (collectively referred to as "Losses") arising from any infringement of letters, patent design, trademark, name, copyright or other protected rights in respect of any machine, plant, work, materials, thing, system or method of using, fixing, working or arrangement used or fixed or supplied by the <b>contractor</b> , but such indemnity shall not cover any use of the equipment of part thereof otherwise than in accordance with the provisions of the specification. All payments and royalties payable in one sum or by installments or otherwise shall be included by the <b>contractor</b> in the price and shall be paid by him to those to whom they may be payable. The <b>contractor</b> shall reimburse the <b>employer</b> for all legal and other costs and expenses, including without limitation attorney's fees on attorney-client scale incurred by the <b>employer</b> in connection with investigation, defending or settling any Losses in connection with pending or threatening litigation in which the <b>employer</b> is a party.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
10	Works insurances (clause 10)			
	Clause 10.0 is amended by the addition of the following clauses			
	<b>10.5 Damage to the Works</b>			
	(a) Without in any way limiting the <b>contractor's</b> obligations in terms of the contract, the <b>contractor</b> shall bear the full risk of damage to and/or destruction of the <b>works</b> by whatever cause during construction of the <b>works</b> and hereby indemnifies and holds harmless the			
	<b>Carried Forward</b>			R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b>			



<b>Brought Forward</b>	R	
<p><b>employer</b> against any such damage. The <b>contractor</b> shall take such precautions and security measures and other steps for the protection and security of the <b>works</b> as the <b>contractor</b> may deem necessary</p> <p>b) The <b>contractor</b> shall at all times proceed immediately to remove or dispose of any debris arising from damage to or destruction of the <b>works</b> and to rebuild, restore, replace and/or repair the <b>works</b></p> <p>(c) The <b>employer</b> shall carry the risk of damage to or destruction of the <b>works</b> and material paid for by the <b>employer</b> that is the result of the excepted risks as set out in 10.6</p> <p>(d) Where the <b>employer</b> bears the risk in terms of this contract, the <b>contractor</b> shall, if requested to do so, reinstate any damage or destroyed portions of the <b>works</b> and the costs of such reinstatement shall be measured and valued in terms of 32.0 hereof</p>		
<b>10.6 Injury to Persons or loss of or damage to Properties</b>		
<p>(a) The <b>contractor</b> shall be liable for and hereby indemnifies the <b>employer</b> 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 <b>works</b> unless due to any act or neglect of any person for whose actions the <b>employer</b> is legally liable</p> <p>(b) The <b>contractor</b> shall be liable for and hereby indemnifies the <b>employer</b> 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 <b>site</b>, whether belonging to or under the control of the <b>employer</b> or any other body or person, arising out of or in the course of or by reason of the execution of the <b>works</b> unless due to any</p>		
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	act or neglect of any person for whose actions the <b>employer</b> is legally liable		
c)	The <b>contractor</b> shall, upon receiving a <b>contract instruction</b> from the <b>principal agent</b> , cause the same to be made good in a perfect and workmanlike manner at his own cost and in default thereof the <b>employer</b> shall be entitled to cause it to be made good and to recover the cost thereof from the <b>contractor</b> or to deduct the same from amounts due to the <b>contractor</b>		
(d)	The <b>contractor</b> shall be responsible for the protection and safety of such portions of the premises placed under his control by the <b>employer</b> for the purpose of executing the <b>works</b> until the issue of the <b>certificate of practical completion</b>		
(e)	Where the execution of the <b>works</b> 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 <b>contractor</b> shall obtain adequate insurance and will remain adequately insured or insured to the specific limit stated in the contract 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 <b>works</b> has been completed		
(f)	The <b>contractor</b> 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 <b>works</b>		
<b>10.7 High risk insurance</b>			
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:			
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<p><b>10.7.1 Damage to the works</b></p> <p>The <b>contractor</b> shall, from the commencement <b>date</b> of the <b>works</b> until the date of the <b>certificate of practical completion</b> bear the full risk of and hereby indemnifies and holds harmless the <b>employer</b> against any damage to and/or destruction of the <b>works</b> consequent upon a catastrophic ground movement as mentioned above.</p> <p>The <b>contractor</b> shall take such precautions and security measures and other steps for the protection of the <b>works</b> as he may deem necessary</p> <p>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.</p> <p><b>10.7.2 Injury to persons or loss of or damage to property</b></p> <p>The <b>contractor</b> shall be liable for and hereby indemnifies and holds harmless the <b>employer</b> 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</p> <p>The <b>contractor</b> shall be liable for and hereby indemnifies the <b>employer</b> against any and all liability, loss, claim or proceeding consequent upon loss of or damage to any moveable or immovable or personal property or property contiguous to the <b>site</b>, whether belonging to or under the control of the <b>employer</b> or any other body or person whomsoever arising out of or caused by a catastrophic ground movement, as mentioned above, which occurred during the period of the contract</p> <p><b>10.7.3</b> It is the responsibility of the <b>contractor</b> 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 <b>contractor's</b> obligations in terms of the</p>	
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	contract, the <b>contractor</b> shall, within twenty-one (21) <b>calendar days</b> of the <b>commencement date</b> but before commencement of the <b>works</b> , submit to the <b>employer</b> proof of such insurance policy, if requested to do so			
	<b>10.7.4</b> The <b>employer</b> shall be entitled to recover any and all losses and/or damages of whatever nature suffered or incurred consequent upon the <b>contractor's</b> 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 <b>contractor</b> or by deducting the same from any amounts still due under this contract or under any other contract presently or hereafter existing between the <b>employer</b> and the <b>contractor</b> and for this purpose all these contracts shall be considered one indivisible whole			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
11	Liability insurances (clause 11)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
12	Effecting insurances (clause 12)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
13	No clause (clause 13)			
		Item		
14	Security (clause 14)			
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14.0 Replace the entire clause 14.0 with the following:	
14.0 Security	
14.1 In respect of contracts with a <b>contract sum</b> up to R1 million, the <b>security</b> to be provided by the <b>contractor</b> to the <b>employer</b> will be a payment reduction of five per cent (5%) of the value certified in the <b>payment certificate</b> (excluding VAT)	
14.1.1 The payment reduction of the value certified in a <b>payment certificate</b> shall be <i>mutatis mutandi</i> in terms of 31.8(A)	
14.1.2 The <b>employer</b> shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the <b>employer</b> complies with the provisions of 33.4 in which event the <b>employer's</b> entitlement shall take precedence over his obligations to refund the payment reduction <b>security</b> or portions thereof to the <b>contractor</b>	
14.2 In respect of contracts with a <b>contract sum</b> above R1 million, the <b>contractor</b> shall have the right to select the <b>security</b> to be provided in terms of 14.3, 14.4, 14.5, 14.6, or 14.7 as stated in the <b>schedule</b> . Such <b>security</b> shall be provided to the <b>employer</b> within twenty-one (21) <b>calendar days</b> from <b>commencement date</b> . Should the <b>contractor</b> fail to select the <b>security</b> to be provided or should the <b>contractor</b> fail to provide the <b>employer</b> with the selected <b>security</b> within twenty-one (21) <b>calendar days</b> from <b>commencement date</b> , the <b>security</b> in terms of 14.7 shall be deemed to have been selected.	
14.3 Where the <b>security</b> as a cash deposit of ten per cent (10%) of the <b>contract sum</b> (excluding VAT) has been selected:	
14.3.1 The <b>contractor</b> shall furnish the <b>employer</b> with a cash deposit equal in value to ten per cent (10%) of the <b>contract sum</b> (excluding VAT) within twenty-one (21) <b>calendar days</b> from <b>commencement date</b> .	
14.3.2 Within twenty-one (21) <b>calendar days</b> of the date of <b>practical completion</b> of the <b>works</b> the <b>employer</b>	
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<p style="text-align: right;"><b>Brought Forward</b></p> <p>shall reduce the cash deposit to an amount equal to three per cent (3%) of the <b>contract value</b> (excluding VAT), and refund the balance to the <b>contractor</b>.</p> <p>14.3.3 Within twenty-one (21) <b>calendar days</b> of the date of <b>final completion</b> of the <b>works</b> the <b>employer</b> shall reduce the cash deposit to an amount equal to one per cent (1%) of the <b>contract value</b> (excluding VAT) and refund the balance to the <b>contractor</b>.</p> <p>14.3.4 On the date of payment of the amount in the final <b>payment certificate</b>, the <b>employer</b> shall refund the remainder of the cash deposit to the <b>contractor</b>.</p> <p>14.3.5 The <b>employer</b> shall be entitled to recover expense and loss from the cash deposit in terms of 33.0 provided that the <b>employer</b> complies with the provisions of 33.4 in which event the <b>employer's</b> entitlement shall take precedence over his obligations to refund the cash deposit <b>security</b> or portions thereof to the <b>contractor</b>.</p> <p>14.3.6 The parties expressly agree that neither the <b>employer</b> nor the <b>contractor</b> shall be entitled to cede the rights to the deposit to any third party.</p> <p>14.4 Where <b>security</b> as a variable <b>construction guarantee</b> of ten percent (10%) of the <b>contract sum</b> (excluding VAT) has been selected:</p> <p>14.4.1 The <b>contractor</b> shall furnish the <b>employer</b> with an acceptable variable <b>construction guarantee</b> equal in value to ten per cent (10%) of the <b>contract sum</b> (excluding VAT) within twenty-one (21) <b>calendar days</b> from <b>commencement date</b></p> <p>14.4.2 The variable <b>construction guarantee</b> shall reduce and expire in terms of the Variable <b>Construction Guarantee</b> form included in the invitation to tender</p> <p>14.4.3 The <b>employer</b> shall return the variable <b>construction guarantee</b> to the <b>contractor</b> within fourteen (14) <b>calendar days</b> of it expiring</p> <p>14.4.4 Where the <b>employer</b> has a right of recovery against the <b>contractor</b> in terms of 33.0, the <b>employer</b></p>		R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b></p>		R	

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shall issue a written demand in terms of the variable <b>construction guarantee</b>			
14.5 Where <b>security</b> as a fixed <b>construction guarantee</b> of five per cent (5%) of the <b>contract sum</b> (excluding VAT) and a five per cent (5%) payment reduction of the value certified in the <b>payment certificate</b> (excluding VAT) has been selected:			
14.5.1 The <b>contractor</b> shall furnish a fixed <b>construction guarantee</b> to the <b>employer</b> equal in value to five per cent (5%) of the <b>contract sum</b> (excluding VAT)			
14.5.2 The fixed <b>construction guarantee</b> shall come into force on the date of issue and shall expire on the date of the last certificate of <b>practical completion</b>			
14.5.3 The <b>employer</b> shall return the fixed <b>construction guarantee</b> to the <b>contractor</b> within fourteen (14) <b>calendar days</b> of it expiring			
14.5.4 The payment reduction of the value certified in a <b>payment certificate</b> shall be in terms of 31.8(A) and 34.8			
14.5.5 Where the <b>employer</b> has a right of recovery against the <b>contractor</b> in terms of 33.0, the <b>employer</b> shall be entitled to issue a written demand in terms of the fixed <b>construction guarantee</b> or may recover from the payment reduction or may do both			
14.6 Where <b>security</b> as a cash deposit of five per cent (5%) of the <b>contract sum</b> (excluding VAT) and a payment reduction of five per cent (5%) of the value certified in the <b>payment certificate</b> (excluding VAT) has been selected:			
14.6.1 The <b>contractor</b> shall furnish the <b>employer</b> with a cash deposit equal in value to five per cent (5%) of the <b>contract sum</b> (excluding VAT) within twenty-one (21) <b>calendar days</b> from <b>commencement date</b>			
14.6.2 Within twenty-one (21) <b>calendar days</b> of the date of <b>practical completion</b> of the <b>works</b> the <b>employer</b> shall refund the cash deposit in total to the <b>contractor</b>			
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14.6.3 The payment reduction of the value certified in a <b>payment certificate</b> shall be <i>mutatis mutandi</i> in terms of 31.8(A)			
14.6.4 Where the <b>employer</b> has a right of recovery against the <b>contractor</b> in terms of 33.0, the <b>employer</b> may issue a written notice in terms of 33.4 or may recover from the payment reduction or may do both			
14.7 Where <b>security</b> as a payment reduction of ten per cent (10%) of the value certified in the <b>payment certificate</b> (excluding VAT) has been selected:			
14.7.1 The payment reduction of the value certified in a <b>payment certificate</b> shall be <i>mutatis mutandi</i> in terms of 31.8(B)			
14.7.2 The <b>employer</b> shall be entitled to recover expense and loss from the payment reduction in terms of 33.0 provided that the <b>employer</b> complies with the provisions of 33.4 in which event the <b>employer's</b> entitlement shall take precedence over his obligations to refund the payment reduction or portions thereof to the <b>contractor</b>			
14.8 Payments made by the guarantor to the <b>employer</b> in terms of the fixed or variable <b>construction guarantee</b> shall not prejudice the rights of the <b>employer</b> or <b>contractor</b> in terms of this <b>agreement</b>			
14.9 Should the <b>contractor</b> fail to furnish the <b>security</b> in terms of 14.2 the <b>employer</b> , in his sole discretion, and without notification to the <b>contractor</b> , is entitled to change the <b>contractor's</b> selected form of <b>security</b> to that of a ten per cent (10%) payment reduction of the value certified in the <b>payment certificate</b> (excluding VAT), where after 14.7 shall be applicable			
Fixed	Item		
Value Related	Item		
Time Related	Item		
<b>Carried Forward</b>		R	
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	<b><u>Execution (A15 - A23)</u></b>			
15	Preparation for and execution of the works (clause 15)			
	Clause 15.1.1 is amended by replacing it with:			
	No clause			
	Clause 15.1.2 is amended by replacing it with:			
	The <b>security</b> selected in terms of 14.0			
	Clause 15.1 is amended by the addition of the following clause:			
	15.1.4 An acceptable health and safety plan, required in terms of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) or latest edition, revision and amendments, within twenty-one (21) <b>calendar days</b> of <b>commencement date</b>			
	Clause 15.2.1 is amended by replacing it with the following clause:			
	Give the <b>contractor</b> possession of the <b>site</b> within ten (10) <b>working days</b> of the <b>contractor</b> complying with the terms of 15.1.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
16	Access to the works (clause 16)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>		R	
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	<b>Brought Forward</b>			R
20	Nominated sub-contractors (clause 20)			
	Clause 20.0			
	Clause 20.1.3 is amended by replacing it with the following:			
	No Clause			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
21	Selected sub-contractors (clause 21)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
22	Employer's direct contractors (clause 22)			
	<i>The Contractor shall allow the direct contractors and employers agents access to the work, allocate reasonable space in the building for storage of their materials, tools and equipment, all to the satisfaction of the Principal Agent. The contractor shall also allow the direct contractors, etc. free of charge, use of their ablution facilities and water and power supply to the and shall in no way hinder or prevent the execution of their works. Attendance may be priced against the relevant specified items in the bills of quantities.</i>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>			R
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		<b>Brought Forward</b>		R	
23	Contractor's domestic sub-contractors (Clause 23)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>COMPLETION</u></b>				
	<b><u>Completion (A24-A30)</u></b>				
24	Practical completion (clause 24)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
25	Works completion (clause 25)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
26	Final completion (clause 26)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
27	Latent defects liability period (clause 27)				
		Fixed	Item		
		Value Related	Item		
		<b>Carried Forward</b>		R	
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	<b>Brought Forward</b>		R	
	Time Related	Item		
28	Sectional completion (clause 28)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
29	Revision of date of practical completion (clause 29)			
	<p>Clause 29.1.1 shall be deemed to be omitted and replaced by the following:</p> <p>Inclement weather shall be defined as weather in excess of the average rainfall (volume and period) for each calendar month over the past ten (10) years as recorded by the nearest commonly recognised weather bureau in the region of the project</p> <p>It shall be deemed that the contractor has adequately allowed in his programme and tendered rates for expenses which might result from delays due to average or below rainfall as described above</p> <p>Add Clause 29.9 as follows:</p> <p>Revision to the date for <b>practical completion</b> shall only be considered when work on the critical path of the agreed programme for the works is delayed."</p> <p>Add Clause 29.10 as follows:</p> <p>Clause 29.10 - Acceleration</p> <p>Clause 29.10.1</p> <p>Irrespective of whether or not the <b>principal agent</b> rules that the <b>contractor</b> is entitled to an extension of time or a revision of the date for <b>practical completion</b>, the <b>principal agent</b> shall nevertheless, at any time, be entitled to instruct the <b>contractor</b> in writing to accelerate the</p>			
	<b>Carried Forward</b>		R	
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		progress of the remaining <b>works</b> to ensure that the <b>works</b> are completed by the original date for <b>practical completion</b> or revised date as the case may be.			
		Clause 29.10.2 Upon receipt of such instruction, the <b>contractor</b> shall take all necessary steps to ensure that the <b>works</b> are completed timeously including the provision by him of additional resources, plant, manpower, etc and the working overtime or additional overtime beyond that contemplated at the time of tender (at all times adhering to the regulations and requirements of all authorities) and by all other adequate and proper means and methods. The <b>contractor</b> shall prove that such steps are being taken if called upon to do so.			
		Clause 29.10.3 The <b>contractor's</b> entitlement to compensation arising out of or in respect of any revision to the date for <b>practical completion</b> that may have been granted by the <b>principal agent</b> or alternatively where the <b>principal agent</b> has instructed the <b>contractor</b> to accelerate, shall be adjudicated strictly in terms of clause 32.			
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
30	Penalty for non-completion (clause 30)				
	Clause 30 is amended by replacing reference to 36.3 at end of sentence with 36.0				
	The penalty per calender day shall be calculated at 0.05% of contract sum excluding contingency allowance and CPAP				
		Fixed	Item		
		Value Related	Item		
		<b>Carried Forward</b>			R
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Brought Forward		Item	R
	Time Related		
	<b><u>Payment (A31 - A35)</u></b>		
31	31.5.2 Security adjustments in terms of 14.0 or 31.8		
	31.8 Amend as follows:		
	31.8(A) Where a <b>security</b> is selected in terms of 14.1; 14.5 or 14.6, the value of the <b>works</b> in terms of 31.4.1 and of the <b>materials and goods</b> in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:		
	31.8(A).1 Ninety-five per cent (95%) of such value in interim <b>payment certificates</b> issued up to the date of <b>practical completion</b>		
	31.8(A).2 Ninety-seven per cent (97%) of such value in interim <b>payment certificates</b> issued on the date of <b>practical completion</b> and up to but excluding the date of <b>final completion</b>		
	31.8(A).3 Ninety-nine per cent (99%) of such value in interim <b>payment certificates</b> issued on the date of <b>final completion</b> and up to but excluding the final <b>payment certificate</b> in terms of 34.6		
	31.8(A).4 One hundred per cent (100%) of such value in the final <b>payment certificate</b> in terms of 34.6 except where the amount certified is in favour of the <b>employer</b> . In such an event the payment reduction shall remain at the adjustment level applicable to the final <b>payment certificate</b> .		
	31.8(B) Where security is a payment reduction in term of 14.7 has been selected the value of the <b>works</b> in terms of 31.4.1 and <b>materials and goods</b> in terms of 31.4.2 shall be certified in full. The value certified shall be subject to the following percentage adjustments:		
	31.8(B).1 Ninety per cent (90%) of such value in interim <b>payment certificates</b> issued up to the date of <b>practical completion</b>		
	<b>Carried Forward</b>		R
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	<p>31.8(B).2 Ninety-seven per cent (97%) of such value in interim <b>payment certificates</b> issued on the date of <b>practical completion</b> and up to but excluding the date of <b>final completion</b></p> <p>31.8(B).3 Ninety-nine per cent (99%) of such value in interim <b>payment certificates</b> issued on the date of <b>final completion</b> and up to but excluding the final <b>payment certificate</b> in terms of 34.6</p> <p>31.8(B).4 One hundred per cent (100%) of such value in the final <b>payment certificate</b> in terms of 34.6 except where the amount certified is in favour of the <b>employer</b>. In such an event the payment reduction shall remain at the adjustment level applicable to the final <b>payment certificate</b></p> <p>Clause 31.9 is amended by replacing "seven (7) <b>calender</b> days" with "thirty (30) <b>calender</b> days" and by deleting the words "subject to the <b>contractor</b> giving the <b>employer</b> a tax invoice for the amount due"</p> <p>31.12 Delete the following: "Payment shall be subject to the <b>employer</b> giving the <b>contractor</b> a tax invoice for the amount due."</p>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
32	Adjustment to the contract value (clause 32)			
	Clause 32.0			
	Clauses 32.5.1, 32.5.4 and 32.5.7 are amended by the addition of the following at the end of the sentence:			
	"due to no fault of the <b>contractor</b> "			
	Fixed	Item		
	<b>Carried Forward</b>		R	
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	<b>Brought Forward</b>			R
	<b><u>Cancellation (A36-A39)</u></b>			
36	<p>Cancellation by employer - contractor's default (clause 36)</p> <p>Clause 36.1 is amended by the additions of the following clauses:</p> <p>36.1.3 refuses or neglects to comply strictly with any of the conditions of contract</p> <p>36.1.4 estate being sequestrated, liquidated or surrendered in terms of the insolvency laws in force within the Republic of South Africa</p> <p>36.1.5 in the judgement of the <b>employer</b>, has engaged in <b>corrupt</b> or <b>fraudulent practices</b> in competing for or in executing the contract</p> <p>Clause 36.3 is amended by removing the reference to "No clause" and replacing the words "<b>principal agent</b>" with "<b>employer</b>"</p> <p>Clause 36.0 is amended by the addition of the following clause:</p> <p>Clause 36.7 Notwithstanding any clause to the contrary, on cancellation of this <b>agreement</b> either by the <b>employer</b> or the <b>contractor</b>; or for any reason whatsoever, the <b>contractor</b> shall on written instruction, discontinue with the <b>works</b> on a date stated and withdraw himself from the <b>site</b>. The <b>contractor</b> shall not be entitled to refuse to withdraw from the <b>works</b> on the grounds of any lien or right of retention or on the grounds of any other right whatsoever</p>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>			R
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	Brought Forward			R
37	<p>Cancellation by employer - loss and damage (clause 37)</p> <p>Clause 37.3.5 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"</p> <p>Clause 37.0 is amended by the addition of the following clause:</p> <p>37.5 Notwithstanding any clause to the contrary, on cancellation of this <b>agreement</b> either by the <b>employer</b> or the <b>contractor</b>; or for any reason whatsoever, the <b>contractor</b> shall on written instruction, discontinue with the <b>works</b> on a date stated and withdraw himself from the <b>site</b>. The <b>contractor</b> shall not be entitled to refuse to withdraw from the <b>works</b> on the grounds of any lien or right of retention or on the grounds of any other right whatsoever</p> <p>Fixed</p> <p>Value Related</p> <p>Time Related</p>	Item		
38	<p>Cancellation by contractor - employer's default (clause 38)</p> <p>Clause 38.5.4 is amended by replacing "ninety (90)" with "one-hundred and twenty (120)"</p> <p>Clause 38.0 is amended by the addition of the following clause:</p> <p>Clause 38.7 Notwithstanding any clause to the contrary, on cancellation of this <b>agreement</b> either by the <b>employer</b> or the <b>contractor</b>; or for any reason whatsoever, the <b>contractor</b> shall on written instruction, discontinue with the <b>works</b> on a date stated and withdraw himself from the <b>site</b>. The <b>contractor</b> shall not be entitled to refuse to withdraw from the <b>works</b> on the grounds of any lien or right of retention or on the grounds of any other right whatsoever</p> <p>Fixed</p>	Item		
	Carried Forward			R
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		<b>Brought Forward</b>		R	
		Value Related	Item		
		Time Related	Item		
39	Cancellation - cessation of the works (clause 39)				
	Clause 39.3.5 is amended by the addition of the following at the end of the sentence: "within one-hundred and twenty (120) <b>working days</b> of completion of such report"				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>Dispute Settlement (A40)</u></b>				
40	Disputes Settlement (clause 40)				
	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 addition 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	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>State Provision (A41)</u></b>				
41	State Substitutions (clause 41)				
		<b>Carried Forward</b>		R	
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<b>Brought Forward</b>	R
<p>Delete in the Substitute Provisions (41.0 State Clauses) clauses 40.2.1, 40.2.2, 40.3, 40.4, 40.5 and 40.6 and replace with the following:</p> <p>40.1 Should any dispute between the <b>employer</b>, his <b>agents</b> or <b>principal agent</b> on the one hand and the contractors on the other arise out of this <b>agreement</b>, such dispute shall be referred to adjudication.</p> <p>40.2 Adjudication shall be conducted in accordance with the edition of the JBCC Rules for Adjudication current at the time when the dispute is declared. The party, which raises the dispute, shall select three adjudicators from the panel of adjudicators published by the South African Institution of Civil Engineering or Association of Arbitrators (Southern Africa), determine their hourly fees and confirm that these adjudicators are available to adjudicate the dispute in question. The other party shall then select within 7 days one of the three nominated adjudicators, failing which the chairman for the time being of the Association of Arbitrators (Southern Africa) shall nominate an adjudicator. The <b>adjudicator</b> shall be appointed in terms of the Adjudicators Agreement set out in C1.4 .</p> <p>40.3 If provided in the <b>schedule</b>, a dispute shall be finally settled by a single Arbitrator to be agreed on between the parties or, failing such agreement within 28 days after referring the dispute to Arbitration, an Arbitrator nominated by the chairman for the time being of the Association of Arbitrators (Southern Africa). Any such reference shall be deemed to be a submission to the arbitration of a single arbitrator in terms of the Arbitration Act (Act No 42 of 1965, as amended), or any legislation passed in substitution therefore. In the absence of any other agreed procedure, the arbitration shall take place in accordance with the Rules for the Conduct of Arbitrations issued</p>	
<b>Carried Forward</b>	R
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		by the Association of Arbitrators (Southern Africa) which are current at the time of the referral to arbitration. The Arbitrator shall, in his award, set out the facts and the provisions of the contract on which his award is based.			
		40.4 If the <b>schedule</b> provides for court proceedings to finally resolve disputes, disputes shall be determined by court proceedings.			
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		<b><u>Contract Variables (A41)</u></b>			
42		The Schedule (clause 42)			
		<i><b>Tenderers are referred to the Contract Data and Notes to Tenderes for variable pertaining to this contract</b></i>			
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		<b><u>SECTION B: PRELIMINARIES</u></b>			
		<b><u>Definition and interpretation (B1)</u></b>			
43		Definition and interpretation			
		See also clause A1.0 of Section A for additional and/or amended definitions which shall apply equally to this Section			
		Fixed	Item		
		Value Related	Item		
		<b>Carried Forward</b>			R
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	<b>Brought Forward</b>			R	
46	Availability of construction documentation (B2.3)				
	<i>The minor budgetary allowances included in this document will be separately procured, based on multiple procurement of selected sub-contractors during the construction period</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
47	Interests of agents (B2.4)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
48	Priced documents (B2.5)				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
49	Tender submission (B2.6)				
	<i>Notwithstanding anything contained in this clause tenders shall be valid for a period of ninety (90) days from the closing date of tenders</i>				
	<i>Clause 2.6 is amended by replacing "JBCC Form of Tender" with "Form of Offer and Acceptance C1.1"</i>				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	<b>Carried Forward</b>			R	
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	Brought Forward		R
	<b><u>The site (B3)</u></b>		
50	Defined works area (B3.1)		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
51	Geotechnical investigation (B3.2)		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
52	Inspection of the site (B3.3)		
	<i><b>Tenderers are instructed to familiarise themselves before submission of their tender with regard to the relevant local site conditions, site accessibility, the nature of operations required, availability of labour and any conditions pertaining thereto, together with conditions relating to unloading, carting and storage of materials, equipment and tools required for the works.</b></i>		
	<i><b>No claims for extras arising from the contractor having failed to comply with this clause will be entertained</b></i>		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
53	Existing premises occupied (B3.4)		
	Fixed	Item	
	Carried Forward		R
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		<b>Brought Forward</b>		R	
		Value Related	Item		
		Time Related	Item		
54	Previous work - dimensional accuracy (B3.5)				
	<i>Work executed under a previous contract and the extent thereof will be pointed out to the contractor by the principal agent on handing over of the site</i>				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
55	Previous work - defects (B3.6)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
56	Services - known (B3.7)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
57	Services - unknown (B3.8)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
58	Protection of trees, etc (B3.9)				
		Fixed	Item		
		<b>Carried Forward</b>		R	
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		<b>Brought Forward</b>		R	
		Value Related	Item		
		Time Related	Item		
59	Articles of value (B3.10)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
60	Inspection of adjoining properties, etc (B3.11)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>Management of contract (B4)</u></b>				
61	Management of the works (B4.1)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		Value Related	Item		
		Time Related	Item		
62	Progress meetings (B4.3)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		<b>Carried Forward</b>		R	
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		<b>Brought Forward</b>		R	
63	Technical meetings (B4.4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
64	Labour and plant records (B4.5)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>Samples, shop drawings and manufacturer's instructions (B5)</u></b>				
65	Samples of materials (B5.1)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
66	Workmanship samples (B5.2)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
67	Shop drawings (B5.3)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		<b>Carried Forward</b>		R	
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	<b>Brought Forward</b>		R	
68	Compliance with manufacturer's instructions (B5.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b><u>Temporary works and plant (B6)</u></b>			
69	Deposits and fees (B6.1)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
70	Enclosure of the works (B6.2)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
71	Advertising (B6.3)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
72	Plant, equipment, sheds and offices (B6.4)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>		R	
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		<b>Brought Forward</b>		R	
78	Telecommunication facilities (B7.4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
79	Ablution facilities (B7.5)				
		Fixed	Item		
		Value Related	Item		
80		Time Related	Item		
	<b><u>Prime cost amounts (B8)</u></b>				
81	Responsibility for prime cost amounts (B8.1)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>Attendance on nominated and selected subcontractors (B9)</u></b>				
82	General attendance (B9.1)				
	The schedule rates providing for attendance on <b>nominated subcontractors</b> and other <b>contractors</b> , will be adjusted only if the scope of the work has changed				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
83	Special attendance (B9.2)				
		Fixed	Item		
		<b>Carried Forward</b>		R	
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		<b>Brought Forward</b>		R	
		Value Related	Item		
		Time Related	Item		
84	Commissioning - Fuel, water and electricity (B9.3)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>Financial aspects (B10)</u></b>				
85	Statutory taxes, duties and levies (B10.1)				
	<i>Provision is made in the summary of these bills of quantities for the inclusion of Value Added Tax (VAT)</i>				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
86	Payment of preliminaries (B10.2)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
87	Adjustment of preliminaries (B10.3)				
	Clauses B10.3.1 and B10.3.2 are amended by replacing "within fifteen (15) <b>working days</b> of taking possession of the <b>site</b> " with "when submitting his priced <b>bills of quantities</b> "				
		Fixed	Item		
		<b>Carried Forward</b>		R	
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		Value Related	Item		
		Time Related	Item		
88	Payment certificate cash flow (B10.4)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>General (B11)</u></b>				
89	Protection of works (B11.1)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
90	Protection/isolation of existing/sectionally occupied works(B11.2)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
91	Site security (B11.3)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
92	Notice before covering work (B11.4)				
		Fixed	Item		
		<b>Carried Forward</b>		R	
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		Value Related	Item		
		Time Related	Item		
93	Disturbance (B11.5)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
94	Enviromental disturbance (B11.6)				
		Fixed	Item		
		Time Related	Item		
		Value Related	Item		
95	Works cleaning and clearing (B11.7)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
96	Vermin (B11.8)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
97	Overhand work (B11.9)				
		Fixed	Item		
		Value Related	Item		
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		<b>Brought Forward</b>		R	
		Time Related	Item		
98	Instruction manuals and guarantees (B11.10)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
99	As built information (B11.11)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
100	Tenant installations (B11.12)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
	<b><u>Schedule of variables (B12)</u></b>				
101	Pre-tender information (B12.1)				
	This <b>schedule</b> 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 <b>Preliminaries</b> .				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		<b>Carried Forward</b>		R	
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<b>Brought Forward</b>		R
12.1.1	<b>Provisional bills of quantities (B12.1.1)</b>  The quantities are provisional:  <div style="text-align: right;"><b>Yes</b></div>	
12.1.2	<b>Availability of construction documentation (B12.1.2)</b>  Construction documentation is complete:  <div style="text-align: right;"><b>Yes</b></div>	
12.1.3	<b>Interest of agents (B12.1.3)</b>  <div style="text-align: right;"><b>No</b></div>	
12.1.4	<b>Defined works area (B12.1.4)</b>  <i>The area of the works to be occupied by the contractor, any restriction on the area and the limit of access or exit will be pointed out to the contractor by the principal agent on handing over of the site</i>	
12.1.5	<b>Geotechnical investigation (B12.1.5)</b>  The geotechnical report is available for viewing at the offices of the Principal Agent  <div style="text-align: right;"><b>No</b></div>	
12.1.6	<b>Existing premises occupied (B12.1.6)</b>  [3.4] Specific requirements: The contractor shall execute the works with as little noise and disturbance as possible	
12.1.6	<b>Existing premises occupied</b>  [3.4] Specific requirements: The contractor shall execute the works with as little noise and disturbance as possible	
<b>Carried Forward</b>		R
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<b>Brought Forward</b>	R	
12.1.7 Previous work - Dimensional accuracy (B12.1.7) [3.5] Details: No additional details		
<b>No</b>		
12.1.8 <b>Previous work - defects</b>		
[3.6] Details: No additional details		
12.1.9 Services - known (B12.1.9)		
<p style="text-align: center;"><b>Existing services and points of connection are shown on the site plan and/or will be pointed out on site by the principal agent</b></p>		
12.1.10 <b>Protection of trees</b>		
[3.9] Specific requirements: No trees to be damaged or removed except those specifically designated in writing by the Architect		
12.1.11 <b>Inspection of adjoining properties</b>		
[3.11] Specific requirements: None		
12.1.12 <b>Enclosure of the works</b>		
[6.2] Specific requirements: Areas where work is taking place shall at all times be           blocked off by appropriate means		
<b>Carried Forward</b>	R	
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<b>Brought Forward</b>		R
12.1.13 <b>Offices</b>		
<p>[6.4.3] 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, suitably 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.</p>		
12.1.14 <b>Main notice board</b>		
<p>[6.5] Specific requirements: The contractor shall provide, erect where directed, maintain and remove on completion of the works a notice board size 3 x 3m constructed of suitable boarding with flat smooth surface and with edging bead 19mm thick round outer edges and projecting 12mm from face of boarding and rounded on front edge. The board shall be securely fixed to hoarding, where hoarding is provided, or fixed to and including a suitable supporting structure of timber or tubular posts and braces. The board is to be painted ivory white and the bead and 12mm wide dividing lines dark green. All wording shall be inscribed in dark green as per the coat of arms for SA. All wording shall be inscribed in dark green painted sans serif lettering.</p>		
12.1.15 <b>Subcontractors' notice board</b>		
<p>[6.6] A notice board is required (yes/no) NO</p>		
Specific requirements:		
12.1.16 <b>Water</b>		
<p>[7.2] Option A (by <b>contractor</b>) (yes/no) YES</p>		
<b>Carried Forward</b>		R
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12.1.17 <i>Electricity</i>				
[7.3] YES	Option A (by <b>contractor</b> )	(yes/no)		
12.1.18 <i>Telecommunications</i>				
[7.4] YES	Telephone	(yes/no)		
YES	Facsimile	(yes/no)		
YES	E-mail	(yes/no)		
12.1.19 <i>Ablution facilities</i>				
[7.5] YES	Option A (by <b>contractor</b> )	(yes/no)		
NO	Option B (by <b>employer</b> )	(yes/no)		
12.1.20 <i>Protection of existing/sectionally occupied works</i>				
[11.2] YES	Protection is required	(yes/no)		
<b>Carried Forward</b>			R	
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	<b>Brought Forward</b>		R	
	<p>12.1.21 <b>Special attendance</b></p> <p>The contractor must obtain information from all subcontractors at tender stage regarding special attendance that might be required and make allowance for each and every subcontract that requires special attendance</p> <p>[9.2] <b>Subcontractor</b> (1) Details:</p> <p><b>Subcontractor</b> (2) Details:</p> <p><b>Subcontractor</b> (3) Details:</p> <p>12.1.22 <b>Protection of the works</b></p> <p>[11.1] Specific requirements: All work that requires protection during construction must be adequately protected up to practical completion by the <b>contractor</b></p> <p>12.1.23 <b>Disturbance</b></p> <p>[11.5] Specific requirements: The <b>contractor</b> shall keep the site, structures, etc well watered during operations to prevent dust and shall provide and erect and remove on completion of the <b>works</b> all necessary temporary dust screens all to the satisfaction of the <b>principal agent</b></p> <p>12.1.24 <b>Environmental disturbance</b></p> <p>[11.6] Specific requirements: None</p>			
102	<p>Post-tender information (B12.2)</p> <p><b>All post-tender information for this section will be determined once tender is awarded</b></p> <p style="text-align: right;">Fixed</p>	Item		
	<b>Carried Forward</b>		R	
	<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b></p>			



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	<b>Brought Forward</b>			R
104	<b>Clause C1 - Contract drawings</b>			
	The drawings issued with the tender documents do not comprise the complete set but serve as a guide only for tendering purposes and for indicating the scope of the work to enable the tenderer to acquaint himself with the nature and extent of the <b>works</b> and the manner in which they are to be executed			
	Should any part of the drawings not be clearly understood by the the tenderer he shall, before submitting his tender, obtain clarification in writing from the <b>principal agent</b>			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
105	<b>Clause C2 - General Preambles</b>			
	The "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the trades is deemed to be included herein and shall be read in conjunction with the bills of quantities and be referred to for the full descriptions of work to be done and materials to be used.			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>			R
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	<b>Brought Forward</b>			R
106	<b>Clause C3 - Site instructions</b>			
	All site instructions issued on site shall be recorded in writing within seven (7) calendar days in site instruction book (A4 size and triplicate carbon format), which is to be provided and maintained by the contractor. The said site instruction book shall be kept on site at all times for the exclusive use of recording site instructions only			
	Site instructions may be issued by the architect or any of the consultants only. Copies of the site instructions are to be submitted to the architect and quantity surveyor within seven (7) calendar days of such recording in the site instruction book			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
107	<b>Clause C4 - Trade Names</b>			
	Wherever a trade name for any product has been described in the <b>bills of quantities</b> , the tenderer's attention is drawn to the fact that any other product of equal quality may be used subject to the written approval of the <b>principal agent</b> being obtained prior to the closing date for submission of tenders			
	If prior written approval for an alternative product is not obtained, the product described shall be deemed to have been tendered for			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>			R
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	<b>Brought Forward</b>		R	
108	<b>Clause C5 - Overtime</b>			
	Should overtime be required to be worked for any reason whatsoever, the costs of such overtime are to be borne by the contractor unless the principal agent has specifically authorized and indicated in writing, prior to the execution thereof, that costs for such overtime will to be borne by the employer			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
109	<b>Clause C6 - As-built drawings</b>			
	The position of construction breaks and the extent of individual concrete pours are to be recorded by the contractor on the structural engineer's drawings and are to be submitted to the principal agent and the structural engineer for their records			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
110	<b>Clause C5 - Labour record</b>			
	At the end of each week the contractor shall provide the principal agent with a written record, in schedule form, reflecting the number and description of tradesmen and labourers employed by him and all subcontractors on the works each day			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>		R	
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<b>Brought Forward</b>	R
<p><b>Clause C8 - Occupational Health and Safety Act</b></p> <p>The <b>contractor</b> shall comply 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), as well as all new occupational health and safety acts requirement regarding the compliance of Covid 19</p> <p>It is required of the <b>contractor</b> to thoroughly study the <b>latest</b> Health and Safety Specification that must be read together with and is deemed to be incorporated under this Section of the <b>bills of quantities / lump sum document</b>.</p> <p>The <b>contractor</b> must take note that compliance with the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is compulsory. In the event of partial or total non-compliance, the <b>principal agent</b>, notwithstanding the provisions of clause A31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress <b>payment certificate</b> until the <b>contractor</b> provides satisfactory proof of compliance. The <b>contractor</b> shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment.</p> <p>Provision for pricing of the Occupational Health and Safety Act, Construction Regulations and Health and Safety Specification is made under this clause and it is explicitly pointed out that all requirements of the aforementioned are deemed to be priced hereunder and no additional claims in this regard shall be entertained.</p> <p><b>PART A-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Construction health &amp; safety documentation</b></p>	
<b>Carried Forward</b>	R
<p>Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b></p>	

	Brought Forward		R
113	<b>Clause C8.1.1</b> - Prepare and compile H&S plan as per site specification Health and safety Specifications (Section C3, Scope of Work), OHS Act & Regulations		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
114	<b>Clause C8.1.2</b> - Allow for the preparation and compilation of the site specific health and safety file, and a health and safety working file		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
115	<b>Clause C8.1.3</b> - Appointment of a Registered Construction health and safety officer for the duration of the Contract as per Section 8(5) of the Construction Regulations 2014		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
	<b>PART B-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Personal Protective Clothing &amp; Equipment</b>		
116	<b>Clause C8.2.1</b> - Foot protection (steel toe cap, gum boots, etc)		
	Fixed	Item	
	Value Related	Item	
	Carried Forward		R
	Section No. 1 PRELIMINARIES Bill No. 1 PRELIMINARIES <b>CLUSTER G</b>		

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		<b>Brought Forward</b>		R	
		Time Related	Item		
117	<b>Clause C8.2.2</b> - Clothing (Overalls Depicting Contractors Company name/identification)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
118	<b>Clause C8.2.3</b> - Glove (leather, PVC, Acid Resistant, etc) Item				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
119	<b>Clause C8.2.4</b> - Head Protection: Hardhats with air vents Colour Coded - Supervisory (Red) Labour (Green)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
120	<b>Clause C8.2.5</b> - Ear protection ( earmuffs with 30% protective value) Item				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
121	<b>Clause C8.2.6</b> - Eye Protection (Face Shield, Goggles, Spectacles, etc)				
		Fixed	Item		
		<b>Carried Forward</b>		R	
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		<b>Brought Forward</b>		R	
		Value Related	Item		
		Time Related	Item		
122	<b>Clause C8.2.7</b> - Visibility (luminous high visibility safety vests/ jackets/ bibs/ etc)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
123	<b>Clause C8.2.8</b> - Harness(double stranded safety harness with pylon hooks)				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
124	<b>Clause C8.2.9</b> - Portable ladders A-frame, extendable, length, material, etc.				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
125	<b>Clause C8.2.9</b> - Portable ladders A-frame, extendable, length, material, etc.				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		<b>Carried Forward</b>		R	
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**Clause C8.2.10 - Barricading/ Demarcation (Supply, Install & Removal)** Demarcation perimeter (fence, shade netting, corrugated iron, shutter board, hard Barricade etc)

Item

Item

Item

R

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	<b>Brought Forward</b>			R	
	<b>PART C-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY - Occupational medical surveillance</b>				
127	<b>Clause C8.3.1</b> - Entry Medical Examinations by a SASOHN registered Occupational Health Nurse or a SASOM registered Occupational Medical Practitioner				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
128	<b>Clause C8.3.2</b> - Exit Medical Examination				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
129	<b>Clause C8.3.3</b> -Provision of a first aid kit				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
130	<b>Clause C8.3.4</b> - Provision of a fire-fighting measures				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	<b>Carried Forward</b>			R	
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	Brought Forward		R
	<b>PART D-OHS ACT COMPLIANCE-IMPLEMENTATION OF THE HEALTH AND SAFETY Education, training, signage</b>		
131	<b>Clause C8.4.1</b> - Health and safety induction site access cards		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
132	<b>Clause C8.4.2</b> - Basic First Aid training level one		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
133	<b>Clause C8.4.3</b> - Health and Safety representative		
	Fixed	Item	
	Value Related	Item	
	Time Related	Item	
134	<b>Clause C8.4.4</b> - Construction (fire fighting. General information, prohibitory, mandatory, warning, hazchem, photo luminescent, etc)		
	Fixed	Item	
	Value Related	Item	
	<b>Carried Forward</b>		R
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	<b>Brought Forward</b>		R	
	Time Related	Item		
135	<b>Clause C8.4.5</b> - Health and Safety information display board in site office (emergency evacuation flow diagram, emergency contact numbers, electrical, general, etc)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
136	<b>Clause C8.4.6</b> -Health and safety charts (OHS Act, Basic Conditions of Employment Act)			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>PART E - OHS AC COMPLIANCE - IMPLEMENTATION OF THE HEALTH AND SAFETY Covid-19 Compliance management</b>			
137	<b>Clause C8.5.1</b> - Covid - 19 related signage and posters			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>		R	
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	<b>Brought Forward</b>			R
138	<b>Clause C8.5.2-</b> 2 x 3ply cloth masks			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
139	<b>Clause C8.5.2-</b> hand sanitizers with 70% alcohol content			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
140	<b>Clause C8.5.3</b> Decontamination agent / surface sanitizers			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
141	<b>Clause C8.5.4</b> Surgical Gloves (for security and cleaning team)			
	Fixed	Item		
	<b>Carried Forward</b>			R
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		<b>Brought Forward</b>		R	
		Value Related	Item		
		Time Related	Item		
142	<b>Clause C8.5.5</b>	Non-contact thermometers			
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
143	<b>Clause C8.5.6</b>	Physical barriers to ensure social distancing (Compliance to Section 22 of the Covid-19 OHS Directive)			
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
144	<b>Clause C9 - Viewing of the school areas</b>				
	The <b>site</b> is situated in a school area and the tenderer must arrange with the responsible school staff to obtain permission to enter the <b>site</b> for tendering purposes				
		Fixed	Item		
		Value Related	Item		
		Time Related	Item		
		<b>Carried Forward</b>		R	
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	<b>Brought Forward</b>			R	
145	<b>Clause C10 - Commencement of Works in School Areas</b>  As the <b>works</b> falls within a school area the <b>contractor</b> must give the responsible staff member notice before commencement of the <b>works</b> . Should the <b>contractor</b> fail to make such arrangements, admission to the <b>site</b> may be refused and any additional costs will be for the <b>contractor's</b> account				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
146	<b>Clause C11 - Entrance Permits to School Areas</b>  As the <b>works</b> falls within a school area the <b>contractor</b> 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 Principal, or chief security officer				
	Fixed	Item			
	Value Related	Item			
	Time Related	Item			
	<b>Carried Forward</b>			R	
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	<b>Brought Forward</b>			R
148	<b>Clause C13 - HIV/Aids Awareness</b>			
	It is required of the <b>contractor</b> to thoroughly study the HIV/AIDS Specification (PW 1544) of the Department that must be read together with and is deemed to be incorporated under this Section of the <b>bills of quantities</b> . Provision for pricing of HIV/AIDS awareness is made under items C10.1 to C10.5 hereafter and it is explicitly 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 <b>contractor</b> must take note that compliance with the HIV/AIDS Specification is compulsory. In the event of partial or total non-compliance, the <b>principal agent</b> , notwithstanding the provisions of Clause A 31.0 of Section A or any other clause to the contrary, reserves the right to delay issuing any progress <b>payment certificate</b> until the <b>contractor</b> provides satisfactory proof of compliance. The <b>contractor</b> shall not be entitled to any compensation of whatsoever nature, including interest, due to such delay of payment			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
149	<b>Clause C13.1 - Awareness Champion</b>			
	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	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>			R
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	<b>Brought Forward</b>			R
150	<b>Clause C13.2 - Awareness Workshop</b>			
	Selection and appointment of a competent Service Provider approved by the <b>principal agent</b> , 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	Item		
	Value Related	Item		
	Time Related	Item		
151	<b>Clause C13.3 - Posters, booklets, videos, etc.</b>			
	Provision, displaying, maintaining and replacing when necessary of four plastic laminated posters, booklets and educational videos, etc. for the duration of the <b>construction period</b> , all in accordance with the HIV/AIDS Specification			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
152	<b>Clause C13.4 - Access to Condoms</b>			
	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 <b>construction period</b> , all in accordance with the HIV/AIDS Specification			
	Fixed	Item		
	Value Related	Item		
	Time Related	Item		
	<b>Carried Forward</b>			R
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Brought Forward			R
<u>Explosives</u>			
No explosives whatsoever may be used for demolition purposes unless otherwise stated			
<u>General</u>			
Water supply pipes and other piping in ground that may be encountered and found necessary to disconnect or cut, shall be effectually stopped off or grubbed up and removed, and any new connections that may be necessary shall be made with proper fittings to the satisfaction of the principal agent			
Unless otherwise described all materials are to become the property of the contractor and are to be removed from the site			
<u>Breaking up and removing</u>			
1	Single storey <b>existing 3 x 4 seater pit toilet block</b> with mono pitched roof comprising toilet pit structure, concrete surface bed, one brick external walls, one brick and half brick internal walls and corrugated roof covering on prefabricated timber trusses including backfilling to toilet pit and compaction (hand over usable items to school)	No	3
<b>Carried to Final Summary</b>			
Section No. 2 DEMOLITIONS OF 3 X 4 SEATER PIT TOILETS Bill No. 1 Demolitions <b>CLUSTER G</b>			R

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.3</u></b>			
	<b><u>BILL NO. 1</u></b>			
	<b><u>ALTERATIONS</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades			
	<b><u>REMOVAL OF EXISTING WORK:</u></b>			
	NATURE OF WORK: Tenderers are advised to visit the site and to satisfy themselves as to the nature and extent of the work to be done and provide in their tenders any items not specifically mentioned which they may deem necessary for the proper completion of the work.			
	DIMENSIONS The Contractor is advised to take all dimensions affecting the existing buildings on the site, as he will be held solely responsible for all new work being of the correct size.			
	PIPES, ETC Special care is to be taken not to interfere unnecessary with any supply pipes or other piping that may be met with and found necessary to disconnect or cut, are to be effectively stopped off and any new connections that may be necessary are to be made with proper fittings and to the satisfaction of the Principal Agent to whom due notice must be given of any alterations to the existing services.			
	PROTECTION In taking down and removing existing work the utmost care is to be observed to avoid any structural or other damage to the remaining portions of the buildings. The Contractor must also protect all work not removed such as walls, floors, doors, windows or other joinery, loose and fixed fittings and electrical appliances, etc. from damage during the progress of the work and provide all necessary materials for doing so. The Contractor will be held solely responsible for any damage to persons or property and for the safety of the structure throughout the whole of this Contract and must			
	<b>Carried Forward</b>			
	Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 1 Alterations <b>CLUSTER G</b>		R	

Brought Forward		R	
<p>make good at his own expense any damage that may occur.</p> <p>OLD USABLE MATERIALS from the alterations/demolitions are to become the property of the Client. Old materials for re-use are to be carefully removed, stored and protected from injury including making good any damaged or defective parts as required before fixing. Old reusable materials are to be handed over to the Client are to be carefully removed and neatly stacked on site where directed. The remainder of the old materials and all rubbish to be immediately carted away and the site left clean and unencumbered. The Contractor should allow for removing of rubble from site on daily basis, failing which the client might stop the construction until the site has been cleaned. None of the old stock bricks from the pulling down are to be re-used for any new work. Materials to be handed over to the Client should be kept safely and handed over to the School Governing Body or the school principal who shall sign for all materials received.</p> <p>MATERIALS, ETC The materials to be used and work to be done to be similar in all respects to that described for new work insofar as they concur. All work in making good is to be properly jointed to the existing.</p> <p>Unless otherwise stated, all usable material from the demolitions should be kept safely and handed over to the school governing body or the school principal who shall sign for all material received.</p> <p><b><u>TEMPORARY BARRICADES, SCREENS, ETC</u></b></p> <p><u>Temporary barricades, screens, roofs, etc including removal</u></p>			
<p>1 Dust screen 1800mm high between construction sites and school facilities with suitable timber framing with 375 micron polyethylene sheeting stapled on one side, including corners, ends, etc</p>	Item		
Carried Forward		R	
<p>Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 1 Alterations <b>CLUSTER G</b></p>			



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	<b><u>REMOVAL OF EXISTING WORK</u></b>			
2	85mm thick apron	m2	210	
3	85mm Thick surface bed	m2	634	
	<u>Breaking down and removing brickwork etc</u>			
4	Half brick wall in beamfilling	m2	204	
	<u>Take out and remove sundry ironmongery and replace with new</u>			
5	Writting board size 4800 x 1200mm high	No	9	
	<u>Taking out and removing doors, windows, etc from brickwork to be demolished</u>			
6	Timber single door 813 x 2032mm high	No	9	
	<u>Taking out and removing doors, windows, etc, including thresholds, sills, etc and building up openings in brick walls, including making good cement plaster on ? side(s) (making good paintwork elsewhere)</u>			
7	Door frame 813 x 2032m high overall from 230mm brick wall	No	1	
	<u>Taking down and removing roofs, floors, panelling, ceilings, partitions, etc</u>			
8	Corrugated iron roof covering including timber purlins	m2	826	
9	Double pitched roof including bracing, gangboarding, purlins, bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for <b>3 classroom block 168m2 on plan</b> (Refer to architect's drawings attached to these bills of quantities)	No	3	
10	Ceilings including branderings and cornices	m2	779	
11	75mm Coved cornice in patches	m	262	
12	Fibre cement fascias, barge boards, etc.	m	286	
	<b>Carried Forward</b>			R
	Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 1 Alterations <b>CLUSTER G</b>			

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

## SERVICING OF DOORS AND WINDOWS

## MAKING GOOD OF FINISHES ETC

**Carried Forward to Summary of Section No. 3**

Section No. 3  
RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5  
Bill No. 1  
Alterations  
**CLUSTER G**

Item No	Quantity	Rate	Amount
<b><u>SECTION NO.4</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO.1</u></b>			
<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>Cost of tests</u>			
The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)			
Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
<b>Carried Forward</b>			R
Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
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Brought Forward			R
<u>Formwork</u>			
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself			
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"			
<b><u>UNREINFORCED CONCRETE</u></b>			
<u>20MPa/19mm concrete</u>			
1	Surface beds	m3	12
2	Surface beds cast in panels on waterproofing.	m3	45
3	Aprons cast in panels to falls	m3	12
Carried Forward			R
Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
LDPWRI-B20305

	Brought Forward			R
4	Ramps	m3	2	
5	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	110	
<b><u>CONCRETE SUNDRIES</u></b>				
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>				
6	Surface beds, slabs, etc	m2	634	
7	Ramp to falls	m2	21	
8	Aprons to falls	m2	135	
<b><u>FORMWORK</u></b>				
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
<u>Rough formwork to sides</u>				
9	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	75	
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>				
<u>Fabric reinforcement</u>				
10	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m <sup>2</sup> with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.	m2	634	
<b>Carried Forward to Summary of Section No. 3</b>				R
Section No. 3				
RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5				
Bill No. 2				
Concrete, Formwork and Reinforcement				
<b>CLUSTER G</b>				

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.4</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO. 2</u></b>			
	<b><u>MASONRY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	-----			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>BRICKWORK</u></b>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Linings to concrete</u>			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole			
	<u>Reinforced brick lintels</u>			
	Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous			
	<b>Carried Forward</b>		R	
	Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 3 Masonry <b>CLUSTER G</b>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
LDPWRI-B20305

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>SUPERSTRUCTURE</u></b>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	Half brick walls in beamfilling.	m2	49
<u>Brickwork reinforcement</u>			
2	75mm Wide reinforcement built in horizontally	m	338
<b><u>SUPERSTRUCTURE</u></b>			
<u>Brickwork of NFP bricks in class II mortar</u>			
3	L-shaped piers	m3	2
<b>Carried Forward to Summary of Section No. 3</b>			R
Section No. 3			
RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5			
Bill No. 3			
Masonry			
<b>CLUSTER G</b>			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.4</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO.3</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	-----			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>General</u>			
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched			
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use			
	<u>Sizes</u>			
	All items are measured net unless otherwise described			
	<u>Flashings, trimming plates, etc.</u>			
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described			
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable			
	All items are unless otherwise described measured net			
	<b>Carried Forward</b>		R	
	Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 4 Roof Coveringss, etc <b>CLUSTER G</b>			



Brought Forward			R
<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	824
2	Ridge capping 550mm girth	m	87
<b>Carried Forward to Summary of Section No. 3</b>			R
Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 4 Roof Coveringss, etc <b>CLUSTER G</b>			

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.4</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO.4</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
<p style="text-align: right;"><b>Carried Forward</b></p>			
<p>Section No. 3  RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5  Bill No. 5  Capentry and Joinery  <b>CLUSTER G</b></p>			R

<p style="text-align: right;"><b>Brought Forward</b></p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>PREFABRICATED ROOF TRUSSES</u></b></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>	R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 5 Carpentry and Joinery <b>CLUSTER G</b></p>	R	

<b>Brought Forward</b>	R	
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>		
<b>Carried Forward</b>	R	
<p>Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 5 Carpentry and Joinery <b>CLUSTER G</b></p>		

<b>Brought Forward</b>	R
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m<sup>2</sup> and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>	
<b>Carried Forward</b>	R
<p>Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 5 Carpentry and Joinery <b>CLUSTER G</b></p>	

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**DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE**  
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<b>Brought Forward</b>			R
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent	Item	
	<u>Sawn softwood</u>		
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for <b>3 classroom block 278m2 on plan</b> (Refer to architect's drawings attached to these bills of quantities)	No 3	
	<u>Sawn softwood grade 4</u>		
5	38 x 114mm Wall plates	m 203	
	<u>Sundries</u>		
6	Two coats creosote on sawn timbers	m2 15	
	<b><u>EAVES, VERGES, ETC</u></b>		
	<u>"Everite FC77" pressed fibre-cement</u>		
7	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m 284	
	<b><u>SKIRTINGS</u></b>		
	<u>Wrought meranti</u>		
8	19 x 76mm Skirting including 19mm quadrant bead nailed	m 158	
	<b><u>DOORS, ETC</u></b>		
	<u>Wrought meranti doors hung to steel frames</u>		
9	813 x 2032 x 44 mm thick heavy duty exterior quality horizontally slatted double sided saligna door fitted to comply with sabs 545 exterior grade or latest revision.	No 15	
<b>Carried Forward</b>			R
Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 5 Capentry and Joinery <b>CLUSTER G</b>			

**BILLS OF QUANTITIES**  
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Brought Forward		R
<p><u>Semi solid core flush doors with concealed hardwood edges and 4mm thick masonite covering on both sides hung to steel frame</u></p> <p>813 x 2032 x 44 mm thick interior grade flush hollow core single timber door with 3 mm ply on both sides with 2 consolidated edges fitted to comply with sabs 545 in pressed steel frame. all painted to architect's colour schedule</p>	No	24
<p><b>Carried Forward to Summary of Section No. 3</b></p> <p>Section No. 3  RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5  Bill No. 5  Capentry and Joinery  <b>CLUSTER G</b></p>		R



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**BILLS OF QUANTITIES**  
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### "Rhino" gypsum plasterboard cornices

3	75mm Coved cornices	m	158
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## NAILED UP AND SCREWED UP CEILINGS

6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints

4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	504
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5	Sloping ceilings including 38 x 38mm sawn softwood brundering at 450mm centres	m2	157
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6	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	9
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**Carried Forward to Summary of Section No. 3**

Section No. 3  
RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5  
Bill No. 6  
Ceilings, Partitions and Access Flooring  
**CLUSTER G**

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.4</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO.6</u></b>			
<b><u>IRONMONGERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>Descriptions</u>			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
<u>Finishes to ironmongery</u>			
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 SD Sanded			
<b><u>CATCHES,CABIN HOOKS, ETC</u></b>			
<u>"Solid"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	27
<b><u>LOCKS</u></b>			
<b>Carried Forward</b>			R
Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 7 Ironmongery <b>CLUSTER G</b>			

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	Brought Forward			R
	<u>"Solid" or similar approved</u>			
2	"Code 630" padlock	No	15	
3	"Code 2252-76SC" three lever upright lockset	No	12	
4	"Code 460/313" Blesbok four lever lockset	No	15	
	<b><u>DOOR CLOSERS AND FLOOR SPRINGS</u></b>			
	<u>"Dorma" or similar approved</u>			
	<b><u>SUNDRIES</u></b>			
	<u>"Solid" or similar approved</u>			
5	Dorma "Code 255" door stop plugged	No	15	
6	Chromium plated toilet roll holder plugged to brickwork	No	12	
	<b><u>STEEL CUPBOARDS</u></b>			
	<u>Approved steel lockers with standard baked enamel finish</u>			
7	G10 Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork	No	9	
	<b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u></b>			
	<u>"Vitrex" or similar approved</u>			
8	Pinning boards 4000 x 1200mm high fixed to brickwork	No	6	
9	2000 x 1300 mm White Porcelain magnetic marker board	No	9	
	<b>Carried Forward to Summary of Section No. 3</b>			R
	Section No. 3			
	RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5			
	Bill No. 7			
	Ironmongery			
	<b>CLUSTER G</b>			

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Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.4</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO.7</u></b>			
	<b><u>METALWORK</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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	<u>Descriptions</u>			
	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			
	<u>Drawings</u>			
	Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
	<b><u>WELDED SCREENS, GATES, ETC</u></b>			
	<u>Gates to external doors</u>			
1	Gate and frame 900 x 2100mm high complete (G1)	No	15	
	<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
	<b>Carried Forward</b>		R	
	Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 8 Metalwork <b>CLUSTER G</b>			

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	Brought Forward			R
	<u>Standard 1.6 mm in double rebate pressed mild steel door frame with wall matching profile in compliance with sabs 1129 or the latest version complete with lugs &amp; fixtures to accommodate 813 x 2032mm door leaf suitable for half brick walls including 3 no. stainless steel medium duty butt hinges</u>			
2	Frame for door 813 x 2032mm high  <u>Standard 1.6 mm in double rebate pressed mild steel door frame with wall matching profile in compliance with sabs 1129 or the latest version complete with lugs &amp; fixtures to accommodate 813 x 2032mm door leaf suitable for one brick walls including 3 no. stainless steel medium duty butt hinges</u>	No	4	
3	Frame for door 813 x 2032mm high  <b><u>STEEL WINDOWS, DOORS, ETC</u></b>  <u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>	No	2	
4	500 x 600mm standard "standard type" galvanised mild steel window frame. manufactured to comply with sabs 727. frames to be factory primed with zinc phosphate primer to comply with sabs 1319	No	6	
5	1000 x 600mm standard "standard type" galvanised mild steel window frame. manufactured to comply with sabs 727. frames to be factory primed with zinc phosphate primer to comply with sabs 1319	No	8	
<b>Carried Forward to Summary of Section No. 3</b> Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 8 Metalwork <b>CLUSTER G</b>				R

Section No. 3  
RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5  
Bill No. 9  
Plastering  
**CLUSTER G**

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.4</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO. 9</u></b>			
	<b><u>TILING</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Descriptions</u>			
	Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
	<b><u>WALL TILING</u></b>			
	<u>Glazed ceramic wall tiles (PC R110,00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere)</u>			
1	On walls	m2	122	
	<b><u>FLOOR TILING</u></b>			
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC R120,00/m2 VAT excl.) fixed with adhesive to plaster (plaster elsewhere) and flush pointed with tinted waterproof jointing compound</u>			
2	On floors and landings	m2	504	
	<b>Carried Forward</b>		R	
	Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 10 Tiling <b>CLUSTER G</b>			



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Bill No. 10  
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Item No		Quantity	Rate	Amount
	<p><b><u>SECTION NO.4</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO. 10</u></b></p> <p><b><u>PLUMBING AND DRAINAGE</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>"Polycop" polypropylene pipes:</u></p> <p>Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated</p> <p>Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><b><u>SANITARY FITTINGS (PROVISIONAL)</u></b></p>			
1	450 x 290mm "Bantam" cloakroom hand basin complete with single punched tapholes fixed to wall with and including two number 10mm bolts	No	6	
	<b>Carried Forward</b>		R	
	<p>Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 11 Plumbing and Drainage <b>CLUSTER G</b></p>			

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## Envirolooo Unit

21	Replace existing ventilation extraction unit including the outlet vent pipe	No	12
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### Cleaning of existing enviroloo system

22	Clean and remove waste on the enviroloo bucket using approved chemicals without damaging the toilet system	No	12
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**Carried Forward to Summary of Section No. 3**

Section No. 3  
RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5  
Bill No. 11  
Plumbing and Drainage  
**CLUSTER G**

Section No. 3  
RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5  
Bill No. 12  
Glazing  
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Brought Forward			R
<p><u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174). Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u></p>			
1	On fascias and barge boards	m2	54
<b><u>ON METAL</u></b>			
<p><u>Plascon Velvagio Satin to exterior new mild steel (NW 683). Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3 of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u></p>			
2	On door frames	m2	32
3	On windows with burglar bars	m2	86
4	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area )	m2	49
<b><u>ON WOOD</u></b>			
Carried Forward			R
<p>Section No. 3 RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 Bill No. 13 Paintwork <b>CLUSTER G</b></p>			



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Apply 3no. clear eggshell varnish for interior to comply with sabs 887 type 01, thin down first coat with mineral turpentine as per manufacturer instructions, allowing each coat to dry overnight, apply wood preservative to exposed exterior wood to saturate the surface, with each coat soaking in before further coats, apply until no further soaking takes place

**Carried Forward to Summary of Section No. 3**

Section No. 3  
RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5  
Bill No. 13  
Paintwork  
**CLUSTER G**

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Bill No	Section No. 3			
	RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 X 4 SEATER ENVIROLOO TOIL			
	SECTION SUMMARY - RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND			
		Page No		Amount
	1 Alterations	73		
	2 Concrete, Formwork and Reinforcement	76		
	3 Masonry	78		
	4 Roof Coveringss, etc	80		
	5 Capentry and Joinery	87		
	6 Ceilings, Partitions and Access Flooring	89		
	7 Ironmongery	91		
	8 Metalwork	93		
	9 Plastering	94		
10 Tiling	96			
11 Plumbing and Drainage	100			
12 Glazing	101			
13 Paintwork	104			

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Brought Forward				R
<u>Filling</u>				
Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material				
<u>Soil poisoning</u>				
Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent				
<b><u>SITE CLEARANCE, ETC.</u></b>				
<u>Site clearance</u>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	562	
<b><u>REMOVAL TREES, ETC.</u></b>				
<u>Taking out and removing, grubbing up roots and filling holes.</u>				
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	4	
<b><u>EXCAVATION, FILLING, ETC</u></b>				
<u>Excavation in earth not exceeding 2m deep</u>				
3	Trenches	m3	34	
<u>Extra over trench and hole excavations in earth for excavation in</u>				
4	Soft rock	m3	3	
Carried Forward				R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 1 Foundations <b>CLUSTER G</b>				

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	Brought Forward			R
5	Hard rock	m3	2	
	<u>Extra over all excavations for carting away</u>			
6	Surplus material from excavations on site to a dumping site to be located by the contractor	m3	34	
	<u>Risk of collapse of excavations</u>			
7	Sides of trench and hole excavations not exceeding 1,5m deep	m2	232	
	<u>Keeping excavations free of water</u>			
8	Keeping excavations free of all water other than subterranean water		Item	
	<u>Approved G6 filling supplied and carted by the contractor and compacted in layers not exceeding 150mm to 95% Mod AASHTO density</u>			
9	Under floors, steps, paving etc.	m3	45	
	<u>Compaction of surfaces</u>			
10	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 93% Mod AASHTO density	m2	297	
	<u>Prescribed density tests on filling</u>			
	<b><u>SOIL POISONING</u></b>			
	<u>Soil insecticide</u>			
11	Under floors etc including forming and poisoning shallow furrows against foundation walls etc, filling in furrows and ramming	m2	297	
12	To bottoms and sides of trenches etc	m2	287	
	<b>Carried Forward</b>			R
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 1 Foundations <b>CLUSTER G</b>			

		Brought Forward			R
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>				
	<b><u>UNREINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>				
	<u>15MPa/19mm concrete</u>				
13	Blinding	m3	0.4		
	<b><u>REINFORCED CONCRETE CAST AGAINST EXCAVATED SURFACES</u></b>				
	<u>25MPa/19mm concrete</u>				
14	Foundation beams	m3	34		
15	Surface beds on waterproofing	m3	33		
	<b><u>REINFORCEMENT</u></b>				
	<u>High tensile steel reinforcement to structural concrete work</u>				
16	10mm Diameter bars	t	2.24		
17	12mm Diameter bars	t	0.38		
18	20mm Diameter bars	t	1.51		
	<b><u>TEST CUBES</u></b>				
19	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	5.0		
	<b><u>BRICKWORK</u></b>				
	<u>Brickwork of NFP bricks in class II mortar</u>				
20	Half brick walls	m2	45		
		Carried Forward			R
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 1 Foundations <b>CLUSTER G</b>				

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Brought Forward			R
<b><u>BRICKWORK SUNDRIES</u></b>			
<u>Joint forming material in movement joints:</u>			
<u>Brickwork reinforcement</u>			
21	75mm wide reinforcement built in horizontally.	m	248
<b><u>FACE BRICKWORK</u></b>			
<u>Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
22	Extra over brickwork for face brickwork	m2	21
<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
23	Coping on top of one brick wall	m	13
<b>Carried Forward to Summary of Section No. 4</b>			R
Section No. 4			
MEDIUM ADMIN BLOCK			
Bill No. 1			
Foundations			
<b>CLUSTER G</b>			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.5</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	-----			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
	<b>Carried Forward</b>		R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			



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Brought Forward			R
<u>Formwork</u>			
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself			
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"			
<b><u>UNREINFORCED CONCRETE</u></b>			
<u>20MPa/19mm concrete</u>			
1	Aprons cast in panels to falls	m3	12
2	Ramps	m3	1
3	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	102
Carried Forward			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			

		Brought Forward			R
	<b><u>REINFORCED CONCRETE</u></b>				
	<u>15MPa/19mm concrete</u>				
4	150mm Concrete wall	m3	4		
	<u>25MPa/19mm concrete</u>				
5	Slabs including beams and inverted beams	m3	6		
	<b><u>CONCRETE SUNDRIES</u></b>				
	<u>Finishing top surfaces of concrete smooth with a wood float</u>				
6	Aprons to falls	m2	122		
	<b><u>FORMWORK</u></b>				
	<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<u>Rough formwork to sides</u>				
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	89		
	<b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY II)</u></b>				
	<u>Smooth formwork to soffits</u>				
8	Slabs	m2	6		
	<u>Permanent formwork to soffits</u>				
	<b><u>TEST CUBES</u></b>				
9	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0		
		Carried Forward			R
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>				

Brought Forward			R
<b><u>MOVEMENT JOINTS ETC</u></b>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
<u>Saw cut joints</u>			
10	Saw cut joints in top of concrete	m	5
<b><u>REINFORCEMENT</u></b>			
<u>High tensile steel reinforcement to structural concrete work</u>			
11	12mm Diameter	t	3.50
12	10mm Diameter bars	t	2.80
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
<u>Fabric reinforcement</u>			
13	Type 245 fabric reinforcement in concrete slabs etc	m2	236
14	Type 311 fabric reinforcement in concrete walls etc	m2	27
<b>Carried Forward to Summary of Section No. 4</b>			R
Section No. 4			
MEDIUM ADMIN BLOCK			
Bill No. 2			
Concrete, Formwork and Reinforcement			
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	<b><u>SECTION NO.5</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	-----			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>BRICKWORK</u></b>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Linings to concrete</u>			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole			
	<b>Carried Forward</b>		R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 3 Masonry <b>CLUSTER G</b>			

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Brought Forward			R
<u>Reinforced brick lintels</u>			
Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous			
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>SUPERSTRUCTURE</u></b>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	Piers	m3	3
2	L-shaped piers	m3	0.5
3	Half brick walls	m2	265
4	Half brick walls in beamfilling.	m2	27
5	One brick walls	m2	409
<u>Joint forming material in movement joints:</u>			
<u>Brickwork reinforcement</u>			
6	75mm Wide reinforcement built in horizontally	m	853
7	150mm Wide reinforcement built in horizontally	m	1,282
<u>Turning pieces</u>			
8	230mm Wide turning piece to lintels etc	m	69
Carried Forward			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 3 Masonry <b>CLUSTER G</b>			

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Brought Forward				R
<u>"Allied Concrete" prestressed fabricated lintels</u>				
9	110 x 75mm Lintels in lengths not exceeding 3m	m	15	
<u>Galvanised wire ties etc</u>				
10	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	56	
<b><u>FACE BRICKWORK</u></b>				
<u>Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>				
11	Extra over brickwork for face brickwork	m2	355	
12	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	6	
13	Extra over for facings in beamfilling for face brickwork	m2	75	
<u>Brick-on-edge header course copings, sills, etc of face bricks ( Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>				
14	Extra over brickwork for brick-on-edge header course lintel	m	28	
<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>				
15	220mm Wide sill set sloping and slightly protecting outside	m	19	
16	Coping on top of one brick wall	m	8	
<b><u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u></b>				
Carried Forward				R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 3 Masonry <b>CLUSTER G</b>				

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Brought Forward		R
<u>Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.</u>		
15mm x 150mm Wide sills set flat and slightly projecting	m	45
<p><b>Carried Forward to Summary of Section No. 4</b></p> <p>Section No. 4  MEDIUM ADMIN BLOCK  Bill No. 3  Masonry  <b>CLUSTER G</b></p>		R

Section No. 4  
MEDIUM ADMIN BLOCK  
Bill No. 4  
Waterproofing  
**CLUSTER G**



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.5</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO.5</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	-----			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>General</u>			
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched			
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use			
	<u>Sizes</u>			
	All items are measured net unless otherwise described			
	<u>Flashings, trimming plates, etc.</u>			
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described			
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable			
	All items are unless otherwise described measured net			
	<b>Carried Forward</b>		R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 5 Roof Coveringss, etc <b>CLUSTER G</b>			

Brought Forward			R
<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	354
2	Ridge capping 550mm girth	m	38
3	Hip capping 550mm girth	m	42
4	Gable trim 550mm girth	m	24
<b><u>STEEL LOUVRES</u></b>			
<u>"NTY Steelworks" or similar approved</u>			
5	Triangular steel louvre size 3000x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	4
<b>Carried Forward to Summary of Section No. 4</b>			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 5 Roof Coveringss, etc <b>CLUSTER G</b>			

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.5</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO.6</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
<p><b>Carried Forward</b></p>			<p>R</p>
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery <b>CLUSTER G</b></p>			

<p style="text-align: right;"><b>Brought Forward</b></p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>PREFABRICATED ROOF TRUSSES</u></b></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>	R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Carpentry and Joinery <b>CLUSTER G</b></p>	R	

<b>Brought Forward</b>	R	
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>		
<b>Carried Forward</b>	R	
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Carpentry and Joinery <b>CLUSTER G</b></p>		

<b>Brought Forward</b>	R	
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>		
<b>Carried Forward</b>	R	
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Carpentry and Joinery <b>CLUSTER G</b></p>		

<b>Brought Forward</b>		R	
<p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p>			
<p><u>Specific specifications for roof trusses</u></p>			
<p>Unless otherwise described, the following specifications will apply:</p>			
<p>1 All trusses to be with a 10° pitch</p>			
<p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p>			
<p><b><u>ROOFS</u></b></p>			
<p><b><u>The following in plate nailed timber roof truss construction</u></b></p>			
<p><u>The following is applicable in respect of roof trusses</u></p>			
<p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p>			
<p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p>			
<p><u>Allow for the preparation and submission of the following documents in respect of all buildings</u></p>			
<p>1 Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication</p>	Item		
<p>2 Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.</p>	Item		
<b>Carried Forward</b>		R	
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 6 Capentry and Joinery <b>CLUSTER G</b></p>			

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

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**BILLS OF QUANTITIES**  
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**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
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Item No		Quantity	Rate	Amount
<b><u>SECTION NO.5</u></b>				
<b><u>BUILDING WORK</u></b>				
<b><u>BILL NO.7</u></b>				
<b><u>CEILING , ETC.</u></b>				
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.  -----				
<b><u>SUPPLEMENTARY PREAMBLES</u></b>				
<u>Descriptions:</u>				
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 elsewhere				
<b><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></b>				
<b><u>Insulation</u></b>				
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	297	
<b><u>Sawn softwood</u></b>				
2	38 x 114mm Ceiling joists (Provisional)	m	85	
<b>Carried Forward</b>				R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring <b>CLUSTER G</b>				

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

### "Rhino" gypsum plasterboard cornices

3	75mm Coved cornices
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m

325

## NAILED UP AND SCREWED UP CEILINGS

6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints

4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.
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m2

297

5	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening
---	--

No

8

**Carried Forward to Summary of Section No. 4**

Section No. 4

MEDIUM ADMIN BLOCK

Bill No. 7

## Ceilings, Partitions and Access Flooring

### CLUSTER G

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.5</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO.8</u></b></p> <p><b><u>IRONMONGERY</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Descriptions</u></p> <p>Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs</p> <p><u>Finishes to ironmongery</u></p> <p>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 SD Sanded</p> <p><b><u>CATCHES,CABIN HOOKS, ETC</u></b></p> <p><u>"Solid"</u></p> <p><b><u>LOCKS</u></b></p>			
<p><b>Carried Forward</b></p>			<p>R</p>
<p>Section No. 4  MEDIUM ADMIN BLOCK  Bill No. 8  Ironmongery  <b>CLUSTER G</b></p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
LDPWRI-B20305

	Brought Forward			R
	<u>"Solid" or similar approved</u>			
1	"Code 630" padlock	No	2	
2	"Code 460/313" Blesbok four lever lockset	No	12	
	<b><u>DOOR CLOSERS AND FLOOR SPRINGS</u></b>			
	<u>"Dorma" or similar approved</u>			
3	Dorma TS91/EN3 slide channel door closer - Non hold open (Silver)	No	4	
4	Dorma DPH301C 150 x 19mm stainless steel "D" shaped straight bolt-through pull handle (St/Steel)	No	4	
	<b><u>SUNDRIES</u></b>			
	<u>"Solid" or similar approved</u>			
5	Dorma "Code 255" door stop plugged	No	16	
	<b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u></b>			
	<u>"Vitrex" or similar approved</u>			
6	Pinning boards 2400 x 1200mm high fixed to brickwork	No	2	
7	Pinning boards 3000 x 1200mm high fixed to brickwork	No	4	
	<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
	<u>"Union" or similar approved</u>			
8	150 x 150mm Stainless steel plate engraved with "female" sign (St/Steel)	No	1	
9	150 x 150mm Stainless steel plate engraved with "male" sign (St/Steel)	No	1	
	<b>Carried Forward</b>			R
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery <b>CLUSTER G</b>			

Brought Forward			R
10	150 x 150mm Stainless steel plate engraved with electrical symbol (St/Steel)	No	2
11	150 x 150mm Stainless steel plate engraved with "running man RH" sign (St/Steel)	No	4
12	150 x 150mm Stainless steel plate engraved with a "Fire Hose Reel" sign (St/Steel)	No	1
13	150 x 150mm Stainless steel plate engraved with "Fire Extinguisher" sign (St/Steel)	No	6
14	150 x 150mm Stainless steel plate engraved with a "Arrow sign" sign (St/Steel)	No	11
15	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "KITCHEN"	No	1
16	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "STAFF ROOM"	No	1
17	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "STATIONERY STORE"	No	1
18	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "RECEPTION"	No	1
19	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "SICK ROOM"	No	1
20	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "PRINCIPAL"	No	1
21	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "PRINT ROOM"	No	1
22	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "VICE PRINCIPAL"	No	1
23	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "GENERAL OFFICE"	No	1
Carried Forward			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 8 Ironmongery <b>CLUSTER G</b>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
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	Brought Forward			R
24	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "WAITING AREA"	No	1	
25	300 x 75 x 3mm Thick perspex plate with 40mm high engraved and paint letters to read "STRONG ROOM"	No	1	
<b><u>BATHROOM FITTINGS</u></b>				
<u>"Buchel" or similar approved</u>				
26	19mm Diameter chromium plated towel rail 600mm long including end brackets	No	2	
<u>"Kimberly-Clark" or similar approved</u>				
27	Kimberly-Clark® Professional MR2 Satin finish Stainless Steel toilet tissue dispenser (code: SA426130), overall size 130 x 135 x 256mm high, installed by a Kimberly Clark® installation team.	No	2	
28	Kimberly-Clark® Professional Reflex® MK2 Stainless Steel hand towel dispenser (code: SA426125), overall size 310 x 280 x 400mm high, installed by a Kimberly Clark® installation team.	No	2	
29	Kimberly-Clark® Professional Foam soap dispenser colour stainless steel, overall size 134 x 120 x 250mm high, installed by a Kimberly Clark® installation team.	No	2	
<u>"Nampak" or similar approved</u>				
30	Vandal resistant 2 roll holder complete fitments or similar approved	No	2	
<b><u>VERTICAL BLINDS</u></b>				
<u>"Luxaflex" or similar approved</u>				
31	Vertical blind system, not exceeding 2000mm high, consisting of 70mm wide vanes, powder coated aluminium headrail 44.8 x 26.5mm high, fitted with wheeled runners, connected by grey acetal spacer links with and including all necessary components to manufacturer's specifications	m	56	
<b>Carried Forward to Summary of Section No. 4</b>				R
Section No. 4				
MEDIUM ADMIN BLOCK				
Bill No. 8				
Ironmongery				
<b>CLUSTER G</b>				

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.5</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO. 9</u></b></p> <p><b><u>METALWORK</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><u>Descriptions</u></p> <p>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</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc</p> <p><b><u>WELDED SCREENS, GATES, ETC</u></b></p> <p><u>Gates to external doors</u></p> <p><b><u>PRESSED STEEL DOOR FRAMES</u></b></p> <p><u>1,2mm Double rebated frames suitable for one brick walls</u></p>			
1	No	10	
<p style="text-align: right;"><b>Carried Forward</b></p>			R
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 9 Metalwork <b>CLUSTER G</b></p>			



Brought Forward			R
<b><u>STEEL WINDOWS, DOORS, ETC</u></b>			
<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>			
2	Window type SWE 418, size 1511 x 1264mm high	No	14
3	Window type SWE 37S, size 1022 x 949mm high	No	3
4	Window type SWE 31S, size 533 x 949mm high	No	5
5	Window type SWE 47, size 2000 x 1264mm high	No	1
<b><u>STEEL STRONGROOM DOORS, VENTILATORS, ETC</u></b>			
<u>"Gunnebo SA" or similar approved strongroom doors etc. suitable for 230mm walls fixed to brickwork or concrete</u>			
6	Mutual Austen Safes DS50/2/HD SABS Category 2 (Heavy Duty) left hand strongroom with 2 x 7-lever security keylock, overall size 850 x 1860mm high with and including powder coated finish	No	1
7	Double ended strongroom ventilator	No	1
<b><u>STEEL ROLLER SHUTTERS ETC</u></b>			
<u>"Wispeco" or similar approved roller shutters fixed to brickwork or concrete</u>			
<b><u>ALUMINIUM WINDOWS, DOORS, ETC</u></b>			
<u>Doors, windows, etc to be manufactured by an approved firm of specialists, to be of the best quality and design truly squared and unless otherwise described, prepared to receive galzing beads from the outside. All opening portions must fit perfectly on all faces and be so hung as to open and close freely without binding at any point. Wherever possible, all angles and intersections to be welded by electric welding, argon or arc welding. A sample window is to be submitted to the Architect for approval before the work is put in hand.</u>			
Carried Forward			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 9 Metalwork <b>CLUSTER G</b>			

<b>Brought Forward</b>	R
<p><u>The frames generally are to be suitable for brickwork, blockwork, or concrete reveals. They are to be fitted with fixing lugs of 2,8mm aluminium 13mm wide x 100mm long welded to framing, one near each corner and intermediately not more than 300mm apart to sides top and bottom. Where concrete reveals, etc the frames are to be countersunk holed for and fitted with the necessary screws at the centres as for the lugs above.</u></p> <p><u>Immediately after the windows, doors, etc, have been delivered on to site, they are to be thoroughly overhauled, and all necessary adjustment or repairs made before they are fixed in position. Where they come into contact with brickwork, blockwork, concrete, steel, etc, the framing is to be treated with bituminuos paint in an approved manner. The windows, doors, etc, are to be placed in their positions for building in and adjusted to open and close properly and are to be securely structured to prevent distortion whilst the brickwork and lintols, are being built.</u></p> <p><u>On completion of all other work the windows, doors, are to be adjusted as necessary and rendered in a complete and satisfactory state of repair and in working order.</u></p> <p><u>General. All rates for doors, windows, shopfronts etc , should include for all galzing as specified.</u></p> <p><u>Glazing beads: All door, etc to be fitted with galzing beads, unless otherwise described, mitred at angles and screwed on.</u></p> <p><u>Glass and Glazing: All functional glass must be delivered to site cut to size and ready for installation and must be classified to indicate grade and thickness. Labels must remain on each piece of glass until it is glazed, inspected and officially accepted in writing by the employer, thereafter an insurance letter will follow absolving the contractor of responsibilty.</u></p>	
<b>Carried Forward</b>	R
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 9 Metalwork <b>CLUSTER G</b></p>	

<b>Brought Forward</b>	R	
<p><u>AAAMSA guide</u></p> <p>All windows, doors, etc shall comply with and meet the minimum recommended performance requirements as set out in the General Specification for Architectural Aluminium and Glass Products (Third Edition) as published by the Association of Architectural Aluminium Manufacturers of South Africa (AAAMSA)</p> <p>The following specifications are to be complied with:</p> <p>Aluminium alloy extrusion: BS 1474 Aluminium alloy sheets: SANS 903 Anodising: SANS 999 Neoprene performed seals and gaskets: SATM C542 Powder coat finishing: SANS 1274</p> <p><u>Finish</u></p> <p>The windows, doors, etc shall be natural anodised to a thickness of 25 micron and shall comply with SABS 999 and 1407</p> <p><u>Glass</u></p> <p>Glazing to be with patent rubber gaskets with glazing beads and comply with BS 952. Thickness of glass shall be in accordance with table 1 (Part N : Glazing ). Safety glass shall comply with SABS 1263. The National Building Regulations shall be observed with regard to the specification of safety glass</p> <p><u>Design indemnity</u></p> <p>The contractor is to submit with his tender the "Form of Indemnity", annexed to this document, fully completed and signed</p> <p><u>Drawings</u></p> <p>Tenderers are referred to architect's drawings annexed to these bills of quantities for full details of windows, doors, etc</p>		
<b>Carried Forward</b>	R	
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 9 Metalwork <b>CLUSTER G</b></p>		

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
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Brought Forward			R
<u>Pricing.</u>			
All window prices should include aluminium louvres as shown			
<u>General</u>			
Workshop drawings to be approved by the architect before manufacture			
<u>Ironmongery</u>			
Prices for windows shall allow for two standard stainless steel side/top hung friction hinges and one bronze anodised aluminium handle per opening sash. Prices for doors shall allow for two pairs of standard flush bolts to double doors and one-and-a-half pairs of standard hinges per door leaf.			
<u>Natural anodised series 340 aluminium windows, doors, etc including sub-frames, fixing, silicone sealant all round, ironmongery and glazed with 6,38mm clear laminated safetyglass unless otherwise stated</u>			
8	Purpose made aluminium viewing panel size 2000 x 1110mm high in two equal fixed panes	No	1
9	Purpose made sliding viewing panel size 2000 x 1110mm high in three equal leafs (W6 & W5)	No	2
10	Purpose made aluminium double door in two equal leafs size 1575 x 2100mm high overall (D1)	No	2
<b>Carried Forward to Summary of Section No. 4</b>			R
Section No. 4			
MEDIUM ADMIN BLOCK			
Bill No. 9			
Metalwork			
<b>CLUSTER G</b>			

**BILLS OF QUANTITIES**  
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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.5</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO. 10</u></b>			
<b><u>PLASTERING</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<b><u>GRANOLITHIC</u></b>			
<u>Untinted granolithic on concrete</u>			
1	25mm Thick on floors and landings	m2	68
<b><u>SCREEDS</u></b>			
<u>Screeds on concrete</u>			
2	30mm Thick on floors	m2	229
<b><u>INTERNAL PLASTER</u></b>			
<u>Cement plaster on brickwork</u>			
3	On walls	m2	821
4	On narrow widths	m2	35
<b><u>CORNER PROTECTORS, DIVIDING STRIPS, ETC</u></b>			
Carried Forward			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 10 Plastering <b>CLUSTER G</b>			

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

Brass

5	3 x 32mm Flat section brass dividing strips between different floor finishes
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m

13

R

**Carried Forward to Summary of Section No. 4**

Section No. 4  
MEDIUM ADMIN BLOCK  
Bill No. 10  
Plastering  
**CLUSTER G**

R

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

Item No	Quantity	Rate	Amount
<b><u>SECTION NO.5</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO.11</u></b>			
<b><u>TILING</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
-----			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>Descriptions</u>			
Unless described as "fixed with adhesive to plaster (plaster elsewhere)" descriptions of tiling on brick or concrete walls, columns, etc shall be deemed to include 1:4 cement plaster backing and descriptions of tiling on concrete floors etc shall be deemed to include 1:3 plaster bedding			
<b><u>WALL TILING</u></b>			
<u>Glazed ceramic wall tiles (PC R110,00/m2 VAT excl.)</u> <u>fixed with adhesive to plaster (plaster elsewhere)</u>			
1	On walls	m2 122	
2	On narrow widths	m2 5	
<b><u>FLOOR TILING</u></b>			
<b>Carried Forward</b>			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 11 Tiling <b>CLUSTER G</b>			

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Brought Forward			R
	<u>300 x 300 x 11,5mm Ceramic floor tiles (PC</u> <u>R120.00/m2 VAT excl.) fixed with adhesive to plaster</u> <u>(plaster elsewhere) and flush pointed with tinted</u> <u>waterproof jointing compound</u>		
3	On floors and landings	m2	354
4	Skirting formed of ceramic tile cut to 300 x 75mm high	m	26
Carried Forward to Summary of Section No. 4			R
Section No. 4			
MEDIUM ADMIN BLOCK			
Bill No. 11			
Tiling			
CLUSTER G			



Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.5</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO.12</u></b>			
	<b><u>PLUMBING AND DRAINAGE</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>"Polycop" polypropylene pipes:</u>			
	Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated			
	Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions			
	All pipe diameters are nominal external			
	<u>"Polylink" polypropylene pipes:</u>			
	Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
	Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
	<b>Carried Forward</b>		R	
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

<b>Brought Forward</b>	R
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>	
<b>Carried Forward</b>	R
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b></p>	

<b>Brought Forward</b>	R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>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</p> <p><u>Copper pipes:</u></p> <p>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</p> <p><u>Fixing of pipes</u></p> <p><b>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</b></p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p>	
<b>Carried Forward</b>	R
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b></p>	

<b>Brought Forward</b>	R	
<p><u>Reducing fittings</u></p> <p>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</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Septic tanks</u></p> <p>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</p> <p><u>Exposed concrete surfaces</u></p> <p>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</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p>		
<b>Carried Forward</b>	R	
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b></p>		

<b>Brought Forward</b>	R
<p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>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 clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>Steel sectional water tanks</u></p> <p>Tanks shall comply with SABS CKS 114</p> <p><u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described</p>	
<b>Carried Forward</b>	R
<p>Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b></p>	

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Brought Forward			R
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<b><u>RAINWATER DISPOSAL</u></b>			
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 125mm Eaves gutters with beaded front edge	m	66
2	Extra over eaves gutter for angle	No	8
3	Extra over eaves gutter for stopped end	No	2
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	8
5	100mm Diameter rainwater pipes	m	25
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	8
7	Extra over rainwater pipe for shoe	No	8
<b><u>STORMWATER CHANNELS</u></b>			
<u>15 MPa/20 mm concrete</u>			
<b><u>SOIL DRAINAGE</u></b>			
<u>uPVC pipes</u>			
8	110mm Pipes vertically or ramped to cleaning eye etc (no excavation)	m	6
9	110mm Pipes laid in and including trenches not exceeding 1m deep	m	150
Carried Forward			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

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	Brought Forward			R
	<u>Extra over uPVC pipes for fittings</u>			
10	110mm Access bend	No	4	
11	110mm Access junction	No	3	
12	110mm Bend	No	3	
13	110mm Junction	No	3	
14	110mm uPVC rodding eye cover in end of pipe	No	2	
	<u>Pre-cast concrete gulleys</u>			
15	110mm Dished gulley not exceeding 1m deep with 150mm steel grate and standard concrete gulley surround	No	1	
	<u>Concrete pipes:</u>			
	<u>Inspection chambers (covers elsewhere)</u>			
16	Inspection chamber 450 x 600mm x exceeding 750mm and not exceeding 1000mm deep internally	No	1	
	<u>Covers, etc</u>			
17	450 x 600mm x 74kg Type 8A cast iron double seal manhole cover and frame	No	1	
	<u>Sundries</u>			
18	100mm Cast iron "ABC" cleaning eye	No	3	
19	Precast concrete inspection eye marker slab set in ground	No	4	
20	110mm Rodding eye	No	3	
21	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	2	
	<b>Carried Forward</b>			R
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

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	Brought Forward			R
	<u>"Cobra Watertech" or similar approved</u>			
28	Cobra Ref. 166/041 wall type "Star" sink mixer with overarm swivel outlet	No	1	
29	Cobra Watertech 15mm chrome plated hi-waste elbow action pillartap with blue indicator for cold water (Code: 504-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	6	
30	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	8	
	<b><u>SANITARY PLUMBING</u></b>			
	<u>uPVC pipes</u>			
31	50mm Pipes	m	9	
32	50mm Pipes laid in and including trenches not exceeding 1m deep	m	16	
33	110mm Pipes	m	65	
	<u>Extra over uPVC pipes for fittings</u>			
34	50mm Bend	No	6	
35	50mm Access bend	No	4	
36	50mm BSP adaptor	No	2	
37	50mm "GI Two-way" vent valve	No	1	
38	110mm Bend	No	4	
39	110mm Access bend	No	2	
40	110mm Pan Connector	No	2	
41	110mm "GI Two-way" vent valve	No	1	
	<b>Carried Forward</b>			R
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

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	Brought Forward			R
	<u>Sundries</u>			
	<b><u>WATER SUPPLIES</u></b>			
	<u>Class 16 uPVC pressure pipes with solvent welded joints</u>			
42	32mm Pipes laid in and including trenches not exceeding 1m deep	m	30	
43	50mm Pipes laid in and including trenches not exceeding 1m deep	m	25	
	<u>Extra over class 16 uPVC pressure pipes for fittings with solvent welded joints</u>			
44	32mm Bend	No	3	
45	32mm Reducer	No	2	
46	32mm Tee	No	4	
47	50mm Bend	No	3	
48	50mm Tee	No	2	
49	35 x 50 x 35mm Junction	No	1	
	<u>Class 0 copper pipes</u>			
50	15mm Pipes	m	85	
51	22mm Pipes	m	65	
	<u>Extra over class 0 copper pipes for capillary fittings</u>			
52	15mm Fittings	No	44	
53	22mm Fittings	No	37	
	<u>Brass</u>			
54	15mm Fullway gate valve	No	1	
	<b>Carried Forward</b>			R
	Section No. 4 MEDIUM ADMIN BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

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'Chubb' or similar approved

60	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish
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No

6

61	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket
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No

1

**Carried Forward to Summary of Section No. 4**

Section No. 4  
MEDIUM ADMIN BLOCK  
Bill No. 12  
Plumbing and Drainage  
**CLUSTER G**

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## **SECTION NO.5**

## BUILDING WORK

**BILL NO. 13**

## GLAZING

For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.

## GLAZING TO STEEL WITH PUTTY

4mm Clear float glass

1	Panes exceeding 0,1m2 and not exceeding 0,5m2	m2	3
2	Panes exceeding 0,5m2 and not exceeding 2m2	m2	22

4mm Rough cast glass

3	Panes exceeding 0,5m2 and not exceeding 2m2	m2	4
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**TOPS, SHELVES, DOORS, MIRRORS, ETC**

4 mm Silvered float glass copper backed mirrors with 10 mm bevelled and polished edges holed for and fixed with chromium plated dome capped mirror screws with rubber buffers to plugs in brickwork or concrete

4	Mirror 400 x 600mm high with four (4) screws	No	3
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**Carried Forward to Summary of Section No. 4**

Section No. 4  
MEDIUM ADMIN BLOCK  
Bill No. 13  
Glazing  
**CLUSTER G**

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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.5</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO. 14</u></b>			
<b><u>PAINTWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>DESCRIPTIONS</u></b>			
Descriptions of paintwork shall be deemed to include for all cutting in			
<b><u>PAINT SPECIFICATIONS</u></b>			
All painting shall be done in accordance with "Plascon-Evans" specifications			
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<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
<b><u>ON FLOATED PLASTER</u></b>			
Carried Forward			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 14 Paintwork <b>CLUSTER G</b>			

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Brought Forward			R
<u>Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274). Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.</u>			
5	On window sills not exceeding 300 mm girth	m	99
<b><u>ON METAL</u></b>			
<u>Plascon Velvagio Satin to exterior new mild steel (NW 683). Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3 of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvagio Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u>			
6	On door frames	m2	23
7	On strong room doors	m2	5
8	On windows with burglar bars	m2	69
9	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area )	m2	28
10	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	99
<b><u>ON WOOD</u></b>			
Carried Forward			R
Section No. 4 MEDIUM ADMIN BLOCK Bill No. 14 Paintwork <b>CLUSTER G</b>			



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Brought Forward			R
<u>Filling</u>			
Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
<u>Soil poisoning</u>			
Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent			
<b><u>SITE CLEARANCE, ETC.</u></b>			
<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	360
<b><u>REMOVAL TREES, ETC.</u></b>			
<u>Taking out and removing, grubbing up roots and filling holes.</u>			
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	4
<b><u>EXCAVATION, FILLING, ETC</u></b>			
<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	52
<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	5
Carried Forward			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 1 Foundations <b>CLUSTER G</b>			

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Brought Forward			R
	<u>Brickwork of NFP bricks in class II mortar</u>		
21	Half brick walls	m2	54
	<b><u>BRICKWORK SUNDRIES</u></b>		
	<u>Joint forming material in movement joints:</u>		
22	12mm Fibre board built in vertically between brick skins.	m2	10
	<u>Brickwork reinforcement</u>		
23	75mm Wide reinforcement built in horizontally	m	159
	<b><u>FACE BRICKWORK</u></b>		
	<u>Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>		
24	Extra over brickwork for face brickwork	m2	25
	<u>Brick-on-edge header course copings, sills, etc of face bricks (Purchase price R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
25	Coping on top of one brick wall	m	29
<b>Carried Forward to Summary of Section No. 5</b>			R
Section No. 5			
1 X 4 CLASSROOM BLOCK			
Bill No. 1			
Foundations			
<b>CLUSTER G</b>			

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.6</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO.2</u></b></p> <p><b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Cost of tests</u></p> <p>The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)</p> <p>Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated</p>			
<p><b>Carried Forward</b></p>			R
<p>Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b></p>			



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Brought Forward			R
<u>Formwork</u>			
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself			
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"			
<b><u>UNREINFORCED CONCRETE</u></b>			
<u>20MPa/19mm concrete</u>			
1	Aprons cast in panels to falls	m3	4
2	Ramps	m3	3
3	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	76
Carried Forward			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			

Brought Forward			R
<b><u>REINFORCED CONCRETE</u></b>			
<u>25MPa/19mm concrete</u>			
<b><u>CONCRETE SUNDRIES</u></b>			
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Surface beds, slabs, etc	m2	360
5	Ramp to falls	m2	8
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
6	Surface beds, slabs, etc	m2	52
7	Aprons to falls	m2	91
<b><u>FORMWORK</u></b>			
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
<u>Rough formwork to sides</u>			
8	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	30
<b><u>TEST CUBES</u></b>			
9	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0
<b><u>MOVEMENT JOINTS ETC</u></b>			
Carried Forward			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			

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	<b><u>SECTION NO.6</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO. 3</u></b>			
	<b><u>MASONRY</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<b><u>BRICKWORK</u></b>			
	<u>Sizes in descriptions</u>			
	Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick			
	<u>Linings to concrete</u>			
	Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties			
	<u>Hollow walls etc</u>			
	Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole			
	<u>Reinforced brick lintels</u>			
	Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous			
	<b>Carried Forward</b>		R	
	Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 3 Masonry <b>CLUSTER G</b>			

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Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>SUPERSTRUCTURE</u></b>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	L-shaped piers	m3	2
2	One brick walls	m2	401
<u>Joint forming material in movement joints:</u>			
3	12mm Bitumen impregnated fibre board built in vertically between brick skins not exceeding 300mm wide.	m2	82
<u>Brickwork reinforcement</u>			
4	150mm Wide reinforcement built in horizontally	m	1,180
<u>Turning pieces</u>			
5	230mm Wide turning piece to lintels etc	m	32
<u>"Allied Concrete" prestressed fabricated lintels</u>			
6	110 x 75mm Lintels in lengths not exceeding 3m	m	3
<u>Galvanised wire ties etc</u>			
7	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	46
<b><u>FACE BRICKWORK</u></b>			
Carried Forward			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 3 Masonry <b>CLUSTER G</b>			

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Brought Forward			R
<u>Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>			
8	Extra over brickwork for face brickwork	m2	354
9	Extra over for facing in piers, including bonding and pointed with recesses joints on all exposed faces	m2	12
10	Extra over for facings in beamfilling for face brickwork	m2	40
<u>Brick-on-edge header course copings, sills, etc of face bricks ( Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
11	Extra over brickwork for brick-on-edge header course lintel	m	32
<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>			
12	220mm Wide sill set sloping and slightly protecting outside	m	32
13	Coping on top of one brick wall	m	29
<b><u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u></b>			
<u>Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.</u>			
14	15mm x 150mm Wide sills set flat and slightly projecting	m	32
<b>Carried Forward to Summary of Section No. 5</b>			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 3 Masonry <b>CLUSTER G</b>			

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Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.6</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO.5</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	-----			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>General</u>			
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched			
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use			
	<u>Sizes</u>			
	All items are measured net unless otherwise described			
	<u>Flashings, trimming plates, etc.</u>			
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described			
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable			
	All items are unless otherwise described measured net			
	<b>Carried Forward</b>		R	
	Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 5 Roof Coveringss, etc <b>CLUSTER G</b>			



Brought Forward			R
<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	364
2	Ridge capping 550mm girth	m	26
3	Hip capping 550mm girth	m	32
4	Gable trim 550mm girth	m	8
<b><u>STEEL LOUVRES</u></b>			
<u>"NTY Steelworks" or similar approved</u>			
5	Triangular steel louvre size 3000x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	2
<b>Carried Forward to Summary of Section No. 5</b>			R
Section No. 5			
1 X 4 CLASSROOM BLOCK			
Bill No. 5			
Roof Coveringss, etc			
<b>CLUSTER G</b>			

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.6</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO.6</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
<p><b>Carried Forward</b></p>			<p>R</p>
<p>Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery <b>CLUSTER G</b></p>			

<p style="text-align: right;"><b>Brought Forward</b></p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>PREFABRICATED ROOF TRUSSES</u></b></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>	R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 6 Carpentry and Joinery <b>CLUSTER G</b></p>	R	

<b>Brought Forward</b>	R	
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>		
<b>Carried Forward</b>	R	
<p>Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 6 Carpentry and Joinery <b>CLUSTER G</b></p>		

<b>Brought Forward</b>	R
<p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m2 and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>	
<b>Carried Forward</b>	R
<p>Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery <b>CLUSTER G</b></p>	

<p style="text-align: right;"><b>Brought Forward</b></p> <p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p> <p><u>Specific specifications for roof trusses</u></p> <p>Unless otherwise described, the following specifications will apply:</p> <p>1 All trusses to be with a 10° pitch</p> <p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p> <p><b><u>ROOFS</u></b></p> <p><b><u>The following in plate nailed timber roof truss construction</u></b></p> <p><u>The following is applicable in respect of roof trusses</u></p> <p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p> <p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p> <p><u>Allow for the preparation and submission of the following documents in respect of all buildings</u></p> <p>1 Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication</p> <p>2 Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.</p> <p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 6 Capentry and Joinery <b>CLUSTER G</b></p>		R	
	Item		
	Item		
		R	

**BILLS OF QUANTITIES**  
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	Brought Forward		R	
	<u>Wrought meranti doors hung to steel frames</u>			
10	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	8	
	<b><u>FITTINGS</u></b>			
	<b><u>Shelving to various stores</u></b>			
	<b><u>"Novalam" particle board with white melamine laminated finish on one side</u></b>			
11	16mm Tops, shelves, sides, divisions, etc	m2	189	
	<u>Classroom School Furnitures, etc</u>			
12	Provide the sum of R200 000,00 (Two Hundred Thousand Rands) for classroom school furniture by Specialists		Item	200,000.00
13	Allow for giving every facility to Specialists as described		Item	
14	Allow for profit on above if required		Item	
<b>Carried Forward to Summary of Section No. 5</b>				
Section No. 5				
1 X 4 CLASSROOM BLOCK				
Bill No. 6				
Carpentry and Joinery				
<b>CLUSTER G</b>				



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### "Rhino" gypsum plasterboard cornices

3	75mm Coved cornices	m	386
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## NAILED UP AND SCREWED UP CEILINGS

6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints

4	Ceilings including 38 x 38mm brandering at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.	m2	286
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5	Sloping ceilings including 38 x 38mm sawn softwood brandering at 450mm centres	m2	69
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6	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening	No	4
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**Carried Forward to Summary of Section No. 5**

Section No. 5  
1 X 4 CLASSROOM BLOCK  
Bill No. 7  
Ceilings, Partitions and Access Flooring  
**CLUSTER G**

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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.6</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO.8</u></b>			
<b><u>IRONMONGERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>Descriptions</u>			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
<u>Finishes to ironmongery</u>			
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 SD Sanded			
<b><u>CATCHES,CABIN HOOKS, ETC</u></b>			
<u>"Solid"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	4
<b><u>LOCKS</u></b>			
<b>Carried Forward</b>			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 8 Ironmongery <b>CLUSTER G</b>			

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	Brought Forward			R
	<u>"Solid" or similar approved</u>			
2	"Code 630" padlock	No	4	
3	"Code 460/313" Blesbok four lever lockset	No	8	
	<b><u>DOOR CLOSERS AND FLOOR SPRINGS</u></b>			
	<u>"Dorma" or similar approved</u>			
	<b><u>SUNDRIES</u></b>			
	<u>"Solid" or similar approved</u>			
4	Dorma "Code 255" door stop plugged	No	8	
	<b><u>"Algoran Shelvit" with standard epoxy powder coated finish</u></b>			
5	Double slot wall bands plugged	m	58	
6	457mm Shelf bracket	No	158	
	<b><u>STEEL CUPBOARDS</u></b>			
	<u>Aproved steel lockers with standard baked enamel finish</u>			
7	G10 Double door steel cupboard 914 x 457 x 1828mm high with five shelves bolted to brickwork	No	4	
	<b><u>PINNING BOARDS, WRITING BOARDS, PROJECTION SCREENS, ETC</u></b>			
	<u>"Vitrex" or similar approved</u>			
8	Pinning boards 4000 x 1200mm high fixed to brickwork	No	8	
9	2000 x 1300 mm White Porcelain magnetic marker board	No	4	
	<b><u>LETTERS, NAMEPLATES, ETC</u></b>			
	Carried Forward			R
	Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 8 Ironmongery <b>CLUSTER G</b>			

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"Union" or similar approved

**Carried Forward to Summary of Section No. 5**

Section No. 5  
1 X 4 CLASSROOM BLOCK  
Bill No. 8  
Ironmongery  
**CLUSTER G**

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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.6</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO. 9</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
-----			
<u>Descriptions</u>			
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			
<u>Drawings</u>			
Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
<b><u>SUNDRY METALWORK</u></b>			
<u>The following in identical steel support columns</u>			
1	Bolts, complete with nuts and two washers each	kg	250
2	76 x 76 x 3mm Tubular section columns 3050mm high	No	15
<b>Carried Forward</b>			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 9 Metalwork <b>CLUSTER G</b>			

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	Brought Forward			R
3	75 x 6mm Flat section fixing plate 120mm, twice holed for bolt and welded to top end of tubular section column (Provisional)	No	15	
4	200 x 200 x 5mm Thick Base plate, with four holes for bolts and welded to bottom end of tubular section column	No	15	
5	12mm Diameter x 75mm long sleeved masonry anchor	No	15	
<b><u>WELDED SCREENS, GATES, ETC</u></b>				
<u>Gates to external doors</u>				
6	Gate and frame 900 x 2100mm high complete (G1)	No	4	
<b><u>PRESSED STEEL DOOR FRAMES</u></b>				
<u>1,2mm Double rebated frames suitable for one brick walls</u>				
7	Frame for door 813 x 2032mm high	No	4	
<b><u>STEEL WINDOWS, DOORS, ETC</u></b>				
<u>"Nty" or similar approved steel residential windows with burglar bars to all sashes</u>				
8	NTY Standard School type window "Code 5/2" size 1143 x 1272mm high (W1)	No	36	
9	NTY Standard School type window "Code 5/2" size 1143 x 859mm high (W2)	No	4	
<b>Carried Forward to Summary of Section No. 5</b>				R
Section No. 5				
1 X 4 CLASSROOM BLOCK				
Bill No. 9				
Metalwork				
<b>CLUSTER G</b>				

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Section No. 5  
1 X 4 CLASSROOM BLOCK  
Bill No. 10  
Plastering  
**CLUSTER G**



Section No. 5  
1 X 4 CLASSROOM BLOCK  
Bill No. 11  
Tiling  
**CLUSTER G**

Item No	Quantity	Rate	Amount
<b><u>SECTION NO.6</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO.12</u></b>			
<b><u>PLUMBING AND DRAINAGE</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>"Polycop" polypropylene pipes:</u>			
Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated			
Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions			
All pipe diameters are nominal external			
<b><u>RAINWATER DISPOSAL</u></b>			
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 125mm Eaves gutters with beaded front edge	m	88
2	Extra over eaves gutter for angle	No	4
<b>Carried Forward</b>			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

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	Brought Forward			R
3	Extra over eaves gutter for outlet for 100mm diameter pipe	No	4	
4	100mm Diameter rainwater pipes	m	16	
5	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	4	
6	Extra over rainwater pipe for shoe	No	4	
<b><u>STORMWATER CHANNELS</u></b>				
<u>15 MPa/20 mm concrete</u>				
7	Stormwater channel cast in panels	m3	38	
<b><u>FIRE APPLIANCES ETC</u></b>				
<u>'Chubb' or similar approved</u>				
8	9kg Dry chemical powder fire extinguisher, including standard hard wood backing plugged and backing finished with one coat dark stain and two coats clear suede polyurethane varnish	No	4	
9	"Everyway" hose reel complete with 30m plastic hose, chromium plated stopcock, shut-off nozzle and wall bracket	No	1	
<b>Carried Forward to Summary of Section No. 5</b>				R
Section No. 5				
1 X 4 CLASSROOM BLOCK				
Bill No. 12				
Plumbing and Drainage				
<b>CLUSTER G</b>				

Section No. 5  
1 X 4 CLASSROOM BLOCK  
Bill No. 13  
Glazing  
**CLUSTER G**

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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.6</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO. 14</u></b>			
<b><u>PAINTWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>DESCRIPTIONS</u></b>			
Descriptions of paintwork shall be deemed to include for all cutting in			
<b><u>PAINT SPECIFICATIONS</u></b>			
All painting shall be done in accordance with "Plascon-Evans" specifications			
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<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
<b><u>ON FLOATED PLASTER</u></b>			
Carried Forward			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 14 Paintwork <b>CLUSTER G</b>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
LDPWRI-B20305

Brought Forward			R
	<u>Plascon Polvin Super Acrylic to interior new cement plaster (NW 205). Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u>		
1	On internal walls	m2	343
	<b><u>ON FIBRE-CEMENT</u></b>		
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>		
2	On ceilings and cornices	m2	355
	<u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174). Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u>		
3	On fascias and barge boards	m2	74
	<u>Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274). Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.</u>		
4	On window sills not exceeding 300 mm girth	m	92
Carried Forward			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 14 Paintwork <b>CLUSTER G</b>			

Brought Forward			R
<b><u>ON METAL</u></b>			
<u>Plascon Velvaglo Satin to exterior new mild steel (NW 683). Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3 of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u>			
5	On door frames	m2	10
6	On windows with burglar bars	m2	115
7	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area )	m2	15
8	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	88
<b><u>ON WOOD</u></b>			
<u>Plascon Velvaglo Satin to interior new wood (NW 571). Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) &lt; 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u>			
9	On doors	m2	28
Carried Forward			R
Section No. 5 1 X 4 CLASSROOM BLOCK Bill No. 14 Paintwork <b>CLUSTER G</b>			

**BILLS OF QUANTITIES**  
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### Three coats matt varnish

**Carried Forward to Summary of Section No. 5**  
 Section No. 5  
 1 X 4 CLASSROOM BLOCK  
 Bill No. 14  
 Paintwork  
**CLUSTER G**



**BILLS OF QUANTITIES**  
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**LDPWRI-B20305**

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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.7</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO.1</u></b>			
<b><u>FOUNDATIONS</u></b>			
<b><u>EARTHWORKS</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>Nature of ground</u>			
The nature of the ground is assumed to be sandy weathered granite, therefore "earth", but possibly interspersed with "hard rock"			
<u>Excavation for working space in rock</u>			
Notwithstanding clause 11 page 8 of the Standard System of Measuring Building Work, excavation for working space in rock will be measured in cubic metres to the extent executed and given as "extra over" bulk excavation or trench and hole excavation as the case may be			
<u>Carting away of excavated material</u>			
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site			
<b>Carried Forward</b>			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 1 Foundations <b>CLUSTER G</b>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
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Brought Forward			R
<u>Filling</u>			
Notwithstanding the reference to prescribed multiple handling in clause 1 page 6 of the Standard System of Measuring Building Work, prices for filling and backfilling shall include for all selection and any multiple handling of material			
<u>Soil poisoning</u>			
Ant and weed poisoning will be applied in accordance to SABS specifications by Registered and Approved Specialists who will issue a five (5) year guarantee. The contractor will only be paid for this items once they have produced the said certificate to the Principal Agent			
<b><u>SITE CLEARANCE, ETC.</u></b>			
<u>Site clearance</u>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc.	m2	59
<b><u>REMOVAL TREES, ETC.</u></b>			
<u>Taking out and removing, grubbing up roots and filling holes.</u>			
2	Tree stump exceeding 200mm and not exceeding 500mm girth.	No	2
<b><u>EXCAVATION, FILLING, ETC</u></b>			
<u>Excavation in earth not exceeding 2m deep</u>			
3	Trenches	m3	6
<u>Extra over trench and hole excavations in earth for excavation in</u>			
4	Soft rock	m3	1
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 1 Foundations <b>CLUSTER G</b>			

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

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BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
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Brought Forward			R
	<u>Rough formwork to sides</u>		
20	Edges, risers, ends and reveals exceeding 300mm not exceeding 700mm high or wide	m	19
	<b><u>REINFORCEMENT</u></b>		
	<u>High tensile steel reinforcement to structural concrete work</u>		
21	10mm Diameter bars	t	0.09
22	12mm Diameter bars	t	0.07
23	20mm Diameter bars	t	0.22
	<b><u>TEST CUBES</u></b>		
24	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	10.0
	<b><u>BRICKWORK</u></b>		
	<u>Brickwork of NFP bricks in class II mortar</u>		
25	Half brick walls	m2	10
	<b><u>BRICKWORK SUNDRIES</u></b>		
	<u>Brickwork reinforcement</u>		
26	75mm Wide reinforcement built in horizontally	m	37
	<b><u>FACE BRICKWORK</u></b>		
	<u>Face bricks (Purchase price of R 4 000,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>		
27	Extra over brickwork for face brickwork	m2	10
<b>Carried Forward to Summary of Section No. 6</b>			R
Section No. 6			
1 X 4 WATERBORNE TOILET BLOCK			
Bill No. 1			
Foundations			
<b>CLUSTER G</b>			

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO7</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO.2</u></b>			
	<b><u>CONCRETE, FORMWORK AND REINFORCEMENT</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
	-----			
	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>Cost of tests</u>			
	The costs of making, storing and testing of concrete test cubes as required under clause 7 "Tests" of SABS 1200 G shall include the cost of providing cube moulds necessary for the purpose, for testing costs and for submitting reports on the tests to the architect. The testing shall be undertaken by an independent firm or institution nominated by the contractor and to the approval of the architect. (Test cubes are measured separately)			
	Breeze concrete shall consist of twelve parts clean dry furnace ash, free from coal or other foreign matter, to one part cement (12:1), the ash graded up to particles which will pass a 16,5mm ring from a minimum which fails to pass a 4,75mm mesh. The finer materials from the screening are to be first mixed with the cement into a mortar and the ash added afterwards and thoroughly incorporated			
	<b>Carried Forward</b>		R	
	Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			

Brought Forward			R
<u>Formwork</u>			
Description of formwork shall be deemed to include use and waste only (except where described as "left in" or "permanent"), for fitting together in the required forms, wedging, plumbing and fixing to true angles and surfaces as necessary to ensure easy release during stripping and for reconditioning as necessary before re-use			
The vertical strutting shall be carried down to such construction as is sufficiently strong to afford the required support without damage and shall remain in position until the newly constructed work is able to support itself			
Formworks to soffits of solid slabs etc shall be deemed to be slabs not exceeding 250mm thick unless otherwise described			
Formwork to soffits of slabs, beams, etc shall be deemed to be propped up exceeding 1,5m and not exceeding 3,5m high unless otherwise described			
Formwork to sides of bases, pile caps, ground beams, etc will only be measured where it is prescribed by the engineer for design reasons. Formwork necessitated by irregularity or collapse of excavated faces will not be measured and the cost thereof shall be deemed to be included in the allowance for taking the risk of collapse of the sides of the excavations, provision for which is made in "Earthworks"			
<b><u>UNREINFORCED CONCRETE</u></b>			
<u>20MPa/19mm concrete</u>			
1	Aprons cast in panels to falls	m3	3
2	Ramps	m3	1
3	Extra over concrete for thickening size 150mm deep 200mm top and tapering to 100mm at bottom including all excavation to 100mm backfilling etc.	m	28
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			



Brought Forward			R
<b><u>CONCRETE SUNDRIES</u></b>			
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
4	Surface beds, slabs, etc	m2	29
5	Ramp to falls	m2	3
<u>Finishing top surfaces of concrete smooth with a wood float</u>			
6	Aprons to falls	m2	35
<b><u>FORMWORK</u></b>			
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
<u>Rough formwork to sides</u>			
7	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	31
<b><u>TEST CUBES</u></b>			
8	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	5.0
<b><u>MOVEMENT JOINTS ETC</u></b>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
<u>Saw cut joints</u>			
9	Saw cut joints in top of concrete	m	14
<b><u>REINFORCEMENT</u></b>			
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 2 Concrete, Formwork and Reinforcement <b>CLUSTER G</b>			

### REINFORCEMENT (PROVISIONAL)

### Fabric reinforcement

10	Steeledale Mesh standard square fabric mesh, nominal mass 1,93 kg/m <sup>2</sup> with nominal 5,6mm thick wires and 200 x 200mm pitch (code 193), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.
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m2

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R|

**Carried Forward to Summary of Section No. 6**

Section No. 6  
1 X 4 WATERBORNE TOILET BLOCK  
Bill No. 2  
Concrete, Formwork and Reinforcement  
**CLUSTER G**

R

Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.7</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO. 3</u></b></p> <p><b><u>MASONRY</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><b><u>BRICKWORK</u></b></p> <p><u>Sizes in descriptions</u></p> <p>Where sizes in descriptions are given in brick units, "one brick" shall represent the length and "half brick" the width of a brick</p> <p><u>Linings to concrete</u></p> <p>Descriptions of linings to concrete, unless otherwise described, shall be deemed to include wire ties</p> <p><u>Hollow walls etc</u></p> <p>Descriptions of hollow walls shall be deemed to include wire ties and leaving every fifth perpend of the bottom course of the external skin open as a weep hole</p> <p><u>Reinforced brick lintels</u></p> <p>Lintels shall bear at least 160mm onto adjacent walling. Where such bearing cannot be obtained due to the proximity of adjacent openings the lintel shall be continuous</p>			
<p style="text-align: right;"><b>Carried Forward</b></p>			
<p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 3 Masonry <b>CLUSTER G</b></p>			
		R	

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
LDPWRI-B20305

Brought Forward			R
<u>Face bricks</u>			
Bricks shall be ordered timeously to obtain uniformity in size and colour			
<u>Pointing</u>			
Descriptions of recessed pointing to fair face brickwork and face brickwork shall be deemed to include square recessed, hollow recessed, weathered pointing, etc			
<b><u>SUPERSTRUCTURE</u></b>			
<u>Brickwork of NFP bricks in class II mortar</u>			
1	Half brick walls	m2	46
2	One brick walls	m2	77
<u>Brickwork reinforcement</u>			
3	75mm Wide reinforcement built in horizontally	m	134
4	150mm Wide reinforcement built in horizontally	m	226
<u>Turning pieces</u>			
5	230mm Wide turning piece to lintels etc	m	2
<u>"Allied Concrete" prestressed fabricated lintels</u>			
6	110 x 75mm Lintels in lengths not exceeding 3m	m	2
<u>Galvanised wire ties etc</u>			
7	4mm Diameter roof tie 2m girth bent double with one end fixed to timber and other end built into brickwork	No	12
<b><u>FACE BRICKWORK</u></b>			
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 3 Masonry <b>CLUSTER G</b>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
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Brought Forward			R
	<u>Face bricks (Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed horizontal and vertical joints</u>		
8	Extra over brickwork for face brickwork	m2	77
9	Extra over for facings in beamfilling for face brickwork	m2	7
	<u>Brick-on-edge header course copings, sills, etc of face bricks ( Purchase price R4 700,00 / 1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
10	Extra over brickwork for brick-on-edge header course lintel	m	2
	<u>Brick-on-edge header course copings, sills, etc of face bricks(Purchase price of R4 700,00/1000 VAT excl. delivered to site) pointed with recessed joints on all exposed faces</u>		
11	220mm Wide sill set sloping and slightly protecting outside	m	2
12	Coping on top of one brick wall	m	4
	<b><u>NUTEC-CEMENT/FIBRE-CEMENT WINDOW SILLS</u></b>		
	<u>Nutec window internal sill, size 150mm x 15mm thick, manufactured in accordance with SANS 803:2005 and installed below window with window sill lug screwed to underside of sill at 400mm centres, minimum of 75mm from end of window sill and bedded in Class II mortar with plastic slip joints at end of sills at plaster reveals and projecting from the finished face of wall, all in accordance with the manufacturer's recommendations.</u>		
13	15mm x 150mm Wide sills set flat and slightly projecting	m	2
<b>Carried Forward to Summary of Section No. 6</b>			R
Section No. 6			
1 X 4 WATERBORNE TOILET BLOCK			
Bill No. 3			
Masonry			
<b>CLUSTER G</b>			

Section No. 6  
1 X 4 WATERBORNE TOILET BLOCK  
Bill No. 4  
Waterproofing  
**CLUSTER G**

Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.7</u></b>			
	<b><u>BUILDING WORK</u></b>			
	<b><u>BILL NO.5</u></b>			
	<b><u>ROOF COVERINGS ETC</u></b>			
	For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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	<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
	<u>General</u>			
	All roof coverings, etc., to be with a covering of Z275 galvanising. All holes to be drilled and not punched			
	Where described as with "Chromadek" finish, all sheets, flashings, etc., shall be with "Chromadek" silicone polyester paint for exterior use			
	<u>Sizes</u>			
	All items are measured net unless otherwise described			
	<u>Flashings, trimming plates, etc.</u>			
	Prices to include for all cutting and waste and relevant fixing material, unless otherwise described			
	All rates for flashings, trimmings, etc., to include for forming drips and closed ends to troughs of sheet steel roof covering where applicable			
	All items are unless otherwise described measured net			
	<b>Carried Forward</b>		R	
	Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 5 Roof Coveringss, etc <b>CLUSTER G</b>			

Brought Forward			R
<b><u>PROFILED METAL SHEETING AND ACCESSORIES</u></b>			
<u>0,5mm "Brownbuilt Klip-Lok Light Industrial" galvanised troughed sheeting steel with "Chromadek - Traffic Green" finish on one side, in single lengths fixed to steel purlins or rails and 0,6mm galvanised steel accessories with "Chromadek" finish on one side, fixed to roof members by a firm of Specialists who will give a five (5) year guarantee, all in accordance with the manufacturer's instructions</u>			
1	Roof covering with pitch not exceeding 50 degrees	m2	56
<b><u>STEEL LOUVRES</u></b>			
<u>"NTY Steelworks" or similar approved</u>			
2	Triangular steel louvre size 1500x 500mm high fixed to timber purlins including watertight heading joints, necessary sealing strips, fixing accessories, etc	No	2
<b>Carried Forward to Summary of Section No. 6</b>			
Section No. 6			
1 X 4 WATERBORNE TOILET BLOCK			
Bill No. 5			
Roof Coveringss, etc			
<b>CLUSTER G</b>			



Item No	Quantity	Rate	Amount
<p><b><u>SECTION NO.7</u></b></p> <p><b><u>BUILDING WORK</u></b></p> <p><b><u>BILL NO.6</u></b></p> <p><b><u>CARPENTRY AND JOINERY</u></b></p> <p>For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.</p> <p>-----</p> <p><b><u>SUPPLEMENTARY PREAMBLES</u></b></p> <p><u>Particle board:</u></p> <p>Particle board shall comply with the following specifications:</p> <p>a) SABS 1300 Particle board: exterior and flooring type</p> <p>b) SABS 1301 Particle board: interior type</p> <p><u>Joinery:</u></p> <p>Descriptions of frames shall be deemed to include frames, transomes, mullions, rails, etc</p> <p>Descriptions of hardwood joinery shall be deemed to include pelleting of bolt holes</p> <p><u>Fixing</u></p> <p>Items described as "nailed" shall be deemed to be fixed with hardened steel nails or shot pins to brickwork or concrete</p>			
<p style="text-align: right;"><b>Carried Forward</b></p>			<p style="text-align: center;">R</p>
<p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 6 Capentry and Joinery <b>CLUSTER G</b></p>			

<p style="text-align: right;"><b>Brought Forward</b></p> <p><u>Decorative laminate finish:</u></p> <p>Laminate finish shall be glued under pressure. Edge strips shall be butt jointed at junctions with adjacent similar finish</p> <p><b><u>PREFABRICATED ROOF TRUSSES</u></b></p> <p><u>Pre-fabricated metal connected timber roof trusses</u></p> <p>All trusses shall be fabricated by an approved truss manufacturer who holds a current Certificate of Competence awarded by the Institute for Timber Construction</p> <p><u>Timber</u></p> <p>Timber for trusses to be South African softwood and shall be in accordance with the grades as defined in SABS Specification No 563 or as defined in SABS Specification No 1460</p> <p><u>Bolts</u></p> <p>Bolts shall be in accordance with BS 4190 or SABS 135</p> <p><u>Shear plates, tooth connectors and split rings</u></p> <p>Shear plates, tooth connectors and split rings shall be in accordance with BSS 1759 : 1960 and installed in accordance with the CSIR Publication HOUT 468, "The Design, Manufacturing and Erection of Timber Trusses"</p> <p><u>Washers</u></p> <p>Square or round washers of the following dimensions shall be used with all bolts:</p> <p>1 Bolts up to 8mm diameter: Washers shall be minimum 25mm wide of minimum 2,50mm thickness</p>		R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 6 Carpentry and Joinery <b>CLUSTER G</b></p>		R	

<b>Brought Forward</b>	R	
<p>2 Bolts up to 12mm diameter: Washers shall be minimum 36mm wide of minimum 4,00mm thickness</p> <p>3 Bolts up to 20mm diameter: Washers shall be minimum 60mm wide of minimum 5,00mm thickness</p> <p><u>Metal connector plates</u></p> <p>Metal connector plates shall be fabricated out of not less than 1mm thick drawn quality galvanised steel</p> <p>The steel shall have a minimum yield strength of 228MPa and a minimum ultimate tensile strength of 330MPa. The corrosion resisting coating shall be not less than 275g/m2 commercial class hot dipped galvanising as per SABS 934 before stamping</p> <p>All connector plates shall have been tested by the CSIR and be of a size capable of transmitting the forces between members of a truss without exceeding the design values published in the CSIR report</p> <p><u>Truss construction</u></p> <p>Trusses shall be constructed in jigs specially designed to ensure the correct profile, overhangs and cambers</p> <p>Where metal connector plates are used all joints are to be close fitted butt joints made by precision pressing of the metal connector plates into each side of the joint</p> <p><u>Truss design</u></p> <p>All trusses shall be designed by a registered Professional Engineer in accordance with SABS 0163 ("Design of Timber Structures") and Code 0160 ("Loadings")</p> <p><u>Truss spacing</u></p> <p>The truss centres shall be less than or equal to that as described in this bill for each respective truss</p>		
<b>Carried Forward</b>	R	
<p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 6 Carpentry and Joinery <b>CLUSTER G</b></p>		

<p style="text-align: right;"><b>Brought Forward</b></p> <p><u>Truss pitch</u></p> <p>The truss pitch shall be as described in this bill for each respective truss type</p> <p><u>Truss loading</u></p> <p>Trusses shall be designed for a live load of 0,50kN/m<sup>2</sup> and dead load as specified under the sub-heading "Specific load specifications for roof trusses"</p> <p><u>Shop drawings, design and erection guarantee certificates</u></p> <p>It will be expected from the Contractor to timeously prepare, submit and obtain the necessary approvals from the Representative/Agent in respect of the required shop drawings, design and erection guarantee certificates as specified</p> <p><u>Dimensions</u></p> <p>All dimensions given in the descriptions of the trusses are nominal and actual measurements are to be obtained by actual measurements taken on the site before design or fabrication commences</p> <p><u>Erection</u></p> <p>All trusses are to be hoisted and erected strictly in accordance with the procedures and recommendations of the manual "The Erection and Bracing of Timber roof Trusses" as published by the Institute for Timber Construction and the CSIR, or the SABS Code of Practice "The Design, Manufacture and Erection of Timber Roof Trusses", or as designed and detailed by the designer</p> <p><u>Design system</u></p> <p>The design system as documented in this bill is based on the "MiTek" system and all references given in the descriptions are related to specific type of trusses based on this design system</p>	R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 6 Carpentry and Joinery <b>CLUSTER G</b></p>	R	

<b>Brought Forward</b>		R	
<p>However, Contractors are to note that any design system of similar quality may be used subject to the prior written approval of the Representative/Agent</p>			
<p><u>Specific specifications for roof trusses</u></p>			
<p>Unless otherwise described, the following specifications will apply:</p>			
<p>1 All trusses to be with a 10° pitch</p>			
<p>2 The dead load consists of corrugated roof sheeting and purlins at approximately 1200mm centres</p>			
<p><b><u>ROOFS</u></b></p>			
<p><b><u>The following in plate nailed timber roof truss construction</u></b></p>			
<p><u>The following is applicable in respect of roof trusses</u></p>			
<p>The references given in the descriptions are to the respective types of trusses detailed on the architect's drawings annexed to these bills of quantities/accompanying these bills of quantities for tender purposes</p>			
<p>Prices for rafters and trusses to include all "Hurricane" clips, steel M-runners and "Permfix" plates, screws, nails, wires, sundry material, etc (bracing, wallplates, purlins and gangboarding are measured seperately)</p>			
<p><u>Allow for the preparation and submission of the following documents in respect of all buildings</u></p>			
<p>1 Detailed shop drawings indicating truss sizes, truss positions, bracings, details, etc. to be submitted for approval prior the commencement of any fabrication</p>	Item		
<p>2 Design certificate indicating the licensed programme used, SANS specifications adhered to, general procedures and loadings adopted, sizes and grading of timber components, details, etc.</p>	Item		
<b>Carried Forward</b>		R	
<p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 6 Capentry and Joinery <b>CLUSTER G</b></p>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
BILLS OF QUANTITIES  
MAKGOPELE PRIMARY SCHOOL  
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	Brought Forward			R
3	Erection guarantee certificate after the whole completed roof truss structure have been inspected, all defective work have been taken out and made good, etc. to the full satisfaction of the Principal Agent		Item	
	<u>Sawn softwood</u>			
4	Roof construction to double pitched roof supplied and erected complete in position with bracing, gangboarding, purlins, eaves purlins, hipped end, rafters etc. for <b>waterborne toilet block approximately 22m2 on plan</b> (Refer to architect's drawings attached to these bills of quantities)	No	1	
	<u>Sawn softwood grade 4</u>			
5	38 x 114mm Wall plates	m	28	
	<u>Sundries</u>			
6	Two coats creosote on sawn timbers	m2	6	
	<b><u>EAVES, VERGES, ETC</u></b>			
	<u>"Everite FC77" pressed fibre-cement</u>			
7	15 x 250mm Fascias and barge boards including galvanised steel H-profile jointing strips	m	28	
	<b><u>DOORS, ETC</u></b>			
	<u>Wrought meranti doors hung to steel frames</u>			
8	44mm Framed and ledged batten door 813 x 2032mm high of 44 x 100mm top rail and stiles, 22 x 100mm middle and bottom rails, covered on both sides with 6mm plywood with veneer (D3)	No	2	
<b>Carried Forward to Summary of Section No. 6</b>				R
Section No. 6				
1 X 4 WATERBORNE TOILET BLOCK				
Bill No. 6				
Carpentry and Joinery				
<b>CLUSTER G</b>				

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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.7</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO.7</u></b>			
<b><u>CEILING , ETC.</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>Descriptions:</u>			
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 elsewhere			
<b><u>CEILING CONSTRUCTION, CORNICES, ETC.</u></b>			
<b><u>Insulation</u></b>			
1	100mm glass fibre insulation blanket to manufacturer's specification, laid on ceiling.	m2	29
<b><u>Sawn softwood</u></b>			
2	38 x 114mm Ceiling joists (Provisional)	m	7
<b>Carried Forward</b>			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 7 Ceilings, Partitions and Access Flooring <b>CLUSTER G</b>			

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### "Rhino" gypsum plasterboard cornices

3	75mm Coved cornices
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m

28

## NAILED UP AND SCREWED UP CEILINGS

6mm "Everite Nutec" fibre-cement boards with H-profile primed steel jointing cover strips over joints

4	Ceilings including 38 x 38mm branderling at 90deg to trusses at maximum centres of 400mm by 32mm long galvanised nails.
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m2

29

5	Extra over ceiling for opening for 610 x 610mm trap door of 50 x 76mm wrought softwood rebated framing with one 38 x 38mm sawn softwood cross brander covered with ceiling board and fitted flush in opening
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No

1

**Carried Forward to Summary of Section No. 6**

Section No. 6

1 X 4 WATERBORNE TOILET BLOCK

Bill No. 7

## Ceilings, Partitions and Access Flooring

### CLUSTER G



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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.7</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO.8</u></b>			
<b><u>IRONMONGERY</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<u>Descriptions</u>			
Items described as "plugged" shall be deemed to include screwing to fibre, plastic or metal plugs			
<u>Finishes to ironmongery</u>			
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 SD Sanded			
<b><u>CATCHES,CABIN HOOKS, ETC</u></b>			
<u>"Solid"</u>			
1	100mm Cabin hook and eye including 70 x 70 x 20mm chamfered hardwood block twice oiled and plugged	No	6
<b><u>LOCKS</u></b>			
<b>Carried Forward</b>			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 8 Ironmongery <b>CLUSTER G</b>			

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Section No. 6  
1 X 4 WATERBORNE TOILET BLOCK  
Bill No. 8  
Ironmongery  
**CLUSTER G**

Item No	Quantity	Rate	Amount
<b><u>SECTION NO.7</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO. 9</u></b>			
<b><u>METALWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
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<u>Descriptions</u>			
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			
<u>Drawings</u>			
Tenderers are referred to architect's drawings annexed to this document for full details of the windows, doors, etc			
<b><u>WELDED SCREENS, GATES, ETC</u></b>			
<u>Gates to external doors</u>			
1	Gate and frame 900 x 2100mm high complete (G1)		
	No	2	
<b><u>PRESSED STEEL DOOR FRAMES</u></b>			
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 9 Metalwork <b>CLUSTER G</b>			

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1,2mm Double rebated frames suitable for half brick walls

2	Frame for door 813 x 2032mm high	No	4
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1,2mm Double rebated frames suitable for one brick walls

3	Frame for door 813 x 2032mm high	No	2
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## STEEL WINDOWS, DOORS, ETC

"Nty" or similar approved steel residential windows with burglar bars to all sashes

4	Window type NC 1, size 533 x 949mm high	No	4
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**Carried Forward to Summary of Section No. 6**

Section No. 6  
1 X 4 WATERBORNE TOILET BLOCK  
Bill No. 9  
Metalwork  
**CLUSTER G**

Section No. 6  
1 X 4 WATERBORNE TOILET BLOCK  
Bill No. 10  
Plastering  
**CLUSTER G**

Section No. 6  
1 X 4 WATERBORNE TOILET BLOCK  
Bill No. 11  
Tiling  
**CLUSTER G**

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<b>Brought Forward</b>	R
<p>Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers</p> <p>Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers</p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><u>Concrete pipes:</u></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><u>Vitrified clay pipes:</u></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><u>uPVC pipes and fittings:</u></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><u>uPVC pressure pipes and fittings:</u></p> <p>Pipes for water supply shall be of the class stated</p>	
<b>Carried Forward</b>	R
<p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b></p>	



<b>Brought Forward</b>	R
<p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>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</p> <p><u>Copper pipes:</u></p> <p>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</p> <p><u>Fixing of pipes</u></p> <p><b>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</b></p> <p><u>Lead pipes and fittings</u></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p>	
<b>Carried Forward</b>	R
<p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b></p>	

<b>Brought Forward</b>	R
<p><u>Reducing fittings</u></p> <p>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</p> <p><u>Wire gratings</u></p> <p>Descriptions of gutter outlets etc shall be deemed to include wire balloon gratings</p> <p><u>Septic tanks</u></p> <p>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</p> <p><u>Exposed concrete surfaces</u></p> <p>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</p> <p><u>Excavations</u></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p>	
<b>Carried Forward</b>	R
<p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b></p>	

<b>Brought Forward</b>	R
<p><u>Laying, backfilling, bedding, etc. of pipes</u></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>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 clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><u>Flush pans</u></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p> <p><u>Waste unions</u></p> <p>Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings</p> <p><u>Steel sectional water tanks</u></p> <p>Tanks shall comply with SABS CKS 114</p> <p><u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></p> <p>Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described</p>	
<b>Carried Forward</b>	R
<p>Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b></p>	

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Brought Forward			R
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<b><u>RAINWATER DISPOSAL</u></b>			
<u>0,6mm Galvanised sheet iron with "Chromadek" finish on one side</u>			
1	100 x 125mm Eaves gutters with beaded front edge	m	28
2	Extra over eaves gutter for angle	No	4
3	Extra over eaves gutter for stopped end	No	2
4	Extra over eaves gutter for outlet for 100mm diameter pipe	No	4
5	100mm Diameter rainwater pipes	m	16
6	Extra over rainwater pipe for eaves or plinth offset 450mm projection	No	4
7	Extra over rainwater pipe for shoe	No	4
<b><u>SOIL DRAINAGE</u></b>			
<u>uPVC pipes</u>			
8	110mm Pipes vertically or ramped to cleaning eye etc (no excavation)	m	10
9	110mm Pipes laid in and including trenches not exceeding 1m deep	m	70
<u>Extra over uPVC pipes for fittings</u>			
10	110mm Access bend	No	4
11	110mm Access junction	No	4
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

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					R
	<b>Brought Forward</b>				
12	110mm Bend	No	8		
13	110mm Junction	No	2		
14	110mm uPVC rodding eye cover in end of pipe	No	4		
	<u>Sundries</u>				
15	100mm Cast iron "ABC" cleaning eye	No	1		
16	Precast concrete inspection eye marker slab set in ground	No	1		
17	110mm Rodding eye	No	1		
18	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in soft rock	m3	2		
19	Extra over excavation in earth for pipe trenches, chambers, etc for excavation in hard rock	m3	2		
	<b><u>SANITARY FITTINGS</u></b>				
	<u>"Vaal" or similar approved</u>				
20	Vaal Sanitaryware 510 x 405mm Hibiscus White vitreous china lavatory basin (Code : 7023) with two tapholes including integrated overflow and chainstay hole, bolted to wall with two 10mm bolts (product code 8448Z0).	No	3		
21	Vaal Sanitaryware Hibiscus White vitreous china close coupled washdown suite comprising 90° outlet open rim pan (product code 772600) and matching 6/3 litre front dual flush cistern (product code 710539) including "PARKER AVANT" toilet seat	No	2		
	<b><u>WASTE UNIONS ETC</u></b>				
	<u>"Cobra Watertech" or similar approved</u>				
22	38mm "Cobra 316" unslotted waste and plug with chain	No	2		
	<b>Carried Forward</b>				R
	Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>				

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Brought Forward			R
<b><u>TRAPS ETC</u></b>			
<u>"Marley" or similar approved</u>			
<u>Chromium plated</u>			
23	32 x 40mm Bottle trap	No	3
<b><u>CATCH PITS ETC</u></b>			
<u>The following in stormwater catchpits, junction boxes and inlet manholes</u>			
<b><u>TAPS, VALVES, ETC</u></b>			
<u>"Cobra Watertech" or similar approved</u>			
24	Cobra Watertech 15mm chrome plated hi-waste elbow action pillartap with blue indicator for cold water (Code: 504-21B), manufactured in accordance with SANS 226:2004 Type 2 (BS 5412).	No	4
25	Cobra Watertech 15mm compression type angle regulating valve with 10mm bendable copper outlet tube service connection (Code: 232/350).	No	4
<b><u>SANITARY PLUMBING</u></b>			
<u>uPVC pipes</u>			
26	50mm Pipes	m	10
27	50mm Pipes laid in and including trenches not exceeding 1m deep	m	26
28	110mm Pipes	m	12
<u>Extra over uPVC pipes for fittings</u>			
29	50mm Bend	No	40
30	50mm Access bend	No	4
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

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	Brought Forward			R
31	50mm BSP adaptor	No	2	
32	50mm "GI Two-way" vent valve	No	1	
33	110mm Bend	No	4	
34	110mm Access bend	No	4	
35	110mm Pan Connector	No	4	
36	110mm "GI Two-way" vent valve	No	1	
	<u>Sundries</u>			
	<b><u>WATER SUPPLIES</u></b>			
	<u>Class 16 uPVC pressure pipes with solvent welded joints</u>			
37	32mm Pipes laid in and including trenches not exceeding 1m deep	m	23	
	<u>Extra over class 16 uPVC pressure pipes for fittings with solvent welded joints</u>			
38	32mm Bend	No	4	
	<u>Class 0 copper pipes</u>			
39	15mm Pipes	m	24	
40	22mm Pipes	m	23	
	<u>Extra over class 0 copper pipes for capillary fittings</u>			
41	15mm Fittings	No	34	
42	22mm Fittings	No	25	
	<u>Brass</u>			
43	15mm Fullway gate valve	No	1	
	<b>Carried Forward</b>			R
	Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 12 Plumbing and Drainage <b>CLUSTER G</b>			

		Brought Forward			R
44	22mm Fullway gate valve	No	1		
Carried Forward to Summary of Section No. 6					R
Section No. 6					
1 X 4 WATERBORNE TOILET BLOCK					
Bill No. 12					
Plumbing and Drainage					
CLUSTER G					



Section No. 6  
1 X 4 WATERBORNE TOILET BLOCK  
Bill No. 13  
Glazing  
**CLUSTER G**

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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.7</u></b>			
<b><u>BUILDING WORK</u></b>			
<b><u>BILL NO. 14</u></b>			
<b><u>PAINTWORK</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades.			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>DESCRIPTIONS</u></b>			
Descriptions of paintwork shall be deemed to include for all cutting in			
<b><u>PAINT SPECIFICATIONS</u></b>			
All painting shall be done in accordance with "Plascon-Evans" specifications			
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<b><u>PAINTWORK ETC TO NEW WORK</u></b>			
<b><u>ON FLOATED PLASTER</u></b>			
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork <b>CLUSTER G</b>			

Brought Forward			R
	<u>Plascon Polvin Super Acrylic to interior new cement plaster (NW 205). Surface to be dry, sound and clean and cured for a minimum of 14 days, with a moisture content measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Polvin Super Acrylic (EPL) with 1 hour drying time between coats, for a maintenance cycle of 5 years in a C1 - inland environment.</u>		
1	On internal walls	m2	168
	<b><u>ON FIBRE-CEMENT</u></b>		
	<u>One coat primer, one coat universal undercoat and two coats super acrylic PVA paint</u>		
2	On ceilings and cornices	m2	29
	<u>Plascon Sure Coat Gloss Enamel to exterior new fibre cement (NW 174). Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 2 years in a C1 - inland environment.</u>		
3	On fascias and barge boards	m2	4
	<u>Plascon Sure Coat Gloss Enamel to interior new fibre cement (NW 274). Surface to be dry, sound and clean, with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale - 8% or less. Prime with one coat of Plascon Plaster Primer (UC 56) with an overcoating time of 16 hours and finish with two coats of Sure Coat Gloss Enamel (SGE) with 16 hours drying time between coats, for a maintenance cycle of 4 years in a C1 - inland environment.</u>		
	<b><u>ON METAL</u></b>		
Carried Forward			R
Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork <b>CLUSTER G</b>			

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	<b>Brought Forward</b>			R	
	<u>Plascon Velvaglo Satin to exterior new mild steel (NW 683). Surface to be clean and dry. Remove surface contaminants using Plascon Aquasolv Degreaser (GR 1) with bristle brush or Brillo pads. Rinse thoroughly with tap water until surface is water break-free. Remove rust and millscale by abrasive blasting to ISO 8501 - 01:1988 - Sa2½ or by hand/mechanical wire brushing to St3 of the same standard. Allow to dry completely and prime within 4 hours of cleaning. Prime with one coat of Metal Primer (UC 501) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 3 years in a C1 - inland environment.</u>				
4	On door frames	m2	5		
5	On windows with burglar bars	m2	2		
6	On gates, grilles, burglar screens, balustrading, etc (both sides measured over the full flat area )	m2	4		
7	On outside of eaves gutters and rainwater pipes before fixing not exceeding 300mm high	m	56		
	<b><u>ON WOOD</u></b>				
	<u>Plascon Velvaglo Satin to interior new wood (NW 571). Surface to be dry, sound and clean. Wash knots and resinous areas with Lacquer Thinners (ILS 1) and coat with Woodcare Knot Seal (PK 2) and apply one coat of Plascon Woodcare Pretreatment (WWP 1), overcoated within 48 hours with a moisture content, measured with a Doser Hygrometer (or equivalent), of BD 2 scale (A1-A5) &lt; 14% or less. Prime with one coat of Wood Primer (UC 2) with an overcoating time of 16 hours and finish with two coats of Velvaglo Satin (VLO) with 16 hours drying time between coats, for a maintenance cycle of 7 years in a C1 - inland environment.</u>				
8	On doors	m2	13		
	<b>Carried Forward</b>			R	
	Section No. 6 1 X 4 WATERBORNE TOILET BLOCK Bill No. 14 Paintwork <b>CLUSTER G</b>				

	Brought Forward			R
9	<u>Three coats matt varnish</u> On doors	m2	8	
<b>Carried Forward to Summary of Section No. 6</b>				
Section No. 6				
1 X 4 WATERBORNE TOILET BLOCK				
Bill No. 14				
Paintwork				
<b>CLUSTER G</b>				
				R

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

[illegible]

Item No	Quantity	Rate	Amount
<b><u>SECTION NO. 8</u></b>			
<b><u>EXTERNAL WORK</u></b>			
<b><u>BILL NO. 1</u></b>			
<b><u>EARTHWORKS (PROVISIONAL)</u></b>			
For preambles see "Model Preambles for Trades (2008 Edition)" and Supplementary preambles as specified in the Trades as well as Engineering Specifications attached to these documents.			
<b><u>EARTHWORKS (PROVISIONAL)</u></b>			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>NOTE</u></b>			
All earthworks shall comply with the requirements of the latest relevant SABS 1200 Specifications: 1200C; 1200D;1200DM			
<b><u>Nature of ground</u></b>			
The nature of the ground is assumed to be gravel, therefore "earth", but possibly interspersed with soft rock			
<b><u>Specific Requirements of imported G6 material</u></b>			
The imported material must conform to the following criteria:			
(1) Minimum CBR at 93% Mod. AASHTO Density: 15			
(2) Minimum swell at 100% Mod. AASHTO Density: 1,5%			
(3) Maximum PI: 12			
(4) Maximum size particles in material: 63mm			
(5) Grading modulus: $2,7 \geq GM \geq 0,75$			
<b>Carried Forward</b>			R
Section No. 7 EXTERNAL WORKS Bill No. 1 Bulk Earthworks <b>CLUSTER G</b>			

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Brought Forward				R
<b><u>Carting away of excavated material</u></b>				
Descriptions of carting away of excavated material shall be deemed to include loading excavated material onto trucks directly from the excavations or, alternatively, from stock piles situated on the building site				
<b><u>BULK EXCAVATION, FILLING, ETC</u></b>				
<b><u>Excavations</u></b>				
<b><u>Site clearance</u></b>				
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	585	
<b><u>Open face excavation in earth over sloping site</u></b>				
2	Open face excavation	m3	339	
<b><u>Extra over bulk excavation in earth for excavation in</u></b>				
3	Soft rock	m3	34	
4	Hard rock	m3	17	
<b><u>Extra over all excavations for carting away</u></b>				
5	Surplus material from excavations and/or stock piles on site to a dumping site to be located by the contractor	m3	90	
<b><u>Risk of collapse of excavations</u></b>				
6	Sides of trench and hole excavations not exceeding 1 500mm deep	m2	120	
<b><u>Keeping excavations free of water</u></b>				
7	Keeping excavations free of all water other than subterranean water		Item	
<b>Carried Forward</b>				R
Section No. 7 EXTERNAL WORKS Bill No. 1 Bulk Earthworks <b>CLUSTER G</b>				



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Brought Forward				R
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
8	Earth filling obtained from excavations compacted to 95% Mod AASHTO density	m3	88	
	<b><u>Earth filling supplied by the contractor compacted to 95% Mod AASHTO density</u></b>			
	The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.			
	Where described as "imported" the gravel to be supplied and carted on by the contractor from an approved borrow pit			
9	150mm Imported C4 material with and including 3% 32,50 BV cement and consolidated to 97% mod. AASHTO density	m3	76	
10	150mm Imported G6 material compacted to 95% mod. AASHTO density	m3	88	
11	150mm Imported G7 material compacted to 95% mod. AASHTO density	m3	88	
	<b><u>Prescribed density tests on filling</u></b>			
12	"Modified AASHTO Density" test	No	10	
13	Maximum dry density and optimum moisture content (MOD)	No	10	
<b>Carried Forward to Summary of Section No. 7</b>				R
Section No. 7 EXTERNAL WORKS Bill No. 1 Bulk Earthworks <b>CLUSTER G</b>				

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Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.8</u></b>			
	<b><u>EXTERNAL WORKS</u></b>			
	<b><u>BILL NO 4</u></b>			
	<b><u>PARKING AND PAVINGS</u></b>			
	Materials and workmanship must be in accordance to the following SABS 1200 specifications:			
	C - Site clearance			
	D - Earthworks			
	DM - Earthworks (Roads, subgrade)			
	M - Roads (General)			
	ME - Sub-base			
	MF - Base			
	MK - Kerb and Channeling			
	MM - Ancillary Roadworks			
	<b><u>ACCESS ROAD AND VEHICLE PARKING</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>Excavations</u></b>			
	<b><u>Site clearance</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	707	
2	Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum CBR 3)	m2	707	
3	Excavate in pickable earth to reduce ground level below paving and set aside for later use	m3	424	
	<b>Carried Forward</b>		R	
	Section No. 7 EXTERNAL WORKS Bill No. 2 Paving and Carports <b>CLUSTER G</b>			

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	Brought Forward			R
4	Ditto, but cart away excavated material to a dumping place to be found by the contractor (cut to spoil)	m3	318	
5	Extra over excavation for excavation in soft rock	m3	71	
6	Ditto, but in hard rock	m3	35	
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
7	Under floors, steps, paving, etc	m3	106	
	<u>Earth filling supplied by the contractor under pavings etc</u>			
	The following to be natural selected gravel layers evenly spread and consolidated in layers and dimensions as specified and on the drawings. All thicknesses to be consolidated thicknesses.			
	Where described as "imported" the gravel to be supplied and carted on by the contractor from an approved borrow pit			
8	Over site of G7 material in accordance with SABS 1200 DM compacted to 95% Mod AASHTO density	m3	106	
9	150mm Imported G6 material compacted to 95% mod. AASHTO density	m3	106	
10	150mm Imported C4 material with and including 3% 32,50 BV cement and consolidated to 97% mod. AASHTO density	m3	106	
11	25mm Thick layer clean,dry, riversand layer treated with an approved weed killer at the rate of 50 grams per square metre,spread and levelled to receive paving blocks (elsewhere measured)	m2	707	
	Carried Forward			R
	Section No. 7 EXTERNAL WORKS Bill No. 2 Paving and Carports <b>CLUSTER G</b>			

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Brought Forward			R
<b><u>Compaction of surfaces</u></b>			
12	Compaction of ground surface under parking areas etc by wetting and compacting	m2	707
<b><u>Prescribed density tests on filling</u></b>			
13	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	10
14	Tests to determine the degree of compaction, etc of ground filling	No	10
<b><u>PAVING</u></b>			
<b><u>Interlocking Pavings</u></b>			
15	80mm Thick double interlocking (DZZ) precast grey coloured concrete paving blocks laid in a herringbone pattern on and including 20mm sand founding layer with and covered with sand layer sweep into joints	m2	707
16	Circular cutting to paving	m	35
<b><u>Kerbs, etc</u></b>			
17	Precast concrete figure 7 mountable kerb (SABS 927), levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	283
18	Precast concrete figure 7 kerb (SABS 927), circular on plan n.e 4m area levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	247
Carried Forward			R
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		<b>Brought Forward</b>		R	
	<b><u>Sundries</u></b>				
19	Mass concrete (25MPa) in 300 x 150mm edge filler strip finished smooth on top with a wood float, including all excavation, formwork, etc	m	8		
	<b><u>PAINTWORK</u></b>				
	<b><u>Prepare and paint one coat reflective road marking paint on concrete paving block surfaces</u></b>				
20	Lines 100mm wide	m	70		
21	Disable persons pictorial 1000mm high	No	1		
	<b><u>Sign Faces with Painted or Galvanised (as stated) Background, with Painted Symbols, Characters, Legend and Borders, and with Signboardings Constructed from:</u></b>				
	<b><u>Sign Supports supplied and installed including excavations, backfilling, concrete, disposal, etc</u></b>				
22	Steel tubing 76mm diameter x 2,5mm thick CHS sections 3m long, with two coats bitumen tar below ground and zinc phosphate primer and two coats metal paint above ground	No	1		
	<b><u>ASSEMBLY AREA AND WALKWAYS</u></b>				
	<b><u>EARTHWORKS</u></b>				
	<b><u>Excavations</u></b>				
	<b><u>Site clearance</u></b>				
23	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	1,537		
24	Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum CBR 3)	m2	1,537		
	<b>Carried Forward</b>			R	
	Section No. 7 EXTERNAL WORKS Bill No. 2 Paving and Carports <b>CLUSTER G</b>				

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Brought Forward			R
<b><u>Prescribed density tests on filling</u></b>			
33	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	10
34	Tests to determine the degree of compaction, etc of ground filling	No	10
<b><u>PAVING</u></b>			
<b><u>Interlocking Pavings</u></b>			
35	60mm Thick double interlocking (DZZ) precast grey coloured concrete paving blocks laid in a herringbone pattern on and including 20mm sand founding layer with and covered with sand layer sweep into joints	m2	1,537
36	Circular cutting to paving	m	615
<b><u>Kerbs, etc</u></b>			
37	Precast concrete figure 7 mountable kerb (SABS 927), levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	615
38	Precast concrete figure 7 kerb (SABS 927), circular on plan n.e 4m area levelled and jointed in 1:5 cement mortar complete with 15Mpa/19mm in situ concrete support blocks size 225 x 150 x 225mm high, at joints at 1,0m centres, including leaving 6mm expansion joints at 10m intervals between kerbs	m	461
<b><u>Sundries</u></b>			
39	Mass concrete (25MPa) in 300 x 150mm edge filler strip finished smooth on top with a wood float, including all excavation, formwork, etc	m	15
Carried Forward			R
Section No. 7 EXTERNAL WORKS Bill No. 2 Paving and Carports <b>CLUSTER G</b>			

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Brought Forward		R
<b><u>CARPORTS</u></b>		
40	Provide the amount of R350 000,00 (Three Hundred Fifty Thousand Rand) for the supply and installation of Carports by Specialists	Item 350,000.00
41	Allow for profit on above if required	Item
42	Allow for giving every facility to Specialists as described	Item
Carried Forward to Summary of Section No. 7		R
Section No. 7		
EXTERNAL WORKS		
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Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.8</u></b>			
	<b><u>EXTERNAL WORKS</u></b>			
	<b><u>BILL NO 4</u></b>			
	<b><u>STORMWATER DRAINAGE</u></b>			
	Materials and workmanship must be in accordance to the following SABS 1200 specifications:			
	C - Site clearance			
	D - Earthworks			
	DM - Earthworks (Roads, subgrade)			
	M - Roads (General)			
	ME - Sub-base			
	MF - Base			
	MK - Kerb and Channeling			
	MM - Ancillary Roadworks			
	<b><u>ACCESS ROAD AND VEHICLE PARKING</u></b>			
	<b><u>EARTHWORKS</u></b>			
	<b><u>Excavations</u></b>			
	<b><u>Site clearance</u></b>			
1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc for paving and bulk site clearance	m2	207	
2	Rip and scarify ground level to a depth of 150mm and consolidate to 90% mod. AASHTO density (minimum CBR 3)	m2	207	
3	Excavate in pickable earth to reduce ground level below paving and set aside for later use	m3	49	
	<b>Carried Forward</b>		R	
	Section No. 7 EXTERNAL WORKS Bill No. 3 Stormwater Drainage <b>CLUSTER G</b>			

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	Brought Forward			R
4	Ditto, but cart away excavated material to a dumping place to be found by the contractor (cut to spoil)	m3	49	
5	Extra over excavation for excavation in soft rock	m3	5	
6	Ditto, but in hard rock	m3	2	
	<u>Earth filling obtained from the excavations and /or prescribed stock piles on site including compacted to 93% Mod AASHTO density</u>			
7	Under floors, steps, paving, etc	m3	31	
	<u>Earth filling supplied by the contractor under pavings etc</u>			
	<u>Compaction of surfaces</u>			
8	Compaction of ground surface under parking areas etc by wetting and compacting	m2	207	
	<u>Prescribed density tests on filling</u>			
9	In-situ dry density (sand replacement) test in accordance with method A10 (a) of TMH 1	No	10	
	<u>REINFORCED CONCRETE</u>			
	<u>30MPa/19mm concrete</u>			
10	Stormwater channels cast in panels	m3	21	
	<u>CONCRETE SUNDRIES</u>			
	<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
11	Surface beds, slabs, etc	m2	207	
	<u>FORMWORK</u>			
	Carried Forward			R
	Section No. 7 EXTERNAL WORKS Bill No. 3 Stormwater Drainage CLUSTER G			

Brought Forward			R
<b><u>ROUGH FORMWORK (DEGREE OF ACCURACY II)</u></b>			
<u>Rough formwork to sides</u>			
12	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	207
<b><u>TEST CUBES</u></b>			
13	Allow for preparing a set of three concrete strength test cubes, each size 150 x 150 x 150mm, sending them to an approved Testing Laboratory for testing and paying all charges in connection therewith.	Sets	5.0
<b><u>MOVEMENT JOINTS ETC</u></b>			
<u>Expansion joints with bitumen impregnated softboard between vertical concrete and brick surfaces</u>			
14	Saw cut joints in top of concrete	m	207
<b><u>REINFORCEMENT</u></b>			
<b><u>REINFORCEMENT (PROVISIONAL)</u></b>			
<u>Fabric reinforcement</u>			
15	Type 311 fabric reinforcement in concrete slabs etc	m2	207
<b>Carried Forward to Summary of Section No. 7</b>			R
Section No. 7			
EXTERNAL WORKS			
Bill No. 3			
Stormwater Drainage			
<b>CLUSTER G</b>			

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Item No		Quantity	Rate	Amount
	<b><u>SECTION NO.8</u></b>			
	<b><u>EXTERNAL WORKS</u></b>			
	<b><u>BILL NO 4</u></b>			
	<b><u>WATER SUPPLIES</u></b>			
	<u>Materials and workmanship must be in accordance to the following SABS 1200 specifications:</u>			
	C - Site clearance			
	D - Earthworks			
	DM - Earthworks (Roads, subgrade)			
	M - Roads (General)			
	ME - Sub-base			
	MF - Base			
	MK - Kerb and Channeling			
	MM - Ancillary Roadworks			
	<u>Class 6 uPVC pipes including fittings</u>			
1	75mm Pipes laid in and including trenches not exceeding 1m deep	m	430	
2	25mm Pipes laid in and including trenches not exceeding 1m deep	m	70	
	<u>Extra over class 6 uPVC pressure pipes for fittings with solvent welded joints</u>			
3	25mm Junction	No	4	
4	25mm Bend	No	8	
5	75 x 25mm Reducer	No	12	
6	25 x 15 x 25mm Tee	No	12	
7	25 x 22mm Reducer	No	4	
	<b>Carried Forward</b>		R	
	Section No. 7 EXTERNAL WORKS Bill No. 4 Water Supply <b>CLUSTER G</b>			

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**Carried Forward to Summary of Section No. 7**

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EXTERNAL WORKS  
Bill No. 4  
Water Supply  
**CLUSTER G**

Item No	Quantity	Rate	Amount
<b><u>SECTION NO.8</u></b>			
<b><u>BILL NO. 6</u></b>			
<b><u>SOIL DRAINAGE</u></b>			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
<b><u>"Polycop" polypropylene pipes:</u></b>			
Polypropylene pipes 54mm diameter and under shall be seamless copper coloured class 16 pipes jointed with "Fast-fuse" heat welded thermoplastic or brass compression fittings as designed for use with copper pipes as stated			
Pipes shall be firmly fixed to walls etc with coloured nylon snap-in pipe clips with provision for accommodating thermal movement and jointed and fixed strictly in accordance with the manufacturer's instructions			
All pipe diameters are nominal external			
<b><u>"Polylink" polypropylene pipes:</u></b>			
Polypropylene pipes 63mm diameter and over shall be class 12 pipes jointed with cast iron "Supraclamp" running joints			
Fusion welded bends, once or twice mitred as necessary, and tees shall be factory manufactured			
Fusion welded bends and tees shall include jointing to pipes with PVC rubber ring double Z joint couplers			
Branch tees shall include flanged and bolted joints to "Polycop" branch pipes in addition and for brass compression male iron to copper straight couplers			
<b>Carried Forward</b>		R	
Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b>			

<p style="text-align: right;"><b>Brought Forward</b></p> <p>Reducers shall include jointing to pipes with PVC rubber ring double Z joint couplers and reducers shall be of sufficient overall length to accommodate same</p> <p>All pipes shall be jointed and fixed strictly in accordance with the manufacturer's instructions</p> <p>All pipe diameters are nominal external</p> <p><b><u>Concrete pipes:</u></b></p> <p>Pipes shall be jointed with ogee joints with rubber collars or socket and spigot joints with rubber rings</p> <p><b><u>Vitrified clay pipes:</u></b></p> <p>Pipes shall rest on solid ground and, where necessary, pockets of sufficient size shall be cut around joints to enable the jointing to be properly performed or, alternatively, pipes shall be bedded full length on and including unreinforced concrete laid in a semi-dry state immediately before pipes are laid</p> <p>Sewer and drainage pipes and fittings shall be jointed and sealed with butyl rubber rings</p> <p><b><u>uPVC pipes and fittings:</u></b></p> <p>Soil, waste and vent pipes and fittings shall be solvent weld jointed</p> <p><b><u>uPVC pressure pipes and fittings:</u></b></p> <p>Pipes for water supply shall be of the class stated</p> <p>Pipes of 40mm diameter and smaller shall be plain ended with solvent welded uPVC loose sockets and fittings</p> <p>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</p>		R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b></p>		R	

<p style="text-align: right;"><b>Brought Forward</b></p> <p><b><u>Copper pipes:</u></b></p> <p>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</p> <p><b><u>Fixing of pipes</u></b></p> <p><b>Unless specifically otherwise stated, descriptions of pipes shall be deemed to include fixing to walls etc, casting in, building in or suspending not exceeding 1m below suspension level</b></p> <p><b><u>Lead pipes and fittings</u></b></p> <p>All soldered joints shall be wiped and brass unions shall be used for jointing lead to steel</p> <p><b><u>Reducing fittings</u></b></p> <p>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</p> <p><b><u>Septic tanks</u></b></p> <p>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</p>	R	
<p style="text-align: right;"><b>Carried Forward</b></p> <p>Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b></p>	R	



<b>Brought Forward</b>	R
<p><b><u>Exposed concrete surfaces</u></b></p> <p>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</p> <p><b><u>Excavations</u></b></p> <p>No claim for rock excavation will be entertained unless the contractor has timeously notified the quantity surveyor thereof prior to backfilling</p> <p>"Soft rock" and "hard rock" shall be as defined in "Earthworks"</p> <p><b><u>Laying, backfilling, bedding, etc. of pipes</u></b></p> <p>Pipes shall be laid and bedded and trenches shall be carefully backfilled in accordance with manufacturers' instructions</p> <p>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 clauses 3, 5.5, 5.6, 5.7 and 7 of SABS 1200 DB : Earthworks (Pipe trenches) Pipes shall be bedded in accordance with clauses 3.1 to 3.4.1, 5.1 to 5.3 and 7 of SABS 1200 LB : Bedding (Pipes). Unless otherwise described bedding of rigid pipes shall be class B bedding</p> <p><b><u>Flush pans</u></b></p> <p>Flush pans shall have straight or side outlets and "P" or "S" traps as necessary</p> <p><b><u>Stainless steelbasins, sinks, wash troughs, urinals, etc.</u></b></p> <p>Units shall have standard aprons on all exposed edges and tiling keys against walls where applicable</p>	
<b>Carried Forward</b>	R
<p>Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b></p>	

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Brought Forward			R
<b><u>Waste unions</u></b>			
Descriptions of waste unions shall be deemed to include rubber or vulcanite plugs and chains fixed to fittings			
<b><u>Steel sectional water tanks</u></b>			
Tanks shall comply with SABS CKS 114			
<b><u>"Densyl" petrolatum anti-corrosion tape as manufactured by Denso SA (Pty) Ltd.</u></b>			
Pipes to be taped shall be coated with the appropriate primer and the tape shall be applied with minimum 15mm lap per spiral unless otherwise described			
Couplings and fittings to pipes shall be taped in strict accordance with the manufacturer's instructions including all mastic, tape, "Layflat" sheeting, securing of same, etc			
<b><u>SOIL DRAINAGE</u></b>			
<b><u>"Corflo" double walled radial ribbed uPVC pipes with intergral moulded cuff joints and rubber seal rings</u></b>			
<u>"Corflo" double walled radial ribbed class 34 uPVC pipes with intergral moulded cuff joints and rubber seal rings</u>			
1	110mm Pipes vertically or ramped to cleaning eyes etc	m	130
2	160mm Pipes vertically or ramped to cleaning eyes etc	m	150
<u>Extra over "Corflo" double walled radial ribbed uPVC pipes with intergral moulded cuff joints and rubber seal rings for uPVC fittings</u>			
3	110mm Bend	No	2
4	160mm Bend	No	4
<b>Carried Forward</b>			R
Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b>			

**BILLS OF QUANTITIES**  
**MAKGOPELE PRIMARY SCHOOL**  
**LDPWRI-B20305**

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**BILLS OF QUANTITIES**  
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Brought Forward			R
<b><u>REINFORCED CONCRETE</u></b>			
<u>20MPa/19mm concrete</u>			
22	Surface beds cast in panels	m3	1
23	Slab over septic tank	m3	1
24	Concrete haunch formed below pipes	m3	0.04
<b><u>CONCRETE SUNDRIES</u></b>			
<u>Finishing top surfaces of concrete smooth with a steel trowel</u>			
25	Surface beds, slabs, etc to falls	m2	18
<u>Grooves, channels, mortice , sinkings, etc in concrete</u>			
	Form 25 x 25mm chamfer to edges of concrete	m	13
<u>Permanent formwork to soffits</u>			
26	Slab over septic tank	m2	6
<u>Smooth formwork to form</u>			
27	Opening not exceeding 1m girth through 150mm slab	No	2
<b><u>SMOOTH FORMWORK (DEGREE OF ACCURACY I)</u></b>			
<u>Smooth formwork to sides</u>			
28	Edges, risers, ends and reveals not exceeding 300mm high or wide	m	14
<b><u>REINFORCEMENT</u></b>			
Carried Forward			R
Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b>			

DEPARTMENT OF PUBLIC WORKS, ROADS AND INFRASTRUCTURE  
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Brought Forward			R
<u>Mild steel reinforcement to structural concrete work</u>			
29	10mm Diameter bars	t	0.04
<u>Fabric reinforcement</u>			
30	Steeledale Mesh standard square fabric mesh, nominal mass 3,95 kg/m <sup>2</sup> with nominal 8mm thick wires and 200 x 200mm pitch (code 395), complying with SANS 1024/2006 requirements, in sheets 2,4 x 6m long.(septic tank bottoms)	m2	9
<b><u>MASONRY</u></b>			
<u>Brickwork of NFP bricks in class II mortar</u>			
31	One brick walls	m2	23
<u>Brickwork reinforcement</u>			
32	150mm Wide reinforcement built in horizontally	m	72
<b><u>BRICKWORK SUNDRIES</u></b>			
33	Leave of form 450 x 150mm high opening through a one brick wall	No	1
34	Leave or form opening through one brickwall for pipe exceeding 100mm and n.e 200mm diameter	No	2
<b><u>PLASTERING</u></b>			
<u>Watertight cement plaster on brickwork</u>			
35	On walls	m2	23
<b><u>PLUMBING AND DRAINAGE</u></b>			
<u>uPVC pipes</u>			
36	110mm Pipes	m	1
Carried Forward			R
Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b>			

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Brought Forward			R
	<u>Extra over uPVC pipes for fittings</u>		
37	110mm Tee	No	2
	<u>Cover, etc</u>		
38	600 x 600mm Type 2A cast iron single seal manhole cover and frame	No	2
39	Lifting key for manhole cover	No	2
	<b><u>FRENCH DRAINS</u></b>		
	<b><u>SITE CLEARANCE ETC</u></b>		
	<u>Site clearance</u>		
40	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	45
	<b><u>EXCAVATION, FILLING, ETC</u></b>		
	<u>Excavation in earth not exceeding 2m deep</u>		
41	Holes	m3	19
	<u>Extra over trench and hole excavations in earth for excavation in</u>		
42	Soft rock	m3	1
43	Hard rock	m3	2
	<u>Extra over all excavations for carting away</u>		
44	Extra over all excavations for carting away surplus material from excavations and/or stockpile on site to a dumping site to be located by the Contractor	m3	16
Carried Forward			R
Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b>			

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Brought Forward			R
<u>Risk of collapse of excavations</u>			
45	Sides of trench and hole excavations not exceeding 1,5m deep	m2	35
<u>Keeping excavations free of water</u>			
46	Keeping excavations free of all water other than subterranean water		Item
<u>Earth filling obtained from the excavations and/or prescribed stock piles on site (not compacted)</u>			
47	On top of french drain as soil cover	m3	3
<b><u>FILTER FABRIC</u></b>			
<u>"Kaytech Engineered Fabric" or similar approved laid in strict accordance to the manufacturer's instructions</u>			
48	"Kaymat U14" around stone filling in sub-soil drain trenches	m2	38
<u>20mm Graded stone filling or similar approved</u>			
49	In holes	m3	5
<u>200 - 300mm Diameter clean washed stone filling or similar approved by engineer</u>			
50	In holes	m3	11
<b><u>WATERPROOFING</u></b>			
<u>One layer of 250 micron "Tarkon USB Green" waterproof sheeting sealed at laps with "Gunplas Pressure Sensitive Tape"</u>			
51	On top of pipes as protection of joints	m2	9
Carried Forward			R
Section No. 7 EXTERNAL WORKS Bill No. 5 Sewer Drainage <b>CLUSTER G</b>			



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uPVC pipes

52	110mm Inspection pipes
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Extra over uPVC pipes for fittings

53	110mm End cap
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**Carried Forward to Summary of Section No. 7**

Section No. 7  
EXTERNAL WORKS  
Bill No. 5  
Sewer Drainage  
**CLUSTER G**

**BILLS OF QUANTITIES**  
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## SECTION NO.8

## **BILL NO.6**

## FENCING

**SITE CLEARANCE, ETC.**

## Site clearance

1	Digging up and removing rubbish, debris, vegetation, hedges, shrubs and trees not exceeding 200mm girth, bush, etc	m2	378
<b><u>Steel palisade fencing</u></b>			
2	Steel palisade fence 2100mm high above ground level over flat or sloping terrain including all posts, excavation, backfilling, concrete bases, etc	m	630
3	Single gate gate 1200 x 2100m high including heavy duty hasp and staple, padlock and two barrel bolts with two keeps in and including concrete anchor blocks with Spot primer defects in pre-primed surfaces with zinc chromate primer UC 53, one universal undercoat and two coats approved enamel paint	No	1
4	Single gate gate 2982 x 2100m high including heavy duty hasp and staple, padlock and two barrel bolts with two keeps in and including concrete anchor blocks with Spot primer defects in pre-primed surfaces with zinc chromate primer UC 53, one universal undercoat and two coats approved enamel paint	No	1

**Carried Forward to Summary of Section No. 7**

Section No. 7  
EXTERNAL WORKS  
Bill No. 6  
Fencing  
**CLUSTER G**

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**BILLS OF QUANTITIES**  
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Item No	Quantity	Rate	Amount
<b><u>SECTION NO.9</u></b>			
<b><u>BILL NO.1</u></b>			
<b><u>PROVISIONAL SUMS</u></b>			
<b><u>SUPPLEMENTARY PREAMBLES</u></b>			
NOTE: Tenderers are referred to the definition of general attendance on nominated sub-contractors given in Clause 9 of the Preliminaries			
NOTE: Under no circumstances may any Prime Cost - Provisional Amount, etc be extended at an amount lower than the amount given in the Bill			
Carried Forward			R
Section No. 8 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS <b>CLUSTER G</b>			

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Brought Forward		R
THE FOLLOWING PROVISIONAL SUMS ARE FOR WORK TO BE EXECUTED BY SELECTED SUBCONTRACTORS		
The following Provisional Sums are for specialists work to be executed by a selected Sub-contractor who upon appointment in terms of the Conditions of Contract shall be deemed to be a Domestic Sub-Contractor to the Contractor		
A Selected Sub-Contractor shall be a Sub-contractor executing work for which a sum of money is provided for in the Bills of Quantities or a Sub-contractor executing additional specialist work which arises as a result of an instruction by the Principal Agent/Engineer		
Tender documents for such work shall be prepared by the Principal Agent/Engineer in consultation with and to the approval of the Contractor and such tender document shall be issued by the Principal Agent/Engineer to a list of tenderers agreed upon between the Principal Agent/Engineer and Contractor. Tenders shall be submitted to the Principal Agent/Engineer		
The Selected Sub-contractor shall be chosen by the Principal Agent/Engineer and the Contractor, and the Contractor shall satisfy himself that such selected sub-contractor can meet the requirements of the Sub-Contract agreement and the Contractor shall inform the Principal Agent/Engineer accordingly		
The procedure relating to the method of selection, obtaining of tenders, adjudication thereof and the appointment of the Selected Sub-contractor shall not create any contractual relationship between the Client and the Selected Sub-contractor		
<b><u>RAINWATER HARVEST ETC</u></b>		
1	Provide the sum of R 100,000-00 for the supply and installation of Rainwater Harvest	Item 100,000.00
2	Allow for profit.	Item
Carried Forward		R
Section No. 8 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS <b>CLUSTER G</b>		

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	<b>Brought Forward</b>		R
3	Allow for attendance on sub-contractor	Item	
	<u>Borehole Development and equipping including 10m high elevated Bulk Water Storage tank including footings. Tank stander</u>		
4	Provide the amount of R350 000.00 (Three Hundred Fifty Thousand Rand) for equipping of borehole , elevated water storage and Water pipe reticulation by Specialists approved by the civil engineer	Item	350,000.00
5	Allow for profit on above if required	Item	
6	Allow for giving every facility to Specialists as described	Item	
	<u>Community Liaison Officer</u>		
7	Provide the sum of R190,000.00 (One Hundred Ninety Thousand Rand) for community liaison officer	Item	190,000.00
8	Allow for giving every facility to Specialists as described	Item	
9	Allow for profit on above if required	Item	
	<u>Project Steering Committee</u>		
10	Provide a sum of R50 000,00 (Fifty Thousand Rand) for the provision of a Project Steering Committee	Item	50,000.00
11	Allow for profit on above if required	Item	
12	Allow for giving every to specialist as described	Item	
	<u>Mobile Classroom Relocation</u>		
13	Provide the sum of R 100,000-00(One Hundred Fifty Thousand Rand) for mobile relocations	Item	100,000.00
14	Allow for profit.	Item	
15	Allow for attendance on sub-contractor	Item	
	<b>Carried Forward</b>		R
	Section No. 8 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS <b>CLUSTER G</b>		

Brought Forward		R
<b><u>CONTRACT PARTICIPATION GOALS</u></b>		
16	Provide the sum of R 50 000.00 ( Fifty Thousand Rand) for contract participation goals for targeted enterprises in accordance to CIDB Competence Standard for Contractors Gazette No. 41237, 10 November 2017.	Item 50,000.00
17	Allow for profit.	Item
18	Allow for attendance on sub-contractor	Item
<b><u>ELECTRICAL, ELECTRONICAL AND MECHANICAL INSTALLATION</u></b>		
<u>Electrical Installation, etc</u>		
19	Provide the amount of R1,200,000.00 (One Million Two Hundred Thousand Rand) for electrical installation to the buildings and site by Specialists	Item 1,200,000.00
20	Allow for giving every facility to Specialists as described	Item
21	Allow for profit on above if required	Item
<b><u>WORK EXECUTED BY SEPARATE DIRECT CONTRACTORS</u></b>		
The following work will be executed by contractors under direct instruction from the employer. The contractor is to accommodate these direct contractors and allow them to execute their work unhindered and allow them the use of water and toilet facilities. Damage caused by these contractors to work completed by the principal contractor is to be recorded in detail to enable the employer to counter-charge the direct contractors the cost of making good such damages		
Carried Forward		R
Section No. 8 PROVISIONAL SUMS Bill No. 1 PROVISIONAL SUMS <b>CLUSTER G</b>		

Brought Forward		R
<u>Occupation Health and Safety</u>		
22	Provide the sum of R350,000.00 (Three Hundred Fity Thousand Rand) for Health and Safety Consultant to be appointed as nominated sub contractor from the client	Item 350,000.00
23	Allow for giving every facility to Specialists as described	Item
24	Allow for profit on above if required	Item
Carried to Final Summary		R
Section No. 8		
PROVISIONAL SUMS		
Bill No. 1		
PROVISIONAL SUMS		
CLUSTER G		



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## FINAL SUMMARY

**Section  
No**

**Page  
No**

## Amount

1	PRELIMINARIES
2	DEMOLITIONS OF 3 X 4 SEATER PIT TOILETS
3	RENOVATIONS OF 3 X 3 CLASSROOM BLOCKS AND 5 X 4 SEATER ENVIROLOO TOILETS
4	MEDIUM ADMIN BLOCK
5	1 X 4 CLASSROOM BLOCK
6	1 X 4 WATERBORNE TOILET BLOCK
7	EXTERNAL WORKS
8	PROVISIONAL SUMS

67

69

105

161

200

245

274

279

Sub Total

R

## CONTINGENCIES

Contingencies:

Provide the amount of R900 000.00 (Nine Hundred thousand Rand) for contingencies to be used by the architect in terms of clause 17 of the principal Building Agreement.

Item

900,000.00

## SPECIAL CONDITIONS

Provide the sum of R 750 000.00 (Seven Hundred Thousand Rand) for fluctuations in cost

Item

750,000.00

Sub Total

R

Add: Value Added Tax at 15%

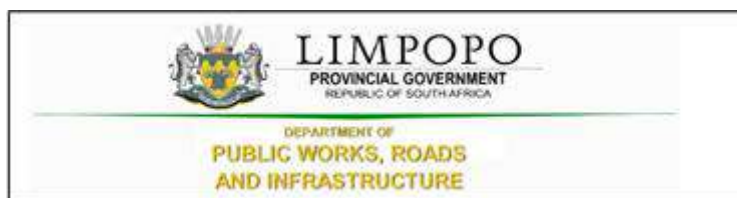
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### Carried to Form of Tender

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## CLUSTER G

## **PART C3 SCOPE OF WORKS**



## PART C3.1: SPECIAL NOTES TO BIDDERS

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

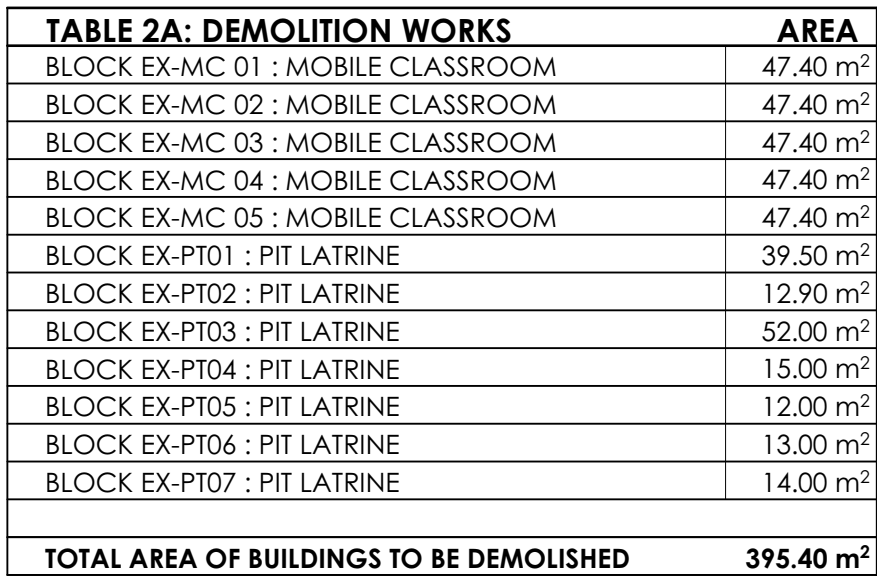
- 1.1. LDPWR&I reserve the right to call interviews with short-listed bidders before final selection.
- 1.2. LDPWR&I reserve the right to conduct supplier due diligence prior to final award or at any time during the contract period. This may include surprise site visits.
- 1.3. LDPWR&I reserve the right 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**





<b>TABLE 2C: NEW WORKS</b>		<b>AREA</b>
BLOCK A: ADMINISTRATION BLOCK		180.00 m <sup>2</sup>
BLOCK SJ 01: 04 CLASSROOM BLOCK		325.00 m <sup>2</sup>
BLOCK X 01: 04 SEAT WATERBORNE STAFF TOILET		22.00 m <sup>2</sup>
<b>TOTAL AREA : PROPOSED BUILDINGS</b>		<b>527 m<sup>2</sup></b>







## **C4.1 DRAWINGS**









## FINISHES LEGEND

### FLOORS:

#### F1: FULLY FLEXIBLE TILES (CORROSION RESISTANT & ANTI-SLIPPER)

420 x 420 11.5mm kiln-fired floor tiles or similar approved by architects, fixed with adhesive, painted with tinted waterproof jointing compound. Grouting to be grey, tiles should have expansion joint and aluminium edging strip.

#### F2: PORCELAIN TILE - MATI

480 x 480 x 10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 1107 and approved adhesives and grout on screeds. With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle tiles where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

#### F3: CARPETILES

500mm x 500mm x 1005 PFX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54234 on wira test and ISO body test at less than 20v at 25% RH on static electricity. Colour and pattern to architects approval.

#### F4: CEMENT SAND SCREED

30mm thick polished cement sand screed with 13mm Stone Nominal aggregate for Topping to comply with SABS 1083 or latest revision for concrete.

#### F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

65mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or Latest Revision.

#### F6: GRANITIC FINISH

22 mm thick unfilled Granolithic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve, laid by specialist in panels not exceeding 10m<sup>2</sup>, divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

#### F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

200mm x 197mm x 60 mm thick concrete interlocking pavers, G3 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a 'herringbone' pattern to the Architect's approval.

#### F8: SEMI FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586. With Static Dissipative Properties Throughout Thickness, Engineered for ESD or ISO (anti-static) Protection Vinyl Sheet. Laid on Self-Levelled Smooth Screed glued with conductive adhesive To SABS 070 or Latest Revision In Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polished Floor In Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

#### F9: GRAVEL FINISH ON SAND LAYER

32mm Gravel On Compacted Sand Layer Base as Per PSE Details Installed in All Duct Chambers Accommodating Sanitary Services.

### SKIRTING:

#### S1: HARDWOOD OR EQUAL AND APPROVED

15 x 75mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant beading. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

#### S2: CERAMIC TILE SKIRTING

600mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturers instructions and SABS specification, with cove base and straight top. Complete with corner and top trims. Fittings to include, ribbed angle tiles where there is change of level. Colour and pattern to architects approval.

#### S3: CEMENT SAND SCREED

75 mm high x 20 mm thick hardened cement sand screed skirting coved at 50 mm dia. to form a continuous joint with the adjoining screed floor finish to FA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

### WALL FINISHES:

#### R1: FACE BRICK

FBX face brick in common running bond to comply with SABS 227 and forming part of the structural work.

#### R2: EMULSION (PVA) PAINT - FULL HEIGHT

2 no. coats of PVA matt finish emulsion paint to SABS 1586 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

#### R3: ALKYD (ENAMEL) PAINT

2 no. coats matt (egg shell) finish alkylid (enamel) paint to SABS 630, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

#### R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of: 600mm wide x 300mm x 7mm thick high glazed ceramic Tiles To Specification "R5", laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification "R2" To Comply with SABS 630 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

#### R5: CERAMIC WALL TILES - FULL HEIGHT

600mm x 300mm x 7mm thick high glazed ceramic tiles To Comply with SABS 22 or latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

### CEILING AND CORNICE:

#### C1: 9mm GYPSUM BOARDS FLUSH PLASTERED, CEILINGS OR EQUAL AND APPROVED

"GypCell Classic" gypsum plasterboard ceiling OR EQUAL & APPROVED consisting of 1 layer Gyproc Rhino-board 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhino-board Sharp Joint Grabber Screws 32mm at maximum 150mm centres. Apply, Gyproc Rhino-tape to all joints and skim the ceiling using Gyproc Rhino-tile.

#### C2: FIBRE CEMENT BOARDS (H-JOINTED)

6.4mm thick GypCell Prestige 5' fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc Rhino-board 9 mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing, non-combustible to SANS 10177.5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhino-board Sharp Joint Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc Rhino-tape to all joints and skim the ceiling using Gyproc Rhino-tile.

#### C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm x 15mm Gyproc Celotex Pn Perforated or Fire Rated OR EQUAL & APPROVED laid into Dorn ceiling grid and secured into place using Dorn Hold Down Clips @ 200mm c/c. Dorn Wall Angle M6 fixed to the perimeter wall using fangs at 300mm centres. Dorn T38 FR Main Tees (0.4mm thickness, 2150 gals. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Dorn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Dorn Hanger Strap 19mm suitably fixed to the building structural members. Dorn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All fire notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Dorn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

#### C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED

"Emulsion (PVA) Paint on Skimmed Plastered Slab" 3No. coats of PVA emulsion ceiling paint to latest SANS 1586 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soffit.

### ROOF COVERING AND INSULATION:

#### RF1: FIBROCEMENT ROOFING SHEET (TWO SIDES)

Roofing Sheets: 150mm thick concrete bedded fibre roofing sheets manufactured from roll formed from certified steel

complying with ISO 5801. The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 456mm. The rib height shall be 41mm and provide capillary breaks. The male ribs shall have spurs at 283mm centres to ensure a positive double interlocking action of side-laps. Each pan shall incorporate two stiffener ribs. Profiled roof sheets to be coated on both sides with "Gabal Coat" or "Chromadek Colour" and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave claspers in strict compliance to manufacturer's instructions.

Installation: SHALL EITHER BE: 1: where there are acoustic ceilings suspended board, a heavy duty 'Aluminium isolation foil' shall be installed AND 2: where the steel work is exposed, a 50mm 'Tactoryboard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with metalized foil.

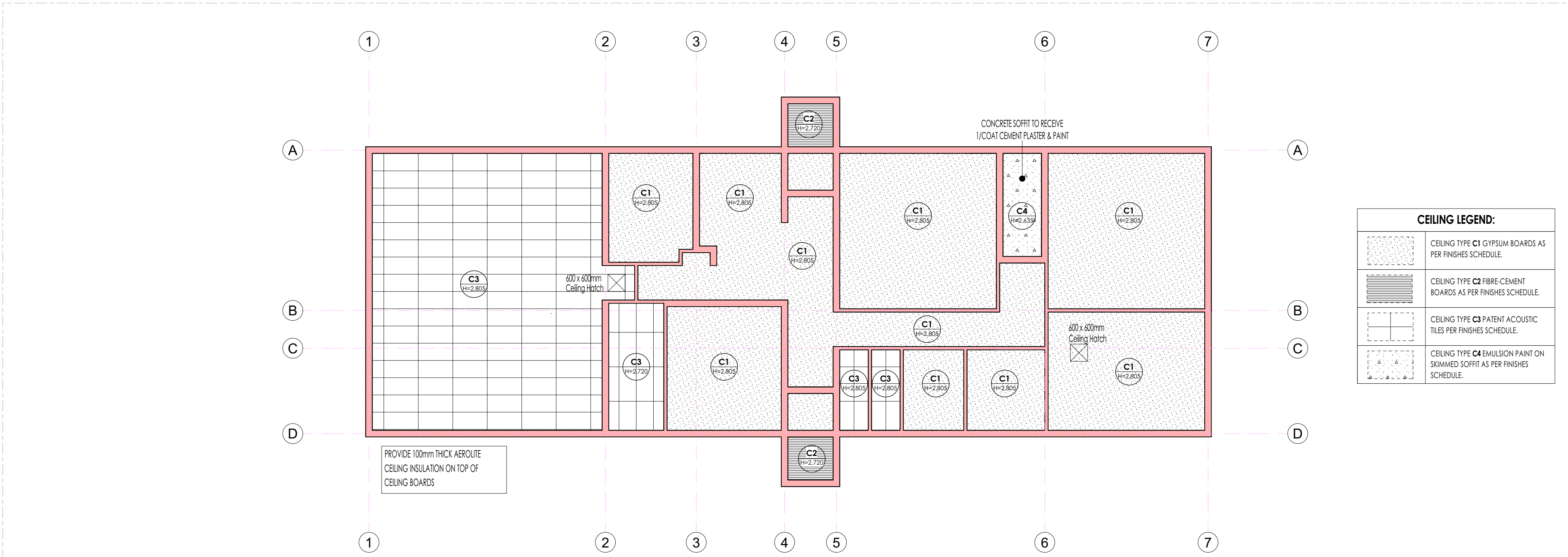
Galvanized Steel (GI) Gutter: 150mm wide x 100mm Deep x 0.6mm Eave Gutter of Commercial Grade Steel With Class 1275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

Downpipes: 110 x 110 x 1.0mm Thick Commercial Grade Galvanized Steel Sheet With Class 1275 Galvanizing To Comply With SABS 934 or latest Revision to be built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-tapping screws To Manufacturer Installation Instructions.

Facia board: 250 x 10 mm Fibre Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

## FLOOR PLAN:

Scale 1:100.



## CEILING PLAN:

Scale 1:100.



**ISSUED FOR TENDER**

**LEGEND**

- NEW WALLS
- EXISTING WALL TO BE RETAINED
- EXISTING WALL TO BE DEMOLISHED
- NEW FIXTURES & FITTING TO BE INSTALLED
- ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

**NOTES**

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED

DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING

CONTRACTORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT

**FINISHES LEGEND**

CEILING FINISH

WALL FINISH

FLOOR FINISH

WALL SKIRTING FINISH

**SIGNATURE TABLE**

DISCIPLINE	SIGN	DATE
CLIENT		
PLAN EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS / STORMWATER		
WATER & SANITATION		

**REVISIONS**

REV. NO.	DATE	DESCRIPTION
0	JUL 21	FIRST ISSUE FOR TENDER

**LIMPOPO**

PROVINCIAL GOVERNMENT

REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF

**PUBLIC WORKS, ROADS & INFRASTRUCTURE**

INSTITUTION

**MAKGOPPEL SECONDARY-918 521 309**

**RESTORATIVES, REPAIRS & ADDITIONS**

CONTRACT - SECTION

**DOCUMENTATION & PROCUREMENT**

DISCIPLINE

**ARCHITECTURAL**

WORK DESCRIPTION - SUB DIVISION

**MEDIUM ADMINISTRATION BLOCK**

DRAWING DESCRIPTION

**FLOOR PLAN & CEILING LAYOUT**

DRG No.	101-01	01/10	ITEM No.
DESIGN	NA	KSN	DRAWN
SCALE	AS SHOWN	ES	CHECK

DATE	RESPONSIBLE PROFESSIONAL	SIGN	PR. NUMBER
NOV 2019	A. SINKALA		PrArch 24750409

DRAWING CO-ORDINATED

**CONSULTANT**

**TECTURA PROJECTS**

QUALITY MANAGEMENT SYSTEM ISO 9001:2015 CERTIFIED

REGISTERED OFFICE: 101-01, 101-02, 101-03, 101-04, 101-05, 101-06, 101-07, 101-08, 101-09, 101-10, 101-11, 101-12, 101-13, 101-14, 101-15, 101-16, 101-17, 101-18, 101-19, 101-20, 101-21, 101-22, 101-23, 101-24, 101-25, 101-26, 101-27, 101-28, 101-29, 101-30, 101-31, 101-32, 101-33, 101-34, 101-35, 101-36, 101-37, 101-38, 101-39, 101-40, 101-41, 101-42, 101-43, 101-44, 101-45, 101-46, 101-47, 101-48, 101-49, 101-50, 101-51, 101-52, 101-53, 101-54, 101-55, 101-56, 101-57, 101-58, 101-59, 101-60, 101-61, 101-62, 101-63, 101-64, 101-65, 101-66, 101-67, 101-68, 101-69, 101-70, 101-71, 101-72, 101-73, 101-74, 101-75, 101-76, 101-77, 101-78, 101-79, 101-80, 101-81, 101-82, 101-83, 101-84, 101-85, 101-86, 101-87, 101-88, 101-89, 101-90, 101-91, 101-92, 101-93, 101-94, 101-95, 101-96, 101-97, 101-98, 101-99, 101-100, 101-101, 101-102, 101-103, 101-104, 101-105, 101-106, 101-107, 101-108, 101-109, 101-110, 101-111, 101-112, 101-113, 101-114, 101-115, 101-116, 101-117, 101-118, 101-119, 101-120, 101-121, 101-122, 101-123, 101-124, 101-125, 101-126, 101-127, 101-128, 101-129, 101-130, 101-131, 101-132, 101-133, 101-134, 101-135, 101-136, 101-137, 101-138, 101-139, 101-140, 101-141, 101-142, 101-143, 101-144, 101-145, 101-146, 101-147, 101-148, 101-149, 101-150, 101-151, 101-152, 101-153, 101-154, 101-155, 101-156, 101-157, 101-158, 101-159, 101-160, 101-161, 101-162, 101-163, 101-164, 101-165, 101-166, 101-167, 101-168, 101-169, 101-170, 101-171, 101-172, 101-173, 101-174, 101-175, 101-176, 101-177, 101-178, 101-179, 101-180, 101-181, 101-182, 101-183, 101-184, 101-185, 101-186, 101-187, 101-188, 101-189, 101-190, 101-191, 101-192, 101-193, 101-194, 101-195, 101-196, 101-197, 101-198, 101-199, 101-200, 101-201, 101-202, 101-203, 101-204, 101-205, 101-206, 101-207, 101-208, 101-209, 101-210, 101-211, 101-212, 101-213, 101-214, 101-215, 101-216, 101-217, 101-218, 101-219, 101-220, 101-221, 101-222, 101-223, 101-224, 101-225, 101-226, 101-227, 101-228, 101-229, 101-230, 101-231, 101-232, 101-233, 101-234, 101-235, 101-236, 101-237, 101-238, 101-239, 101-240, 101-241, 101-242, 101-243, 101-244, 101-245, 101-246, 101-247, 101-248, 101-249, 101-250, 101-251, 101-252, 101-253, 101-254, 101-255, 101-256, 101-257, 101-258, 101-259, 101-260, 101-261, 101-262, 101-263, 101-264, 101-265, 101-266, 101-267, 101-268, 101-269, 101-270, 101-271, 101-272, 101-273, 101-274, 101-275, 101-276, 101-277, 101-278, 101-279, 101-280, 101-281, 101-282, 101-283, 101-284, 101-285, 101-286, 101-287, 101-288, 101-289, 101-290, 101-291, 101-292, 101-293, 101-294, 101-295, 101-296, 101-297, 101-298, 101-299, 101-300, 101-301, 101-302, 101-303, 101-304, 101-305, 101-306, 101-307, 101-308, 101-309, 101-310, 101-311, 101-312, 101-313, 101-314, 101-315, 101-316, 101-317, 101-318, 101-319, 101-320, 101-321, 101-322, 101-323, 101-324, 101-325, 101-326, 101-327, 101-328, 101-329, 101-330, 101-331, 101-332, 101-333, 101-334, 101-335, 101-336, 101-337, 101-338, 101-339, 101-340, 101-341, 101-342, 101-343, 101-344, 101-345, 101-346, 101-347, 101-348, 101-349, 101-350, 101-351, 101-352, 101-353, 101-354, 101-355, 101-356, 101-357, 101-358, 101-359, 101-360, 101-361, 101-362, 101-363, 101-364, 101-365, 101-366, 101-367, 101-368, 101-369, 101-370, 101-371, 101-372, 101-373, 101-374, 101-375, 101-376, 101-377, 101-378, 101-379, 101-380, 101-381, 101-382, 101-383, 101-384, 101-385, 101-386, 101-387, 101-388, 101-389, 101-390, 101-391, 101-392, 101-393, 101-394, 101-395, 101-396, 101-397, 101-398, 101-399, 101-400, 101-401, 101-402, 101-403, 101-404, 101-405, 101-406, 101-407, 101-408, 101-409, 101-410, 101-411, 101-412, 101-413, 101-414, 101-415, 101-416, 101-417, 101-418, 101-419, 101-420, 101-421, 101-422, 101-423, 101-424, 101-425, 101-426, 101-427, 101-428, 101-429, 101-430, 101-431, 101-432, 101-433, 101-434, 101-435, 101-436, 101-437, 101-438, 101-439, 101-440, 101-441, 101-442, 101-443, 101-444, 101-445, 101-446, 101-447, 101-448, 101-449, 101-450, 101-451, 101-452, 101-453, 101-454, 101-455, 101-456, 101-457, 101-458, 101-459, 101-460, 101-461, 101-462, 101-463, 101-464, 101-465, 101-466, 101-467, 101-468, 101-469, 101-470, 101-471, 101-472, 101-473, 101-474, 101-475, 101-476, 101-477, 101-478, 101-479, 101-480, 101-481, 101-482, 101-483, 101-484, 101-485, 101-486, 101-487, 101-488, 101-489, 101-490, 101-491, 101-492, 101-493, 101-494, 101-495, 101-496, 101-497, 101-498, 101-499, 101-500, 101-501, 101-502, 101-503, 101-504, 101-505, 101-506, 101-507, 101-508, 101-509, 101-510, 101-511, 101-512, 101-513, 101-514, 101-515, 101-516, 101-517, 101-518, 101-519, 101-520, 101-521, 101-522, 101-523, 101-524, 101-525, 101-526, 101-527, 101-528, 101-529, 101-530, 101-531, 101-532, 101-533, 101-534, 101-535, 101-536, 101-537, 101-538, 101-539, 101-540, 101-541, 101-542, 101-543, 101-544, 101-545, 101-546, 101-547, 101-548, 101-549, 101-550, 101-551, 101-552, 101-553, 101-554, 101-555, 101-556, 101-557, 101-558, 101-559, 101-560, 101-561, 101-562, 101-563, 101-564, 101-565, 101-566, 101-567, 101-568, 101-569, 101-570, 101-571, 101-572, 101-573, 101-574, 101-575, 101-576, 101-577, 101-578, 101-579, 101-580, 101-581, 101-582, 101-583, 101-584, 101-585, 101-586, 101-587, 101-588, 101-589, 101-590, 101-591, 101-592, 101-593, 101-594, 101-595, 101-596, 101-597, 101-598, 101-599, 101-600, 101-601, 101-602, 101-603, 101-604, 101-605, 101-606, 101-607, 101-608, 101-609, 101-610, 101-611, 101-612, 101-613, 101-614, 101-615, 101-616, 101-617, 101-618, 101-619, 101-620, 101-621, 101-622, 101-623, 101-624, 101-625, 101-626, 101-627, 101-628, 101-629, 101-630, 101-631, 101-632, 101-633, 101-634, 101-635, 1



## FINISHES LEGEND

### FLOORS:

#### F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slip)

300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Slips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

#### F2: PORCELAIN TILES - MAT

600 x 600 x 10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds with thickness/specification in strict compliance to manufacturers specifications and SABS specification. Fittings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Slips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

#### F3: CARPET TILES

500mm x 500mm, 100% PFK staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof jute backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

#### F4: CEMENT SAND SCREED

30mm thick patted cement sand screed with 13mm Stone Nominal aggregate for topping to comply with SABS 1083 or latest revision for concrete.

#### F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVES

60mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or latest Revision.

#### F6: GRANULITHIC FINISH

22 mm thick unlimed Granolithic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve, laid by specialist in panels not exceeding 10m<sup>2</sup> divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

#### F7: INTERLOCKING PAVES (RIGID PAVING/VEHICULAR WAYS)

220mm x 191mm x 80 mm thick concrete interlocking paves, 23 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a herringbone pattern to the Architect's approval.

#### F8: SEMI FLEXIBLE VINYL SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or (Anti-static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed glued with conductive adhesive to SABS 070 or latest Revision in Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap, Clean & Polish Floor In Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation, Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

#### PP: GRAVEL FINISH ON SAND LAYER

32mm Gravel On Compacted Sand Layer Base as Per PSE Details Installed in All Duct Chambers Accommodating Sanitary Services.

### SKIRTING:

#### S1: HARDWOOD OR EQUAL AND APPROVED

1x 75mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs of centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant heading. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

#### S2: CERAMIC TILE SKIRTING

600mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturers instructions and SABS specification, with cove base and straight tops. Complete with corner and top trims. Fittings to include, ribbed angle files where there is change of level. Colour and pattern to architects approval.

#### S3: CEMENT SAND SCREED

75 mm high x 20 mm thick hardened cement sand screed skirting coved at 50 mm dia. to form a continuous joint with the adjoining screed floor finish to PA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

### WALL FINISHES:

#### R1: FACEBRICK

FB Face brick in common running bond to comply with SABS 227 and forming part of the structural work.

#### R2: EMULSION (PVA) PAINT - FULL HEIGHT

2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

#### R3: ALYDIT (ENAMEL) PAINT

2 no. coats matt (egg shell) finish alyd (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

#### R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COLO

Combination of: 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'R5', laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification 'R2' To Comply with SABS 103 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

#### R5: CERAMIC WALL TILES - FULL HEIGHT

600mm x 300mm x 7mm thick high glazed ceramic tiles to comply with SABS 22 or latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

### CEILING AND CORNICE:

#### C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

'GypCel Classic' gypsum plasterboard ceiling OR EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc RhinoBoard Shap Paint Grabber Screws 32mm at 150mm centres. Apply Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTale.

#### C2: FIBRE CEMENT BOARDS (H-JOINTED)

6mm thick GypCel Resiste 1 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc RhinoBoard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing, non-combustible to SABS 10171/5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc RhinoBoard Shap Paint Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 no. coats of super PVA external quality paint colour to PA's approval. Gyproc RhinoTape to all joints and skim the ceiling using Gyproc RhinoTale.

#### C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm x 15mm Gyproc Celotex Pin Perforated or fine fissured OR EQUAL & APPROVED laid into Donn ceiling grid and secured into place using Donn Hold Down Clips @ 200mm c/c. Donn Wall Angle M6 fixed to the perimeter wall using fittings at 300mm centres. Donn T38 FR Main Tees (6mm thickness, 2150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Donn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Donn Hanger Strap 19mm suitably fixed to the building structure members. Donn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All the fire notches to be in fire. Suspend all full length 1200 Cross Tees of their mid-point using Donn Hanger Strap 19mm suitably fixed to the building structure members. All to comply with latest SANS 603 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

#### C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED

Emulsion (PVA) Paint or Skinned Plastered Slat 3No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab stiff.

### ROOF COVERING AND INSULATION:

#### R1: EMBOSSED ROOFING SHEET (TWO SIDES)

**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 330 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 200mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roof sheets to be coated on both sides with 'Global Coat' or 'Chromadek Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as fastenings and eave closes in strict compliance to manufacturer's instructions.

**Insulation:** SHALL EITHER BE: 1. where there are acoustic ceilings suspended from a heavy duty 'Aluminium isolation foil' shall be installed AND 2. where the steel work is exposed, a 50mm 'Fibreboard' manufactured from noncombustible glass fibres and thermal setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white meltable foil.

**Galvanized Steel (GSI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Extra Gutter of Commercial Grade Steel With Class Z275 Coating to Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Facia Board Together with standard accessories discharging into Rainwater Downpipes.

**Dampstop:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing to Comply With SABS 934 or latest Revision to be built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-tapping screws to Manufacturer installation instructions.

**Facia board:** 250 x 100 x 10mm Fibre Cement Facia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

DOOR SCHEDULE:		BURGLAR DOOR (SINGLE)	
QUANTITY	04	QUANTITY	04
DOOR DESCRIPTION	813 x 2032, 44 mm THICK HEAVY DUTY EXTERIOR QUALITY HORIZONTALLY SLATED DOUBLE SIDED SALUMA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	DOOR DESCRIPTION	PAINTED GALVANISED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm AT CENTRES AT 10° ANGLE INCLUDING SECURITY MESH COLOUR TO ARCHITECT'S SPECIFICATION TO COMPLY WITH SABS 481, GRADE 01 AND FINISH WITH TWO COATS ALKYDE EGG-SHELL PAINT TO COMPLY WITH SABS 630
FRAME	STANDARD 1.6 mm IN DOUBLE REBATE PRESSED MILD STEEL DOOR FRAME WITH WALL MATCHING PROFILE IN COMPLIANCE WITH SABS 1129 OR THE LATEST VERSION COMPLETE WITH LUGS & FIXTURES TO ACCOMMODATE 640 x 1910 DOOR LEAF	FRAME	50 x 50 mm GALVANISED MILD STEEL SQUARE WELDED TO FORM FRAME
FRAME FINISH	WASHABLE ENAMEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT, COLOR TO ARCHITECT'S APPROVAL	FRAME FINISH	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)
DOOR FINISH	APPLY 3No. CLEAR EGG-SHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01, 7MM DOWN PRESS COAT WITH ANAEROBIC TURPENTINE AS PER MANUFACTURER'S INSTRUCTIONS, ALLOWING EACH COAT TO DRY OVERNIGHT. APPLY WOOD PRESERVATIVE TO EXPOSED EXTERIOR WOOD TO SATURATE THE SURFACE, WITH EACH COAT SOAKING IN BEFORE FURTHER COATS. APPLY UNTIL NO FURTHER SOAKING TAKES PLACE	FRAME FINISH	PAINTED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm AT CENTRES AT 10° ANGLE INCLUDING SECURITY MESH TO COMPLY WITH SABS 481, GRADE 01 & FINISH WITH 2 COATS ALKYDE EGG-SHELL PAINT TO COMPLY WITH SABS 630 COLOR TO ARCHITECT'S SPECIFICATION
IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS
HINGES	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES

BLOCK SJ-05 DOOR SCHEDULE

SCALE 1:100

WINDOW SCHEDULE:	
QUANTITY	36
WINDOW DESCRIPTION	STANDARD 'SCHOOL TYPE' GALVANISED MILD STEEL DOUBLE SIDE HUNG WINDOWS MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAYS FASTENERS & WEATHER BARS TO OENABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING
FRAME	STANDARD 'STANDARD TYPE' GALVANISED MILD STEEL WINDOW FRAME, MANUFACTURED TO COMPLY WITH SABS 723 FRAMES TO BE FACTORY SHOWN WITH ZINC PHOSPHATE PRIMER TO COMPLY WITH SABS 1319 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COMPLY WITH SABS 481 GRADE 01, FINISHED WITH 2No. COATS ALKYDE ENAMEL PAINT TO COMPLY WITH SABS 630, COLOR TO ARCHITECT'S SPECIFICATIONS
GLASS	6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 480, PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL
WINDOW FITTINGS	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)
IRON MONGERY	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT
HINGES	FIXED, MANUFACTURER'S SPECIFICATION

BLOCK SJ-05 WINDOW SCHEDULE

SCALE 1:100

## SANITARY SCHEDULE

### WC'S URINALS & SHOWER

#### U1: CERAMIC STANDARD WC (C/C) CONCEALED CISTERN

Vitreous china 90° outlet WC or equal and approved, top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with 'Jazz Thermostatic Plastic Seat'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with blank flush plate.

#### U2: CERAMIC PARALEGIC WC

Vitreous china 90° outlet or equal and approved, top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with 'Jazz Thermostatic Plastic Seat'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever, blank flush plate & offset push button for paraplegic access

#### U3: CERAMIC PARALEGIC WC (C/C) CONCEALED CISTERN

Vitreous china 90° outlet WC or equal and approved, top inlet closed rim back-to-wall pan, Floor Mounted to comply with SABS 497 & Fitted with 'Jazz Thermostatic Plastic Seat'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever, blank flush plate & offset push button for paraplegic access

#### U4: CERAMIC STANDARD WC (BACK INLET)

Vitreous china 90° outlet back inlet pan to comply with SABS 497. Fitted complete with back inlet exposed flush valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever.

#### U5: CERAMIC STANDARD WC (C/C)

Vitreous china 90° outlet, back inlet pan to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermostatic seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.

#### U6: CERAMIC WALL HUNG URINAL

Vitreous china 90° outlet wall hung bowl urinal to comply with SABS 497. Supplied with suitable 38mm CP domical grating, CP top inlet spreader and two hanger brackets and fitted with exposed flush valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS standards.

#### S01: SHOWER

25mm thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste fitting in corner position fitted with shower set and complying with SABS 226 comprising of approved:

- Glazed Shower Cabinet with access doors as per standard supply from manufacturer and sized to fit space configuration
- Overhead shower arm with wall flange.
- Chrome Plated Shower Head with ball jointed connector
- Chrome Plated Shower Shower Diverter mixer-valve type with sliding wall flanges and concealed connectors adjustable from 178 mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face laid.

### WASH-HAND BASIN

#### R1: WASH & MIRROR TAP

Vaod Sanitaryware vitreous china size 560 x 415mm rounded 'Tuscan', OR EQUAL AND APPROVE basin to comply with SABS 497 with single tap-hole configuration supplied with integrated overflow and chainstay hole through the centre semi-punched supplied with a 'Tuscany pedestal' and fitted with 'No. 2No. chrome plated tap with flanged backnut (code KM2.102) meeting tap, 309-32 CP anti-thrust plug with spindle, 308 basin waste, 365/40 CP bottle trap, mounting kit and angle valves.

#### R2: DISABLED BASIN

250mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No chrome plated Blow action pillar-top, with 1/4 turn ceramic disc head and blow & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

#### R3: WHITE GLAZED PORCELAIN WHB (VANTY)

Ceramic freecay size 450x350mm oval self-priming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 'No. 2No. chrome plated tap with flanged backnut (code KM2.102) meeting tap, mounting kit and angle valves. 400mm long flexible inlets and chrome plated bottle trap supplied with all necessary pipe connections. Basin mounted on cabinet or vanity slab with silicon sealant between contact areas in strict accordance to manufacturer's specifications.

#### R4: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS)

Vitreous china size 450x300mm oval self-priming vanity basin to comply with SABS 497 in two tap hole configuration supplied with integrated overflow and chainstay hole with 'No. 2No. chrome plated tap with flanged backnut (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. All brackets and fixing accessories in strict accordance to the manufacturer's specifications.

#### R5: WIDUTY BASIN (No. TAP FOR LABS)

Vitreous china size 450x300mm oval self-priming vanity basin to comply with SABS 497 in two tap hole configuration supplied with integrated overflow and chainstay hole with 'No. 2No. chrome plated anti-thrust plug with spindle plug, slotted basin waste, chrome plated bottle trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer's specifications.

#### R6: MEDIC BASIN & FITTINGS (SICK BAY)

Vitreous china size 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No chrome plated Blow action pillar-top, with 1/4 turn ceramic disc head and blow & Red indicators water applications and flanged backnut, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

Combination of sanitaryware, accessories and general fittings comprising of:

- Mirror type C2
- Paper towel dispenser K8 and bin type K3.
- Soap dispenser type K5.
- Spoutback comprising 2no. rows of wall tile finish type R5 as per finishes schedule

and grout in compliance to manufacturer's specifications and government standard specifications. Installation heights as indicated in the drawings.

### SINKS:

#### X1: STAINLESS STEEL SINK

Stainless steel 1000 x 457mm inset single end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink mixer- wall type, chrome plated swivel Outlet, adjustable and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

#### X2: STAINLESS STEEL SINK

Stainless steel 1500 x 457mm inset double end bowl with recessed drainage ledge and folded edges. Bowl to be fitted to kitchen cupboard (cupboard elsewhere measured). Grade 304 (18/10) Stainless Steel sink to comply with SABS 906 fitted with: Approved Sink mixer- wall type, chrome plated overall swivel Outlet, adjustable wall flanges and supplied with suitable accessories in accordance to manufacturer's specifications. Sink installation height = 900mm AFFL.

#### X3: CERAMIC SINK

Ceramic freecay 455 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre and waste outlet, fitted to wall on two semi-concealed brackets supplied with all necessary accessories (all to be acid resistant)

#### X4: SINK WITH WASH TROUGH (Inset) & 2 no. TAPS

1200 x 553 x 200mm inset wash trough manufactured from grade 18/10 SS, stainless steel with radius internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2No. CP bibcoaps - plan extended chrome plated, complete with sliding wall flanges. Un-shielded sink waste with back nut, plug with strip, chain and stay, CP, 'P' trap. Top fitted with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 535 x 425mm.

#### X5: DOUBLE WASH TROUGH (Inset) & 2 no. TAPS

1200 x 553 x 200mm Double bowl wash trough manufactured from grade 304 (18/10) SS, radius internal corners and provision for a 40mm dia. outlet, fitted with: Approved 2No. wall type bibcoaps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connectors. CP, Un-shielded sink waste with back nut and plug with strip, CP. Double drain back rubber deep seal 'P'-trap. Sink mounted on 2no. 25mm square SS gallow brackets, front leg and adjustable foot piece of height of 915mm AFFL.

## SANITARY ACCESSORIES

### K1: SS TOILET ROLL HOLDER - 2 ROLL

Standard stainless steel toilet roll holder (roll 2) 153mm width x 270mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Satin finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications.

### K2: GLASS MIRROR

6mm thick clear float glass silver-backed mirror, size 450x900mm height with polished bevelled edges 4 times folded for and fixed, with chromium plated dome-headed mirror screws

### K3: SS WASTE BIN

328W x 528H x 203D Waste bin manufactured from 18/10 Stainless steel, Surface Satin Finish, Material Thickness 1.5mm, including Screws, dowels and all necessary accessories in accordance to manufacturer's specifications.

### K4: SANITARY BIN (PLASTIC)

190mm x 200mm x 600mm Plastic Sanitary Pedal Bin with capacity of 100 Litres per pack Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

### K5: SOAP HOLDER

Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

### K6: WALL GRAB RAILS-PARALEGIC

Stainless steel 914 x 10 x 32mm diameter wall (rear) grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions.

### K7: GRAB RAILS (RIGHT/LEFT HAND)-PARALEGIC

Stainless steel 914 x 10 x 32mm diameter right/left hand side toilet grab rail with 450mm high centre flange, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions.

### K8: PAPER TOWEL DISPENSER

350mmWx650mmHx220mmD Tear and dry paper hand towel dispenser in stainless steel. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.

### K9: SOAP DISPENSER (HSH- WALL MOUNTED)

1158H x 270W x 110D Stainless Steel Hands Free soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.

### K10: ALUMINIUM COAT HOOKS (MULTICOLOR)

800mm Wide x 220mm High x 90mm High Aluminium Multi-track Hat and Coat Hook in multi-track two Hooks Configuration With Anodised Silver Finish Complete with Screws

### K11: HAND DRYER (Hands free)

As per Electric Engineer's specification

### K12: TOWEL RAIL

55mm dia. Polished 900mm long towel rail complete with all necessary accessories in accordance to manufacturer's specifications. Installation height as per architect's drawing

### K13: SHOWER CURTAIN RAIL (Height)

20mm dia. standard chromium plated shower curtain rail 1300mm long with flanged ends and screws CP fixing height as per PA's drawing



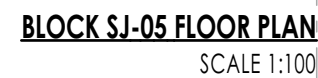
**Fascia board:** 250 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws.  
Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



CONTRACTOR			
CAD SYSTEM	AUTOCAD		FILE NAME
SIZE	PROJECT NUMBER		REV
A1	LDPW - PROF/16002/G14		0



**Fascia board:** 250 x 10 mm Fibre- Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws.  
Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.





FINISHES LEGEND

FLOORS:

**F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)**  
300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification S81:1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Filings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Ships Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

**F2: PORCELAIN TILES - MAT**

600 x 600 x10mm thick porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Filings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Ships Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

**F3: CARPET TILES**

500mm x 500mm, 100% PFK staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with Manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54324 on wira test and ISO body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

**F4: CEMENT SAND SCREED**

30mm thick patterned cement sand screed with 13mm Stone Nominal aggregate for topping to comply with SABS 1083 or latest revision for concrete.

**F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVES**

60mm thick multi-coloured concrete paves laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approved and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or latest Revision.

**F6: GRANULITHIC FINISH**

22 mm thick unlimed Granulithic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve; laid by specialist in panels not exceeding 10m<sup>2</sup>, divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

**F7: INTERLOCKING PAVES (RIGID PAVING/VEHICULARWAYS)**

220mm x 191mm x 80 mm thick concrete interlocking paves, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a herringbone pattern to the Architect's approval.

**F8: SEMI FLEXIBLE VINYL SHEETING (CORROSION RESISTANT/ANTI-SLIPPERY)**

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed glued with conductive adhesive to SABS D70 or latest Revision in Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042, Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

**F9: GRAVEL FINISH ON SAND LAYER**

32mm Gravel On Compacted Sand Layer Base as Per PE Details Installed in All Duct Chambers Accommodating Sanitary Services.

SKIRTING:

**S1: HARDWOOD OR EQUAL AND APPROVED**

Ex 75mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs at centres not exceeding 600mm, and fixed with a 19mm quadrant heading. The skirting to be varnished with 3No. coats of egg shell clear varnish to comply with SABS/SANS 381 type 1.

**S2: CERAMIC TILE SKIRTING**

600mm wide x 1000mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturers instructions and SABS specifications, with cove base and straight tops. Complete with corner and top trims. Filings to include, ribbed angle files where there is change of level. Colour and pattern to architects approval.

**S3: CEMENT SAND SCREED**

75 mm high x 25 mm thick hardened cement sand screed skirting coved at 50 mm dia, to form a continuous joint with the adjoining screed floor finish to PA's approval. All to be manufactured and installed in strict compliance With SABS 1083, or latest revision.

WALL FINISHES:

**R1: FACE BRICK**

F8 Face brick in common running bond to comply with SABS 227 and forming part of the structural work.

**R2: EMULSION (PVA) PAINT - FULL HEIGHT**  
2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed with and with 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

**R3:ALYD (ENAMEL) PAINT**

2 no. coats matt (egg shell) finish alyd (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkali resistant primer prior to SABS 1416 and 1 no. coat undercoat to SABS 681 grade1, in accordance to manufacturer's instructions.

**R4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO**

Combination of: 600mm wide x 300mm x 7mm thick high glazed ceramic tiles to Specification 'R5', laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification 'R2' To Comply with SABS 1030 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

**R5: CERAMIC WALL TILES - FULL HEIGHT**

600mm x 300mm x 7mm thick high glazed ceramic tiles to Comply with SABS 22 or Latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

CEILING AND CORNICE:

**C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED**

'GypCel Classic' gypsum plasterboard ceiling OR EQUAL & APPROVED consisting of 1 layer Gyproc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing) fixed to timber bracing installed at maximum 300mm centres using Gyproc Rhinoboard Shop Paint Grabber Screws 32mm at maximum 150mm centres. Apply Gyproc Rhinolapse to all joints and skim the ceiling using Gyproc Rhinolite.

**C2: FIBRE CEMENT BOARDS (JOINTED)**

6mm thick GypCel FibreSheet 1 fibre cement ceiling boards or EQUAL & APPROVED consisting of 1 layer Gyproc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, EcoSpecifier listing, non-combustible to SANS 10177:5) fixed to Ex 38mm x 50mm timber bracing installed at maximum 400mm centres using Gyproc Rhinoboard Shop Paint Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gyproc Rhinolapse to all joints and skim the ceiling using Gyproc Rhinolite.

**C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED**

1200mm x 600mm X 15mm Gyproc Celotex Pin Perforated or Fine Fissured OR EQUAL & APPROVED laid into Dorn ceiling grid and secured into place using Dorn Hold Down Clips @ 200mm c/c. Dorn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Dorn T38 FR Main Tees @ 4mm thickness, 2150 gwg, coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Dorn T38V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Dorn Hanger Strap 19mm suitably fixed to the building structural members. Dorn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the fire notch. All the catches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Dorn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 603 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

**C4 EMULSION (PVA) PAINT OR EQUAL AND APPROVED**

Tenulsion (PVA) Paint or Skimmed Plastered Sdp 3No. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hem-hydrate gypsum plaster on concrete slab soff.

ROOF COVERING AND INSULATION:

**R6: EMBOSSED ROOFING SHEET (TWO SIDES)**

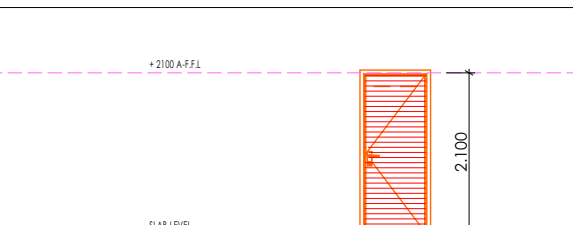
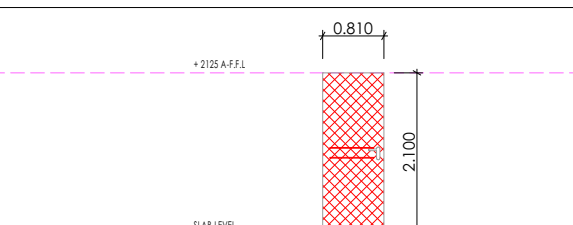
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 350 (3). The profile shall have three trapezoidal ribs at 200mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roof sheets to be coated on both sides with 'Global Coat' or 'Chromadek Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave coves in strict compliance to manufacturer's instructions.

**Insulation:** SHALL EITHER BE 1: where there are acoustic ceilings suspended board, a heavy duty 'Aluminium insulation foil' shall be installed AND 2: where the steel work is exposed, a 50mm 'Fibrocement board' manufactured from non-combustible glass fibres and thermosetting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>2</sup> and finished with white melinated foil.

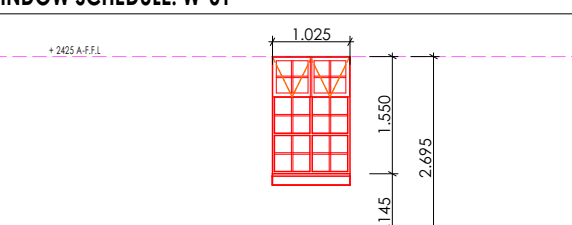
**Galvanized Steel (GI) Gutter:** 150mm Wide x 100mm Deep x 0.6mm Extra Gauge Of Commercial Grade Steel With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Gable Board Together with standard accessories discharging into Rainwater Downpipes.

**Downpipe:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class Z275 Galvanizing To Comply With SABS 934 or latest Revision to be built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation Instructions.

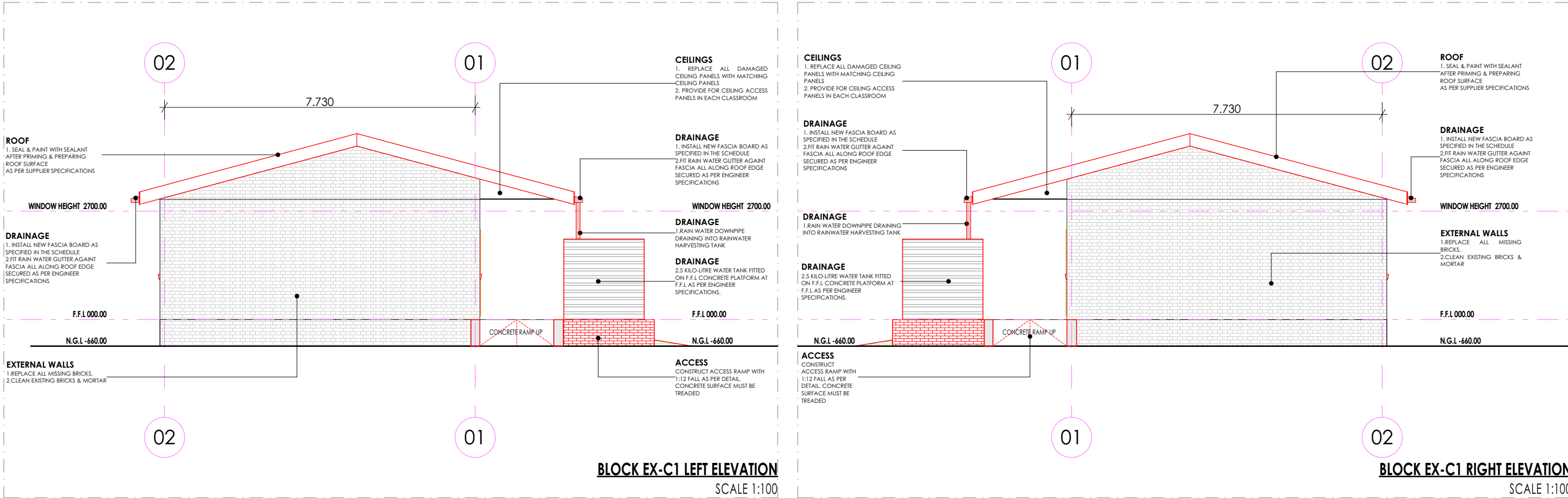
**Fascia board:** 250 x 10 mm Fibre-Cement/Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.

DOOR SCHEDULE: D-01			
			
EXTERIOR DOOR D-01	BURGLAR DOOR (SINGLE)	INTERIOR DOOR	
QUANTITY	03	QUANTITY	03
DOOR DESCRIPTION	813 x 2032 x 44 mm THICK HEAVY DUTY EXTERIOR QUALITY HORIZONTALLY SLATED DOUBLE SLOD SALICINA DOOR FITTED TO COMPLY WITH SABS 545 EXTERIOR GRADE OR LATEST REVISION.	DOOR DESCRIPTION	PAINTED GALVANISED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm CENTRES AT A 90° ANGLE, INCLUDING SECURITY MESH. COLOR TO ARCHITECTS SPECIFICATION TO COMPLY WITH SABS 681 GRADE 01 AND FINISH WITH TWO COATS ALYD EGG SHELL. PAINT TO COMPLY WITH SABS 630
FRAME	STANDARD 1.6 mm IN DOUBLE REBATE PRESSED MILD STEEL DOOR FRAME WITH WALL MATCHING PROFILE IN COMPLIANCE WITH SABS 1129 OR THE LATEST VERSION COMPLETE WITH LUGS & FIXTURES TO ACCOMMODATE 840 x 1910 DOOR LEAF	FRAME	50 x 50 mm GALVANISED MILD STEEL SQUARE WELDED TO FORM FRAME
FRAME FINISH	WASHABLE DANIEL PAINT FINISH AS PER SABS 723 FOR PRIMER, SABS 681 FOR UNDERCOAT & SABS 630 TYPE 02 FOR FINISH COAT. COLOR TO ARCHITECTS APPROVAL	FRAME FINISH	1 x COAT ZINC CHROMATE PRIMER 2 x COATS GLOSS ENAMEL (EXTERIOR QUALITY)
DOOR FINISH	APPLY 3No. CLEAR EGG SHELL VARNISH FOR INTERIOR TO COMPLY WITH SABS 887 TYPE 01. THIN DOWN FIRST COAT WITH MINERAL TURPENTINE AS PER MANUFACTURER'S INSTRUCTIONS, ALLOWING EACH COAT TO DRY OVERNIGHT. APPLY WOOD PRESERVATIVE TO EXPOSED EXTERIOR WOOD TO SATURATE THE SURFACE. WITH EACH COAT SOAKING IN BEFORE FURTHER COATS. APPLY UNTIL NO FURTHER SOAKING TAKES PLACE	DOOR FINISH	PAINTED MILD STEEL GATE CONSISTING OF 10 x 10 mm MILD STEEL BARS PLACED AT 100 mm AT CENTRES AT 90° ANGLE, INCLUDING SECURITY MESH. TO COMPLY WITH SABS 681 GRADE 01 & FINISH WITH 2 COATS ALYD EGG SHELL. PAINT TO COMPLY WITH SABS 630 COLOR TO ARCHITECTS SPECIFICATION
IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS	IRON MONGERY	APPROVED LOCKSET AS PER SUPPLIER DOOR STOP - POLISHED BRASS FLOOR MOUNTED APPROVED ALUMINIUM ENGRAVING SIGN PLATE FOR APPROPRIATE ROOMS
HINGES	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES	HINGES	3 No. STAINLESS STEEL MEDIUM DUTY BUTT HINGES

BLOCK EX-C1 DOOR SCHEDULE  
SCALE 1:100

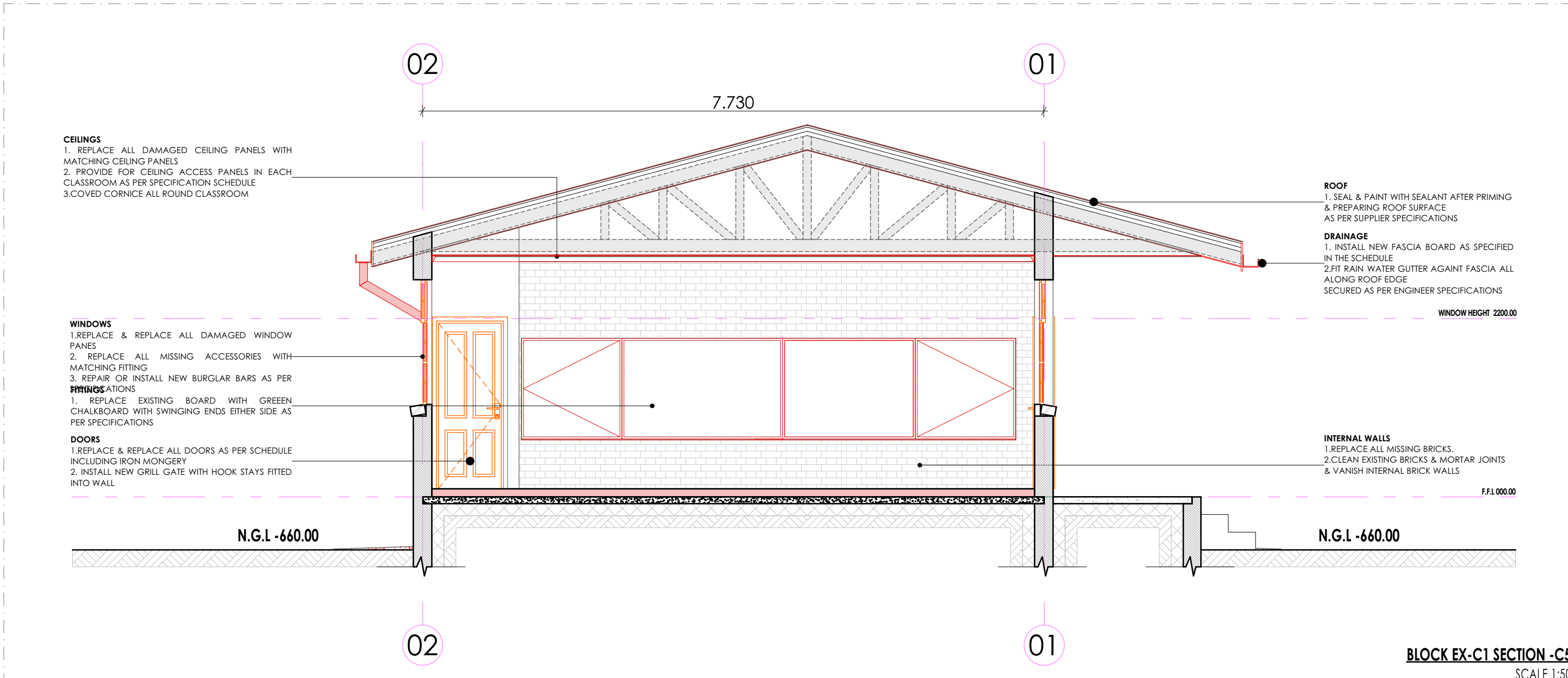
WINDOW SCHEDULE: W-01	
	
WINDOW W-01	
QUANTITY	24
WINDOW DESCRIPTION	STANDARD 'SCHOOL TYPE' GALVANISED MILD STEEL DOUBLE TOP HUNG WINDOWS, MANUFACTURED, ASSEMBLED & DELIVERED COMPLETE WITH IRON MONGERY COMPRISING APPROVED HINGES, PIVOTING MECHANISMS, STAY'S FASTENERS & WEATHERS BARS TO ONSHABLE PANELS: PLUGGED & SCREWED/BUILT IN WALLING
FRAME	STANDARD 'STANDARD TYPE' GALVANISED MILD STEEL WINDOW FRAME, MANUFACTURED TO COMPLY WITH SABS 727. FRAMES TO BE FACTORY PRIMED WITH ZINC PHOSPHATE PRIMER TO COMPLY WITH SABS 1319 BEFORE DELIVERY & FINISHED WITH ONE UNIVERSAL UNDERCOAT TO COAT WITH SABS 681 GRADE 01. FINISHED WITH 2No. COATS ALYD ENAMEL. PAINT TO COMPLY WITH SABS 630. COLOR TO ARCHITECTS SPECIFICATION
GLASS	6 mm SAFETY GLASS FIXED WITH PUTTY TO COMPLY WITH SABS 680. PUTTY MUST BE DELIVERED ON SITE IN SEALED CONTAINERS MARKED WITH SABS MARK OF APPROVAL
WINDOW FITTINGS	MATCH EXISTING WINDOW FITTINGS (ORIGINAL)
IRON MONGERY	ALL IRON MONGERY TO BE SUPPLIED MUST MATCH EXISTING OR SIMILAR & MUST BE APPROVED BY THE ARCHITECT
HINGES	FIXED, MANUFACTURER'S SPECIFICATION

BLOCK EX-C1 WINDOW SCHEDULE  
SCALE 1:100



BLOCK EX-C1 LEFT ELEVATION  
SCALE 1:100

BLOCK EX-C1 RIGHT ELEVATION  
SCALE 1:100



BLOCK EX-C1 SECTION - C/S  
SCALE 1:50

SANITARY SCHEDULE

WC'S URINALS & SHOWER

**W1: CERAMIC STANDARD WC (C/C) - CONCEALED CISTERN**

Vitreous china 90° outlet WC or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz Thermostol Plastic Seat'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with blank flush plate.

**W2: CERAMIC PARAPLEGIC WC**

Vitreous china 90° outlet or equal and approved, top inlet closed rim back-to-wall pan to comply with SABS 497. Fitted with Cistern installed complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever.

**W3: CERAMIC PARAPLEGIC WC (C/C) - CONCEALED CISTERN**

Vitreous china 90° outlet WC or equal and approved, top inlet closed rim back-to-wall pan. Floor Mounted to comply with SABS 497 & Fitted with 'Jazz Thermostol Plastic Seat'. Fitted with Concealed Flushing Cistern for WC 6-7 litres adjustable with small discharge valve access pneumatic discharge valve installed with dual flush ability & complete with all necessary fittings to manufacturer's specification and applicable SABS standards. Flush valve to be fitted with suitable extension lever, blank flush plate & offset push button for paraplegic access

**W4: CERAMIC STANDARD WC (BACK INLET)**

Vitreous china 90° outlet back inlet pan to comply with SABS 497. Fitted complete with back inlet exposed flush-valve complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards. Flush valve to be fitted with suitable extension lever.

**W5: CERAMIC STANDARD WC (C/C)**

Vitreous china 90° outlet, back inlet pan to comply with SABS 497. Fitted complete with matching 7 litre pushbutton top dual flush cistern fitted with quality approved heavy duty thermostol seat and complete with all necessary fittings as per manufacturer's specifications and applicable SABS standards.

**W6: CERAMIC WALL HUNG URINAL**

Vitreous china 90° outlet wall hung bowl urinal to comply with SABS 497. Supplied with suitable 38mm CP domical grafted, CP top inlet spreader and two hanger brackets and fitted with exposed flush-valve, and suitable bottle trap chrome finish as per manufacturer's specifications and applicable SABS standards.

**W7: SHOWER**

2mm Thick Enamelled steel shower tray size 900x900x160 mm manufactured with anti slip pattern, with rounded internal corners, and 38 mm BSP grated waste fitting in corner position fitted with shower set and complying with SABS 226 comprising of approved:  
• Glazed Shower Cubicle with access door as per standard supply from manufacturer and sized to fit space configuration  
• Overhead shower arm with wall flange.  
• Chrome Plated Shower Head with ball jointed connector  
• Chrome Plated Switch/Shower diverter mixer tap with sliding wall flanges and concealed connections adjustable from 178mm to 203 mm centres. Shower tray to be recessed 50 mm into a 100mm high concrete plinth with exposed plinth face laid.

WASH-HAND BASIN

**W8: 1 HOLE 1 TAP**

Vitreous china size 560 x 415mm rounded 'Tuscany', OR EQUAL AND APPROVE basin to comply with SABS 497 with single tap hole configuration supplied with integrated overflow and chainstay hole through the centre semi-punched supplied with a 'Tuscany' pedestal and fitted with 1No. Chrome plated tap with flanged baculn (code KM2.102) meeting tap, 309-352 CP anti-flick plug with spindle, 308 basin waste, 365/40 CP bottle trap, mounting kit and angle valves.

**W9: 2 HOLE 2 TAP**

2mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No Chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged baculn, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

**W10: 1 HOLE 1 TAP (FOR LABS)**

Vitreous china size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1No. chrome plated tap with flanged baculn (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Basin mounted on cabinet or vanity slab with silicon sealant between contact areas in strict accordance to manufacturer's specifications.

**W11: WHIT GLAZED PORCELAIN WHB (VANITY)**

Ceramic freecast size 450x350mm oval self-rimming vanity basin to comply with SABS 497 in one tap hole configuration supplied without overflow and fitted with 1No. chrome plated tap with flanged baculn (code KM2.102) meeting tap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Basin mounted on cabinet or vanity slab with silicon sealant between contact areas in strict accordance to manufacturer's specifications.

**W12: SMALL BASIN & 2 TAPSTRAY & SHOWER SET (FOR WORKSHOPS)**

Vitreous china size 450x300mm wash basin to comply with SABS 497 in 2 tap hole configuration supplied with integrated overflow and chainstay hole with 2No. pillar-top, chrome plated anti-flick plug with spindle plug, slotted basin waste, chrome plated bottle trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. At brackets and fixing accessories in strict accordance to the manufacturer's specifications.

**W13: 1 HOLE 1 TAP (FOR LABS)**

Vitreous china size 450x350mm oval self-rimming vanity basin to comply with SABS 497 and 816 hole plugged and fitted with 1No. pillar-top, Chrome Plated anti-flick plug with spindle plug, slotted basin waste, chrome plated bottle trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer's specifications.

**W14: MEDIC BASIN & FITTINGS (SICK BAY)**

Vitreous china size 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No Chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged baculn, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

**W15: 1 HOLE 1 TAP (FOR LABS)**

Vitreous china size 450x350mm oval self-rimming vanity basin to comply with SABS 497 and 816 hole plugged and fitted with 1No. pillar-top, Chrome Plated anti-flick plug with spindle plug, slotted basin waste, chrome plated bottle trap, mounting kit and angle valves with 400mm long flexible inlets supplied with all necessary pipe connections. Fitted to wall using 2No. Semi-concealed cast iron brackets in accordance to the manufacturer's specifications.

**W16: MEDIC BASIN & FITTINGS (SICK BAY)**

Vitreous china size 420mm semi rounded lavatory basin to comply with SABS 497, in two tap hole configuration fitted with 2 No Chrome plated Elbow action pillar-top, with 1/4 turn ceramic disc head and blue & Red indicators water applications and flanged baculn, chrome plated waste, chrome plated 32mm standing overflow tube, chrome plated bottle trap supplied with all necessary pipe connections. Fixed with concealed wall bracket in accordance to the manufacturer's specifications.

**W17: CERAMIC SINK**

Ceramic freecast 450 x 335 x 180 mm rectangular laboratory sink without overflow, with a centre and waste outlet, fitted to the wall on two semi-concealed brackets supplied with all necessary accessories (pl to be acid resistant)

**W18: SINGLE WASH TROUGH (INLET & 2 No. TAPS)**

600mm x 500mm (approx) wash trough manufactured from grade 18/10 SS, stainless steel with radiused internal corners and provision for a 40mm dia. outlet. Fitted with Approved 2No. CP bibcoaps - plain extended chrome plated, complete with sliding wall flange. Unslotted sink waste with back nut, plug with stirrup, chain and stay, CP, 'P' trap, with deep seal and cleaning eye. Rough brass Sink installation height = 900mm AFFL. Cut out size 335 x 425mm.

**W19: DOUBLE WASH TROUGH (INLET & 2 No. TAPS)**

1200 x 550 x 200mm (approx) wash trough manufactured from grade 304 (18/10) SS, radiused internal corners and provision for a 40mm dia. outlet, fitted with: Approved 2No wall type bibcoaps, with Swivel Outlet, adjustable wall flanges and exposed adjustable connections. CP, Unslotted sink waste with back nut and plug with stirrup, CP, Double drain black rubber deep seal 'P'-trap. Sink mounted on 2No, 25mm square SS gallow brackets, front leg and adjustable foot piece at height of 1515mm AFFL.

SANITARY ACCESSORIES

**K1: SS TOILET ROLL HOLDER-2 ROLL**

Standard stainless steel toilet roll holder (2 roll) 135mm width x 270mm high 275mm depth Toilet Roll Holder manufactured from 18/10 Stainless Steel, surface Satin finish, including screws and dowels and all other necessary accessories in accordance to manufacturer's specifications.

**K2: SS WASTE BIN**

328W x 528H x 203D Waste bin manufactured from 18/10 Stainless steel, Surface Satin Finish, Material Thickness 1.5mm, including Screws,dowels and all necessary accessories in accordance to manufacturer's specifications.

**K3: SANITARY BIN (PLASTIC)**

190mm x 200mm x 600mm Plastic Sanitary Pedal Bin with capacity of 100 Litres per pack Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

**K4: SOAP HOLDER**

Single semi-recessed ceramic soap dish Complete with all necessary accessories and installed in accordance to manufacturer's specifications.

**K5: WALL GRAB RAILS-PARAPLEGIC**

Stainless steel 914 x 90 x 32mm diameter wall (rear) grab rail, in satin polished finish complete with SS fixing screws and plastic wall plugs. Installed as per manufacturer's instructions.

**K6: GRAB RAILS (RIGHT HAND)-PARAPLEGIC**

Stainless steel 914 x 90 x 32mm diameter wall (right) and side toilet grab rail with 450mm high centre flange, in satin polished finish complete with SS fixing screws and plastic wall plugs, installed as per manufacturer's instructions.

**K7: PAPER TOWEL DISPENSER**

330mmWx65mmHx220mmD Tear and dry paper hand towel dispenser in stainless steel. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.

**K8: SOAP DISPENSER (HAND)-WALL MOUNTED**

115W x 275H x 110D Stainless steel hand Free soap dispenser. Complete with screws, locking key, and all necessary accessories and installed in accordance to manufacturer's specifications.

**K9: ALUMINIUM COAT HOOKS (Multiple)**

800mm Wide x 220mm High x 90mm High Aluminium Multi-track Hat and Coat Hook in multi-track two Hooks Configuration With Anodised Silver Finish Complete with Screws

**K10: HAND DRYER (Hands free)**

As per Electrical Engineers specification

**K11: TOWEL RAIL**

55mm dia, Polished 900mm long towel rail complete with all necessary accessories in accordance to manufacturer's specifications. Installation height as per architect's specification.

**K12: SHOWER CURTAIN RAIL (Height)**

20mm dia, standard chromium plated shower curtain rail 1300mm long with flanged ends and screws CP fixing height as per PA's drawing.

GENERAL FIXTURES

**G1: DOOR PROTECTOR**

200mm wide uPVC Door Protector manufactured in high impact resistant rigid uPVC (Colour Grey)



## FINISHES LEGEND

### FLOORS:

#### F1: FULLY FLEXIBLE TILES (Corrosive Resistant & Anti-Slippery)

300 x 300 x 2.0mm thick (colour type to architects approval), OR EQUAL AND APPROVED, quartz reinforced semi-flexible vinyl floor tiles to SABS Specification S81:1992 (or later revision), and laid to SABS D70 (or later revision) and in accordance to manufacturer's specifications on cement screed subfloor. Fittings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

#### F2: PORCELAIN TILES - MATT

600 x 600 x10mm thick matt porcelain tile to comply with SABS 1449 laid on approved pattern by an approved specialist to comply with SABS 107 and approved adhesives and grout on screeds With Thickness/Specification in strict compliance to manufacturers instructions and SABS specification. Fittings to include, ribbed angle files where there is change of level & Movement Joints of 6mm Wide With Patent Aluminium Movement Joints Strips Consisting Of Synthetic Fibre Inserts Installed At Intervals As Per Manufacturer's Instruction. Colour and pattern to architects approval.

#### F3: CARPET TILES

500mm x 500mm, 100% PEX staple fibre carpet tiles To Comply With SABS 1419 (heavy commercial) consisting of fibres set out on waterproof vinyl backing and to comply with EN 1307 Wear Class 4 (heavy duty), laid with approved adhesive on 30mm thick cement screeds in strict compliance with manufacturer's instructions. Carpet tiles to conform to BS 4790 on fire rating, and DIN 54234 on wira test and ISO body test at less than 2kV at 25% RH on static electricity. Colour and pattern to architects approval.

#### F4: CEMENT SAND SCREED

30mm thick patchered cement sand screed with 13mm Stone Nominal aggregate for topping to comply with SABS 1083 or latest revision for concrete.

#### F5: EXTERIOR MULTI COLOURED CONCRETE INTERLOCKING PAVERS

65mm thick multi-coloured concrete pavers laid on sand bedding to civil/structural engineer's specification in approved pattern and compacted to approval and grouted in strict accordance to manufacturer's specifications. All to be manufactured and installed in strict compliance to SABS 1058 or latest Revision.

#### F6: GRANOLITHIC FINISH

22 mm thick unsealed Granolithic finish composed of one part cement, one part fine sand, two parts coarse sand and one part granite that would pass through a 5mm mesh sieve, laid by specialist in panels not exceeding 10m<sup>2</sup>, divided with approved brass dividing strips. All to be manufactured and installed in strict compliance to the latest SABS approved standards. Colour, pattern and aggregate size to architects approval.

#### F7: INTERLOCKING PAVERS (RIGID PAVING/VEHICULAR WAYS)

220mm x 191mm x 80 mm thick concrete interlocking pavers, 25 mpa, manufactured to SABS spec 1058, laid on sand bedding to civil/structural engineer's specification to a herringbone pattern to the Architect's approval.

#### F8: SEMI FLEXIBLE VINYL SHEETING (CORROSIVE RESISTANT/ANTI-SLIPPERY)

2.5mm Thick Heavy Traffic Use, Corrosive Resistant & Anti-Slippery Vinyl Sheeting Semi-Flexible To Comply With SABS 586, With Static Dissipative Properties Throughout Thickness, Engineered for ESD or SD (anti-static) Protection Vinyl Sheet, Laid on Self-Levelled Smooth Screed glued with conductive adhesive to SABS D70 or latest Revision in Accordance To Manufacturer's Instructions And Installed By Approved Specialist. Joints Shall be Welded as Per Manufacturer's Specifications With No more than 2mm Gap. Clean & Polish Floor In Compliance With SABS 1042. Colour To Architect Approval On Sample Presentation. Contractor to provide Certificate of Static Current Conductivity, Contractor to provide Certificate of Static Current Conductivity, Corrosive resistant & Anti-Slippery.

#### F9: GRAVEL FINISH ON SAND LAYER

32mm Gravel On Compacted Sand Layer Base as Per PSE Details installed in All Duct Chambers Accommodating Sanitary Services.

### SKIRTING:

#### S1: HARDWOOD OR EQUAL AND APPROVED

15x 75mm x 20mm Moulded Hardwood Skirting to comply with SANS 1099, fixed to walls in long lengths with splayed heading joints and mitred corners with screws and plugs of centres not exceeding 600mm, and fixed with a 19mm x 19mm quadrant heading. The skirting to be varnished with 3no. coats of egg shell clear varnish to comply with SABS/SANS 581 type 1.

#### S2: CERAMIC TILE SKIRTING

600mm wide x 100mm high x 7mm thick matt porcelain tile to comply with SABS 1449 laid with approved adhesives and grout on 22mm thick screeds in strict compliance to manufacturers instructions and SABS specification, with cove base and straight tops. Complete with corner and top trims. Fittings to include, ribbed angle files where there is change of level. Colour and pattern to architects approval.

#### S3: CEMENT SAND SCREED

75 mm high x 20 mm thick hardened cement sand screed skirting coved at 50 mm dia. to form a continuous joint with the adjoining screed floor finish to PA's approval. All to be manufactured and installed in strict compliance With SABS 1083 or latest revision.

### WALL FINISHES:

#### W1: FACE BRICK

F8V face brick in common running bond to comply with SABS 227 and forming part of the structural work.

#### W2: EMULSION (PVA) PAINT - FULL HEIGHT

2 no. coats of PVA matt finish emulsion paint to SABS 1584 applied on plastered surface primed and with 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.

#### W3: ALKYD (ENAMEL) PAINT

2 no. coats matt (egg shell) finish alkylid (enamel) paint to SABS 650, type 2 applied on plastered surfaces with 1 no coat alkylid resistant plaster primer to SABS 1416 and 1 no. coat undercoat to SABS 681 grade), in accordance to manufacturer's instructions.

#### W4: GLAZED CERAMIC WALL TILES / ENAMEL PAINT COMBO

Combination of: 600mm wide x 300mm x 7mm thick high glazed ceramic tiles To Specification 'R5', laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications laid from finish floor level to window level AND ENAMEL paint to specification 'R2' To Comply with SABS 150 or latest revision applied from 2100 mm above finished floor level to ceiling height all in strict compliance to manufacturer's instructions. All to be manufactured and installed in strict compliance to the latest SABS Standards.

#### W5: CERAMIC WALL TILES - FULL HEIGHT

600mm x 300mm x 7mm thick high glazed ceramic tiles to Comply with SABS 22 or latest revision, laid on 15 mm thick plaster prepared to receive wall tiles fixed with approved adhesives and grout in compliance to manufacturer's specifications and government standard specifications. Tiles to be laid to full ceiling height. All to be manufactured and installed in strict compliance SABS 22 Standard. All to be manufactured and installed in strict compliance SABS 22 Standard.

### CEILING AND CORNICE:

#### C1: 9mm GYPSUM BOARDS FLUSH PLASTERED CEILINGS OR EQUAL AND APPROVED

'GypCalc Classic' gypsum plasterboard ceilings **EQUAL & APPROVED** consisting of 1 layer Gypcalc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing) fixed to timber bracing installed at maximum 300mm centres using Gypcalc Rhinoboard Strap Paint Grabber Screws 32mm at maximum 150mm centres. Apply Gypcalc Rhinotape to all joints and skim the ceiling using Gypcalc Rhinotape.

#### C2: FIBRE CEMENT BOARDS (H-JOINTED)

6mm thick GypCalc Prestige 7 fibre cement ceiling boards or **EQUAL & APPROVED** consisting of 1 layer Gypcalc Rhinoboard 9mm (locally manufactured, ISO 9001 & 14001 certification, recycled paper content, Eco-specifier listing non-combustible to SANS 10171-5) fixed to EX 38mm x 50mm timber bracing installed at maximum 400mm centres using Gypcalc Rhinoboard Strap Paint Grabber Screws 32mm at maximum 150mm centres with all necessary accessories, finished with 3 No. coats of super PVA external quality paint colour to PA's approval. Gypcalc Rhinotape to all joints and skim the ceiling using Gypcalc Rhinotape.

#### C3: PATENT SUSPENDED ACOUSTIC TILES OR EQUAL AND APPROVED

1200mm x 600mm x 15mm Gypcalc Calotex Pin Perforated or fine fissured OR **EQUAL & APPROVED** laid into Dorn ceiling grid and secured into place using Dorn Hold Down Clips @ 200mm c/c. Dorn Wall Angle M6 fixed to the perimeter wall using fixings at 300mm centres. Dorn 138 FR Main Tees (6.4mm thickness, 2150 galv. coating, locally manufactured, recycled content, ISO 9001 & 14001 certification) at 1200 centres & Dorn 138V (1200 long) Cross Tees at 600 centres. Suspend main tees @ 1200mm c/c using Dorn Hanger Strap 19mm suitably fixed to the building structural members. Dorn Galvanized Hanger Strap 19mm at maximum 150mm on both sides of the tie notch. All tie notches to be in line. Suspend all full length 1200 Cross Tees at their mid-point using Dorn Hanger Strap 19mm suitably fixed to the building structural members. All to comply with latest SANS 803 including all necessary accessories and installed in strict accordance to manufacturer's specifications.

#### C4: EMULSION (PVA) PAINT OR EQUAL AND APPROVED

Emulsion (PVA) Paint on Skimmed Plastered Sides 3no. coats of PVA emulsion ceiling paint to latest SANS 1584 approved on 6mm thick light weight hemi-hydrate gypsum plaster on concrete slab soff.

### ROOF COVERING AND INSULATION:

#### R1: EMBOSSED ROOFING SHEET (TWO SIDES)

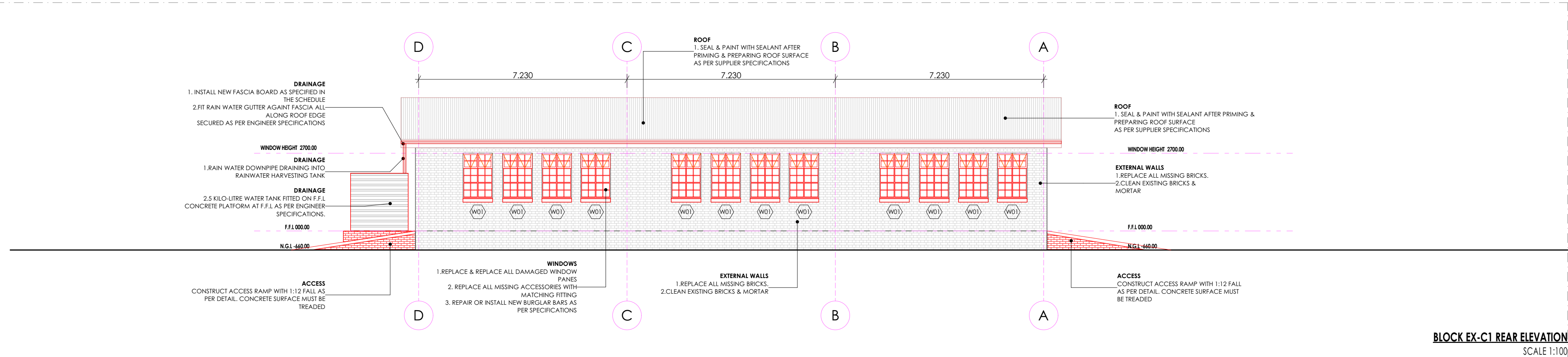
**Roofing Sheets:** 0.58mm Thick concealed fixing roofing sheets manufactured from roll-formed from certified steel complying with ISO 330 (3). The profile shall have three trapezoidal ribs at 203mm centres giving a net cover of 406mm. The rib height shall be 41mm and provide capillary breaks. The male rib shall have spurs at 283mm centres to ensure a positive double interlocking action at side-laps. Each pan shall incorporate two stiffener ribs. Profiled roof sheets to be coated on both sides with 'Global Coat' or 'Chromalox Colour' and laid on structural timber/steel structure incorporating all necessary accessories such as flashings and eave closes in strict compliance to manufacturer's instructions.

**Insulation:** SHALL EITHER BE: 1: where there are acoustic ceilings suspended board, a heavy duty 'Aluminium insulation foil' shall be installed AND 2: where the steel work is exposed, a 50mm 'FactoryBoard' manufactured from noncombustible glass fibres and thermo-setting resin binder supplied size 2400mm x 1200mm and 80kg/m<sup>3</sup> and finished with white metalized foil.

**Galvanized Steel (GI) Gutter:** 150mm wide x 100mm Deep x 0.6mm Excess Gutter Of Commercial Grade Steel With Class 1275 Galvanizing To Comply With SABS 934 or latest Revision Fixed To Painted Fibre Cement Fascia Board Together with standard accessories discharging into Rainwater Downpipes.

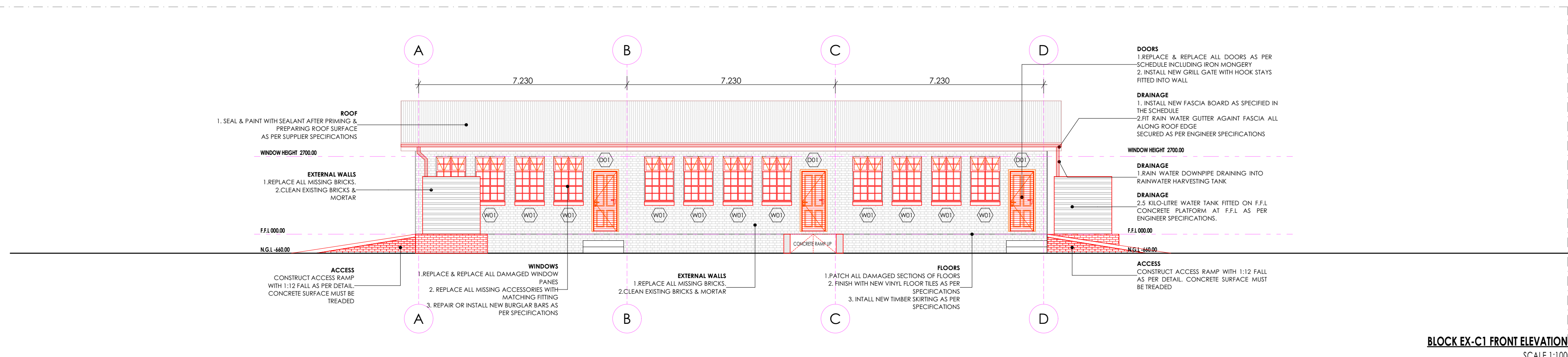
**Downpipe:** 110 x 110 x 0.6mm Thick Commercial Grade Galvanized Steel Sheet With Class 1275 Galvanizing To Comply With SABS 934 or latest Revision to or built into walls or cast in concrete columns fixed to brickwork or steel including brackets and self-tapping screws to Manufacturer Installation instructions.

**Fascia board:** 250 x 10 mm Fibre-Cement Fascia/Barge Board, Screw Fixed To Truss Ends & Counter Batten With Countersunk Brass Screws. Prepare & Apply One Universal Undercoat & Two Coats Super Acrylic P.V.A.



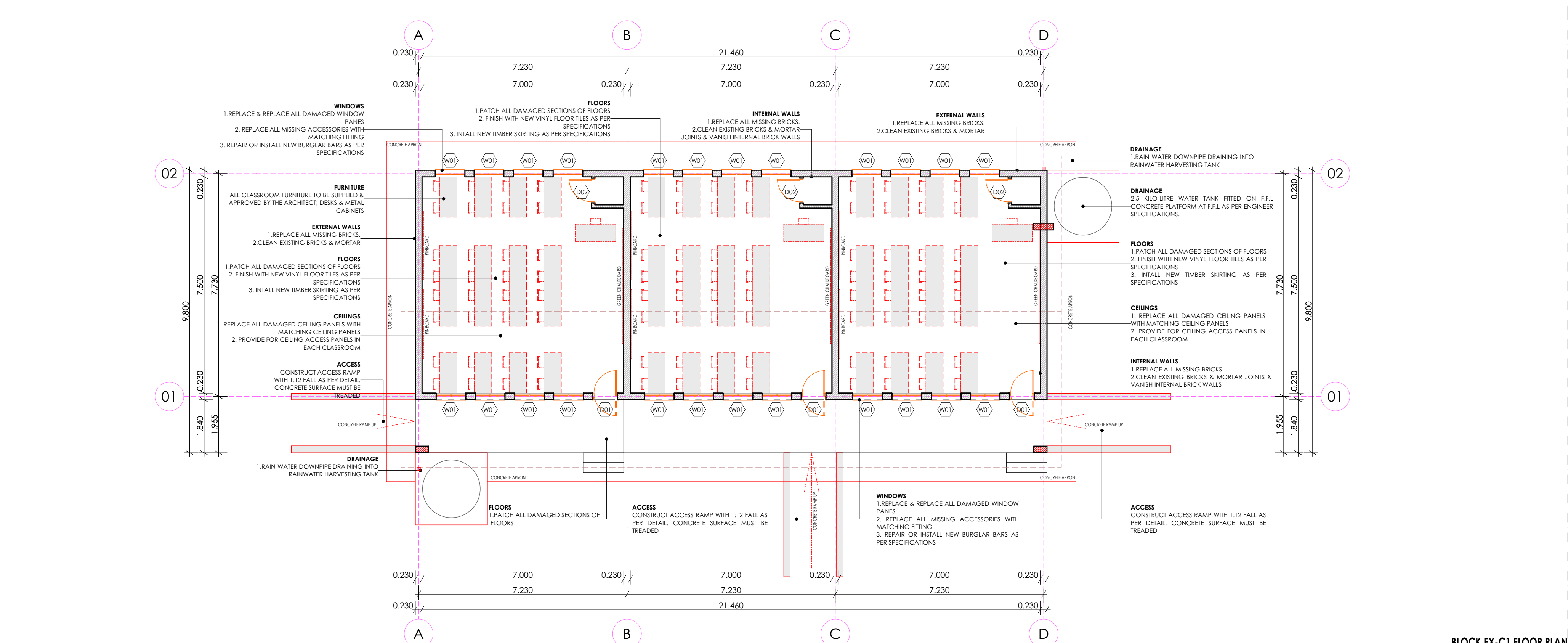
BLOCK EX-C1 REAR ELEVATION

SCALE 1:100



BLOCK EX-C1 FRONT ELEVATION

SCALE 1:100



BLOCK EX-C1 FLOOR PLAN

SCALE 1:100

N

## LEGEND

NEW WALLS

EXISTING WALL TO BE RETAINED

EXISTING WALL TO BE DEMOLISHED

NEW FIXTURES & FITTING TO BE INSTALLED

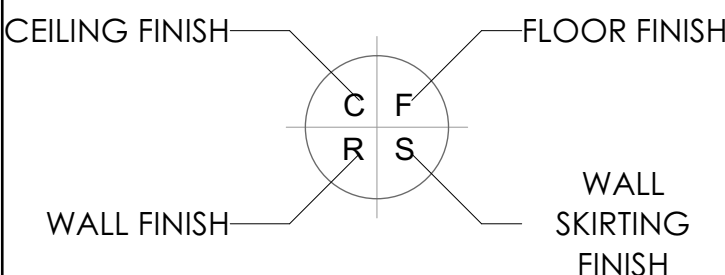
ITEMS IN RED AND (OR) DASHED LINES ARE TO BE REPAIRED AND (OR) REPLACED

NOTES  
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED

DIMENSIONS TO BE READ, NOT TO SCALED FROM THIS DRAWING

CONTRATORS TO CONFIRM ALL DIMENSIONS ON SITE BEFORE CONSTRUCTION COMMENCES & ANY DISCREPANCY TO BE REPORTED TO THE PROJECT ARCHITECT

## FINISHES LEGEND



## SIGNATURE TABLE

DISCIPLINE	SIGN	DATE
CLIENT		
PLAN EXAMINER		
FIRE CONTROL		
ENVIRONMENTAL		
ROADS / STORMWATER		
WATER & SANITATION		


0	JUL 21	FIRST ISSUE FOR TENDER
REV. NO.	DATE	DESCRIPTION

## REVISIONS

**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**PUBLIC WORKS, ROADS & INFRASTRUCTURE**  
INSTITUTION

**MAKGOPHE SECONDARY-918 521 309**

## RESTORATIVES, REPAIRS & ADDITIONS

CONTRACT - SECTION

## DOCUMENTATION & PROCUREMENT

DISCIPLINE	
ARCHITECTURAL	4
WORK DESCRIPTION - SUB DIVISION	

DRAWING DESCRIPTION
3CLASSROOM BLOCK EX-C1

DRG No.	G14-201-01	ITEM No.
DESIGN	SMIN	DRAWN
DATE	AS SHOWN	T.M.
DATE	NAME	SIGN

DATE	NAME	SIGN	PR. NUMBER
NOV 2019	T. MANYADZA		PrArch 43981757

DRAWING CO-ORDINATED

**CONSULTANT**

**TECTURA PROJECTS**

TECTURA PROJECTS (PVT) LTD  
100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 9



